United States Department of the Interior

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In Reply Refer To:
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Memorandum

To: The File

From: Chief, Branch of Permits

Subject: Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zambia On or After January 1, 2016 and On or Before December 31, 2018

The African elephant (*Loxodonta africana*) is listed as threatened under the U.S. Endangered Species Act (ESA) and is regulated under section 4(d) special rule [50 CFR 17.40(e)]. The 4(d) special rule provides the requirements for the import of sport-hunted trophies. Under paragraph 17.40(e)(6)(i)(B), in order for the U.S. Fish and Wildlife Service (Service) to issue a threatened species permit under 50 CFR 17.32 authorizing the import of a sport-hunted elephant trophy, the Service must make a determination that the killing of the trophy animal will enhance the survival of the species. After evaluating the available data as of the date of this finding on elephant hunting in Zambia, including information provided by the Government of Zambia, current applications to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service, under the regulatory requirements provided by 17.40(e)(6)(i)(B), **the Service is able to make a determination that the killing of the trophy animal in Zambia, on or after January 1, 2016, and on or before December 31, 2018, will enhance the survival of the African elephant.** Applications to import trophies hunted during this time period will be considered to have met the enhancement requirement unless we issue a new finding based on available information. The Service may replace this finding at any time that this finding no longer reflects the available information consistent with the regulatory requirements. The Service reviews each application received for import of such specimens and evaluates the information provided in the application as well as other information available to the Service on the status of the elephant population and the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

General Considerations:

In evaluating whether the killing of the trophy animal will enhance the survival of African elephants in accordance with 50 CFR 17.40(e)(6)(i)(B), the Service considers the permit issuance criteria outlined in 50 CFR 17.32(a)(2). These include, in addition to the general permitting criteria in 50 CFR 13.21(b):

(i) Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit;

(ii) The probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit;

(iii) Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed;

(iv) Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit;

(v) The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application; and

(vi) Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application.

As with all permit applications submitted under 50 CFR 17.32(a), the individual requesting authorization to import a sport-hunted elephant trophy bears the burden of providing information in their application showing that the activity meets the requirements for issuance criteria under 50 CFR 17.32(a). In some cases, such as for import of sport-hunted trophies, it is not always possible for the applicant to provide all of the necessary information needed by the Service to make a positive determination under the Act to authorize the activity. In such cases, the Service may consult with the range country and other interested parties to the extent practicable to obtain necessary information. The Service has the discretion to make the required findings on sport-hunted elephant trophy imports on a countrywide basis, although individual import permits will be evaluated and issued or denied for each applicant. While the Service may make enhancement findings for sport-hunted elephant trophy imports on a countrywide basis, the Service encourages the submission of information from individual applicants. We rely on the information available to the Service and may rely on information from sources other than the applicant when making a permitting decision.

Neither the African elephant 4(d) rule nor 50 CFR 17.32(a)(2) specify what would constitute the enhancement of survival of a species regarding the authorization for the importation of an African elephant sport-hunted trophy. Therefore, when making a determination of whether the killing of the trophy animal will enhance the survival of African elephants, the Service examines the overall conservation and management of the species in the country where the specimen originated and whether that management addresses the threats to the species (*i.e.*, that it is based on sound scientific

principles and that the management program is actively addressing the current and longer term threats to the species). In that review, we evaluate whether the import contributes to the overall conservation of the species by considering whether the biological, social, and economic aspects of a program from which the specimen was obtained provide a net benefit to the species and its ecosystem.

As stated in previous findings, in evaluating whether the killing of the trophy animal will enhance the survival of African elephants within a country, the Service looks at a number of factors. We evaluate whether a country has a valid national or regional management plan and if the country has the resources and political will to enact the plan. If there is a plan, what government entities implement the plan and how often is it reviewed and updated? Does the plan have clear, achievable objectives? Are the objectives measurable and are they being achieved? Is there an adaptive management approach within the plan so that enacting agencies can quickly respond to changing environmental or social issues?

The Service also evaluates the status of the elephant population within a country and trends over time. Particularly, we are interested in population numbers, sex and age-class distribution, and mortality rates (both natural and human-induced). Are standardized surveys being conducted and, if so, what are the timing, census methodology, and coverage? Since elephant populations can move across international borders, what level of cooperation is there between neighboring countries in management and surveying efforts for shared populations? How is poaching accounted for within survey efforts?

The Service takes into account all forms of offtake when evaluating population viability and sustainability, including human-elephant conflicts, problem animal control, poaching, and sport hunting. While recognizing that there may be limited resources available for elephant management, the Service considers what national policies are in place to address human-elephant conflicts and problem elephant control. Is there a policy on culling surplus animals and removal of nuisance animals? Does domestic harvesting of elephants occur for local consumption or use? The amount of protected area either set aside for elephants or managed for elephant populations and the level of protection provided are also important in the Service's evaluation of whether imports of trophies could be authorized.

Finally, the Service considers the country's sport-hunting program and whether it contributes to the conservation and management of the species. Is the hunting program scientifically based and has it been incorporated into national/regional management strategies, particularly in light of data on population numbers and trends and levels of utilization (both legal and illegal)? Are the funds generated by hunters going directly to in-situ conservation and management efforts or deposited into a general treasury fund? How are hunting quotas distributed? If there are concession areas, how are they managed and allocated? Do U.S. hunters, through their participation in the hunting program, contribute funds used to help address management needs of the species, and are those funds utilized in a meaningful manner?

In short, the Service is looking to determine if a country has sufficient numbers of elephants to support a hunting program, if the country has a management plan and adequate laws and regulations

to effectively implement a hunting program, and if the participation of U.S. hunters in the program provides a clear benefit to the species to meet the requirements for the import of sport-hunted trophies under paragraph 17.40(e)(6)(i)(B).

The Service's approach to enhancement findings for the importation of sport-hunted trophies of African elephants is consistent with the purpose and intent of the Endangered Species Act. Well-managed trophy hunting can benefit conservation by generating funds to be used for conservation, including for habitat protection, population monitoring, wildlife management programs, and law enforcement efforts. We are, of course, aware that not all trophy hunting is part of a well-managed, well-run program, and we evaluate import of sport-hunted trophies carefully to ensure that all legal requirements are met before allowing import.

We note that our approach is also consistent with the approach provided in the *IUCN Species Survival Commission (SSC) Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives, Ver. 1.0* (IUCN SSC 2012). The SSC document provides useful principles and sets out guidance from international experts in the field on the use of trophy hunting as a tool for "creating incentives for the conservation of species and their habitats and for the equitable sharing of the benefits of use of natural resources" (IUCN SSC 2012, p. 2) and recognizes that recreational hunting, particularly trophy hunting, can contribute to biodiversity conservation and more specifically, the conservation of the hunted species. The SSC document lays out the following five guiding principles:

> (a) *Biological sustainability:* The hunting program cannot contribute to the long-term decline of the hunted species. It should not alter natural selection and ecological function of the hunted species or any other species that share the habitat. The program should not inadvertently facilitate poaching or illegal trade in wildlife by acting as a cover for such illegal activities. The hunting program should also not manipulate the ecosystem or its component elements in a way that alters the native biodiversity.
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> (b) *Net Conservation Benefit:* The biologically sustainable hunting program should be based on laws, regulations, and scientifically based quotas, established with local input, that are transparent and periodically reviewed. The program should produce income, employment, and other benefits to create incentives for reducing the pressure on the target species. The program should create benefits for local residents to co-exist with the target species and other species. It is also imperative that the program is part of a legally recognized governance system that supports conservation.
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> (c) *Socio-Economic-Cultural Benefit:* A well-managed hunting program can serve as a conservation tool when it respects the local cultural values and practices. It should be accepted by most members of the community, involving and benefiting local residents in an equitable manner. The program should also adopt business practices that promote long-term economic sustainability.
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> (d) *Adaptive Management: Planning, Monitoring, and Reporting:* Hunting can enhance the species when it is based on appropriate resource assessments and monitoring (*e.g.*, population counts, trend data), upon which specific science-based quotas and hunting

programs can be established. Resource assessments should be objective, well documented, and use the best science available. Adaptive management of quotas and programs based on the results of resource assessments and monitoring is essential. The program should monitor hunting activities to ensure that quotas and sex/age restrictions of harvested animals are met. The program should also generate reliable documentation of its biological sustainability and conservation benefits.

(e) *Accountable and Effective Governance:* A biologically sustainable trophy-hunting program should be subject to a governance structure that clearly allocates management responsibilities. The program should account for revenues in a transparent manner and distribute net revenues to conservation and community beneficiaries according to properly agreed decisions. All necessary steps to eliminate corruption should be taken and to ensure compliance with all relevant national and international requirements and regulations by relevant bodies such as administrators, regulators and hunters.

We explained in our final rule revising the 4(d) Rule for the African elephant, 81 FR 36388, 36394 (June 6, 2016) that, "[w]hen a trophy hunting program incorporates the following Guiding Principles, IUCN considers that trophy hunting can serve as a conservation tool: Biological sustainability; net conservation benefit; socio-economic-cultural benefit; adaptive management—planning, monitoring, and reporting; and accountable and effective governance. We support this approach."

Basis for Finding for African Elephants in Zambia:

In December 2012, the Service made a positive enhancement finding for the import of sport-hunted elephant trophies from Zambia. The Government of Zambia subsequently suspended elephant hunting from 2013 to 2014. In 2015, information arose that the suspension of the elephant sport-hunting program in Zambia had been lifted. On March 4, 2015, the Service sent a letter to the Zambian Department of National Parks and Wildlife (DNPW)[1] with a list of questions that would aid the Service in evaluating the overall conservation and management of African elephants in Zambia and confirm if a sport-hunting season for elephants had been opened for 2015. In response to our March 4, 2015, letter, DNPW provided a letter on April 28, 2015, that laid out current legislation governing elephant management, an explanation for the elephant sport-hunting suspension, and clarification of the 2015 elephant sport-hunting quota. In addition, on April 30, 2015, they provided a copy of Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia (March 2015), as well as a list of responses to the questions in our March 4, 2015, letter. On December 22, 2015, DNPW sent the Service additional information about an apparent increase in the elephant population in the Kafue area and a comparison of population estimates in 2008 compared to 2015. In addition, DNPW sent an updated version of the Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia (July 2015), a preliminary report of the Dry Season Survey of Large Herbivores for Kafue and Luangwa Ecosystems (2013), and the 65th Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Standing Committee Meeting Summary. At the Safari Club International meeting held in Las Vegas, NV, in February 2017, the Service provided a letter to a DNPW official, requesting any new and updated information regarding the management and conservation of

[1] At the time the letter was sent, the wildlife department was called the Zambia Wildlife Authority (ZAWA).

elephants in Zambia, as well as a list of questions that would aid the Service in making a required enhancement finding under the ESA and non-detriment finding under CITES. In response to our February 2017 letter, DNPW provided a list of responses to our questions on March 31, 2017. These aforementioned documents, relevant information obtained separately through open sources such as IUCN documents, and contained in comments received from interested parties, were the basis of this finding.

Governance of African Elephants in Zambia: The responsibility for implementing wildlife conservation laws in Zambia dates back to the 1930s or 1940s with the establishment of the Department of Tsetse, Fisheries, and Wildlife. In the late 1950s, this agency became the Department of Game and Fisheries and operated under this designation until the mid-1970s when it became the Department of National Parks Wildlife Service (DNPWS) who was responsible for the protected area network. In 1999, the Government of Zambia transformed this agency into the Zambia Wildlife Authority (ZAWA), a semi-autonomous agency responsible for the management and protection of this network, with statutory powers derived through the Zambia Wildlife Act No. 12 of 1998.

For much of the time since its inception in 1999, due partly to its semi-autonomy, ZAWA did not appear to have had adequate resources to conduct their functions fully due to a low funding capability, relying primarily on revenue from tourism, which also included sport hunting. Between 1999 and 2005, ZAWA struggled with their law enforcement capabilities. The costs associated with transforming DNPWS to ZAWA continued to affect the financial and staff allocations for law enforcement activities. Large sums of money that could have been utilized by law enforcement were apparently channeled into tasks involved in the transformation process. From the information provided to the Service when we were making our 2012 finding, between 2005 and 2008, there were shortages in work force and a need for proper staff training, as well as a lack of material resources to enable staff to carry out their duties. Although ZAWA continued to pay salaries for staff throughout the country, ZAWA appear to have had to rely largely on outside donor organizations to recover from the costs associated with its transformation from the DNPWS to ZAWA. There was a need for suitable vehicles, radios or other means of communication, field staff accommodations, uniforms, weapons and other patrol equipment. The financial resources were also inadequate in terms of providing funding for management operations and projects. One organization, the Norwegian Agency for Development Cooperation (NORAD), through the Emergency Support Programme (ESP), provided funding to cover both management and law enforcement operations, allowing ZAWA to procure uniforms, patrol equipment, boats, and vehicles for resource protection in the Western and Central regions, where a majority of the hunting areas are situated. Another organization, the United Nations Development Program (UNDP) supported the Nsumba – Mweru Wa Ntipa Ecosystem, providing vehicles to Law Enforcement, as well as funding for the preparation of general management plans for the three national parks located in this area.

Between 1999 and 2011, the Service provided $1,279,085 through the African Elephant Conservation Act (AECA) to a number of organizations conducting activities in Zambia. Organizations such as the Wildlife Conservation Society, Southern African Wildlife Trust, African Wildlife Trust, and South Luangwa Conservation Society have used such funds to conduct elephant crop damage control, anti-poaching, community law enforcement efforts, and addressing human-elephant conflicts. Two projects in particular include a grant in 2006 to the Wildlife Conservation Society for $5,038 to provide support to village scouts in the Rufunsa GMA in southern Zambia, one of three GMAs designated for elephant sport hunting, to help strengthen conservation efforts by

providing basic equipment and supplies to the community game scouts. This grant helped provide basic field equipment and rations to fourteen village scouts to improve their ability to patrol their community area outside the Lower Zambezi National Park. On September 16, 2008, the Service provided grant money to the Frankfurt Zoological Society, through the AECA, in the amount of $74,646 to provide support for law enforcement and protection of elephants in North Luangwa National Park, to better equip security teams protecting wildlife in eastern Zambia. This project was designed to provide equipment for trained ZAWA patrols in the Park, including rations for 10-day field patrols, base radios and solar equipment, handheld radios and GPS equipment for patrol teams, and conducting regular maintenance and upkeep of equipment and vehicles.

The lack of resources available to ZAWA since this transformation previously raised questions about their ability to monitor and control poaching, as well as their enforcement capabilities in addressing the ongoing illegal ivory trade within their own borders.[2] This was part of the rationale for the Service not finding that elephant hunting and the subsequent importation of trophies taken between 2005 and 2010 enhances the survival of the species. In 2011, however, it appears that the situation improved. Management of ZAWA appeared to have stabilized and funding improved. ZAWA appeared to have made efforts to improve their overall management and control. There was also evidence of an increase in the cooperation between ZAWA and community groups for the betterment of elephant management. Further, the Service reported in its 2012 finding that ZAWA has established a stronger domestic network with other law enforcement agencies to control illegal trade at the national level by collaborating with other law enforcement agencies, such as the Drug Enforcement Commission (DEC), Anti-Corruption Commission (ACC), and Zambia Police and Customs, to make numerous seizures (CITES 2010). All seizures were reported to the Elephant Trade Information System (ETIS). These improvements appear to have continued into 2012; therefore, import permits for trophies taken in 2011 and 2012 were granted.

In 2013, the Zambian government established an elephant-hunting moratorium (some trophies apparently taken before the moratorium were exported during this time, however). The moratorium was established to allow time to restructure Zambia's governance of elephant management and to carry out population surveys. The moratorium was extended through 2014 to allow additional time for evaluating the country's elephant management and population status (DNPW 2016). In 2015, after completing their evaluation, the moratorium was lifted.

In 2015, ZAWA was disbanded and reincorporated as a government department, the Department of National Parks and Wildlife (DNPW 2016). In addition, the Zambia Wildlife Act No. 12 of 1998 was repealed, but it is the Service's understanding that the statutory instruments enacted under this act, as well as the Zambia Wildlife Regulations No. 107 of 2010, and Zambia Wildlife Regulations No. 60 of 2007, are the regulatory framework for the Zambia Wildlife Act (Wildlife Act) No. 14 of 2015, currently the main law under which elephants are protected within Zambia. Revised statutory instruments on elephant sport hunting were submitted to the Ministry of Justice, and the Service is

[2] Documents CoP14 Doc. 53.2 ("Monitoring of Illegal Trade in Ivory and Other Elephant specimens") and CoP15 Doc. 44.1 Annex ("The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory") appear to support DMA's statement regarding ZAWA's inability to monitor and control poaching. While the number of seizures reported in ETIS were low between 2004 (CoP13) and 2009 (CoP15) (CITES 2009), the volumes of the seizures were very high (e.g., few seizures of very high quantities). The ETIS documents indicate that such occurrences are indicative of highly organized criminal activity is a major feature of the illicit ivory trade out of Zambia.

awaiting a copy of these changes (DNPW 2017). However, the Wildlife Act is the principle legislation guiding the management of wildlife in Zambia through a system implemented and enforced by DNPW with assistance from stakeholders (DNPW 2016).

The Wildlife Act is administered by DNPW under the Ministry of Tourism. DNPW is headed by a Director, with assistant directors who command four elements of the department: Principal Warden-Operations Wildlife Law Enforcement Unit, Principal Warden-Conservation Unit, Principal Engineer Infrastructure Development Unit, and Principal Natural Resource Management Officer Community-based Natural Resource Management Unit. *The Wildlife Law Enforcement Unit* is comprised of 1,250 Wildlife Police Officers who are responsible for investigating and enforcing wildlife crimes within 236,376 km^2 of wildlife area (average 189 km^2 per officer). The Zambian government has also committed to adding an additional 850 officers by 2018 (600 new officers were reportedly added in 2016). *The Wildlife Conservation Unit* is responsible for mitigating human-wildlife conflict, facilitating wildlife officer trainings, regulating private wildlife estate operations, managing ecosystems, managing landscape conservation of certain species, and both developing and implementing park regulations. *The Infrastructure Development Unit* is responsible for construction and maintenance of infrastructures and machinery within protected areas. *The Community-based Natural Resource Management Unit* is responsible for co-managing Game Management Areas (GMAs) with local communities. Duties include providing technical support to Community Resource Boards regarding the management of human-natural resources in GMAs and open areas. This unit facilitates the election of the Community Resources Board members and the election of Village Action Groups. Responsibilities also include monitoring the use of funds disbursed to Community Resources Boards and training village scouts and Community Resources Board members.

The African elephant is a protected species under the Wildlife Act. It is a criminal offense to hunt, kill, capture, or possess an elephant without a license. The elephant is also protected under private wildlife estate legislation and statutory instruments implemented with the (now repealed) Wildlife Act of 1998 and carried over to the Wildlife Act. Additionally, in 2016, four new statutory regulations were reportedly enacted to address various aspects of elephant management to complement the operation of the new Wildlife Act. They included the Zambia wildlife regulations for granting of hunting concessions, elephant sport hunting, and conducting ecological or research wildlife assessments (DNPW 2016).

In addition to Zambia's domestic laws, it is also a Party to CITES. The African elephant in Zambia is listed in Appendix I of the Convention. As an Appendix-I species, certain criteria must be met before such species can be exported, including findings from the exporting country's CITES Management Authority that the specimen was legally acquired and the country's Scientific Authority that the export will not be detrimental to the survival of the species in the wild. In addition, the importing country's CITES Management Authority must determine that the import is not for primarily commercial purposes and the importing country's Scientific Authority must determine that the import is not for purposes that are detrimental to the species. In their reply to our inquiry, Zambia provided a copy of their March 2015 non-detriment finding for elephants. This finding states that the CITES Scientific authority of Zambia has considered the population of elephants in Zambia and concluded "that the low level of off-take generated by trophy hunting is not detrimental to the survival [of elephants] and the amount of revenues generated by this low level of off-take are

of critical importance for the conservation of the species, also because of the benefit it provides to local communities."

Current Population Status: To manage any population to ensure an appropriate population level and determine whether sport hunting is having a positive effect on the survival of African elephants, it is vital to have sufficient data on population numbers and population trends to base management decisions. Without current population data, it is not clear how one can calculate the number to offtake. Without information on population demography and mortality, it is not possible to determine accurately what impact hunting, in conjunction with other offtakes, including problem animal control and poaching, is having on Zambia's elephant population.

During the 1970s, Zambia experienced a severe decline in their elephant populations due, in part, to increased human population, conversion of land for agricultural activities, and excessive hunting for ivory. The increase in poaching brought about by international demands for ivory also contributed to this decline (CITES 2010). Since the early 1980s, most of the elephants have been restricted to National Parks, Game Management Areas and adjacent lands.

Currently, the range for the elephant in Zambia can be considered in seven subregions as follows: Luangwa Valley system, Mid/Lower Zambezi system, Kafue system, Mosi oa Tunya, Sioma - upper Zambezi system, Bangweulu system, Nsumbu – Mweru wa Ntipa, Lusenga -Tanganyika system, and West Lunga system. Each of the sub regions is larger than 10,000km^2 and has a total area exceeding 200,000km^2. These elephant sub regions cover a diverse landscape and land tenure systems encompassing National Parks, Game Management Areas and some open areas creating an almost contiguous landscape in which elephants can roam between habitats (CITES 2010, Thouless et al. 2016 p. 191). Habitat varies throughout the major elephant areas, but most is dominated by miombo or mopane woodlands (CITES 2010; ZAWA 2015).

In 1982, the Government of Zambia instituted a ban on elephant sport hunting. By 1989, it was estimated that Zambia's elephant population had fallen below 18,000 from an estimated 200,000 in the 1970s (CITES 2002). In the 1990s and 2002, Zambia's elephant population was estimated to be 22,000 and 25,000, respectively, indicating a stable and/or increasing population (CITES 2010). As a result, in 2005, elephant sport hunting, which had been banned since 1982, was re-opened. Under the Zambia Wildlife Act, the sport hunting of elephant was authorized for non-commercial purposes. According to a DNPW's April 28, 2015, e-mail, elephant sport hunting was again suspended from 2013 to 2014, as the Zambian Government was interested in ascertaining the status of wildlife populations in the Game Management Areas where hunting occurs.

Aerial population surveys conducted in 2008 covered approximately 166,712.51 km^2 of the major elephant range, representing about 80% of the total range and resulted in a population estimate of 26400 ± 4400 elephants, indicating a stable population in reference to previous estimates of 2002 and the 1990s when estimates were 25000±3000 and 22000±3000 elephants respectively. In 2013, a survey conducted by DNPW (then ZAWA) in the Kafue and Luangwa Ecosystems alone revealed a population of 9,594 and 22,112 respectively, for a total of approximately 32,000 animals (ZAWA 2013). In a December 22, 2015, e-mail, DNPW provided a possible explanation for the elephant increase in the Kafue area, noting more areas were surveyed in 2013 than 2008, increased average sampling intensity, and influx of elephant groups from Sioma Ngwezi and west Lunga to Kafue.

The Government of Zambia's proposal for the 15th meeting of the CITES Conference of the Parties (CoP 15 - Doha, Qatar, March 2010) to transfer its elephant population from Appendix I to Appendix II, contained a report on the illegal killing of elephants indicating that between 2002 and 2008, there were 327 elephants illegally killed. Although elephant poaching trends indicated an increase in poaching levels, the estimated illegal annual off-take was said to be less than 0.3% of the elephant population estimates. The increasing trend in elephant poaching was attributed to increased poaching levels in Lower Zmbezi and areas of the Luangwa Valley system where resources for law enforcement were considered inadequate. The high level of human-elephant conflicts taking place in these areas also exacerbated elephant poaching. Over 67% of problem elephant reports involved crop and property damages, as well as human injuries and deaths (CITES 2010). However, there was no information given on the number of animals taken during this same timeframe in relation to problem animal control measures undertaken by ZAWA, leading to a potential increase in the percentage of annual off-take from both illegal and problem animal control activities.

In 2014, the Pan African Aerial Elephant Survey (http://www.greatelephantcensus.com/), or the Great Elephant Census (GEC), was carried out over a significant portion of the savanna elephant's range in Africa. The GEC developed standardized survey methodology to establish a consistent continent-wide population basis line. The 2014 survey that was part of the Great Elephant Census, covering nearly 85,000 km^2 in the Luangwa, Kafue, Sioma, and Lower Zambezi ecosystems, revealed the elephant population in Zambia to be an estimated 21,760 ± 4,523 (DNPW 2016, GEC 2016); this was not significantly different from the 2008 estimate, and may not have accounted for elephants in Sioma-Ngwezi that regularly migrate into neighboring countries during the dry season. However, this is a decrease of about 10,000 animals since the 2013 survey. Thouless et al. (2016) reports an estimate of 21,967 ± 4,704, although this contains 214-314 educated guesses from areas not systematically surveyed.

Carcass ratios may help indicate present levels of poaching in different areas; a carcass ratio of 2-8% is indicative of stable or increasing populations, while a ratio of over 9% indicates a declining population (Douglas-Hamilton & Hillman 1981, Douglas-Hamilton & Burril 1991). The 2008 aerial survey apparently showed low carcass ratios in Kafue (0.97%), Luangwa (1.57%) and Upper Zambezi (3.20%), with Lower Zambezi (>5%) as the only exception (CITES 2010); these ratios indicate stable or increasing populations. The 2015 survey showed decreased carcass ratios from the 2008 survey in Luangwa (1.2%), but an increased ratio in Kafue (7.02%), and Lower Zambezi (6.3%); it is possible that not all carcasses were counted in the survey, and these percentages are higher in reality. While these ratios are still considered sustainable, several poaching camps were detected: six in Kafue, two in South Luangwa, one in North Luangwa, and one in Lower Zambezi National Parks. GEC (2016), as well as DNPW (2016), report 85% and 85.5% carcass ratios in Sioma Ngwezi National Park, respectively, with the rest of Zambia being a 3% overall ratio (GEC 2016). For Sioma Ngwezi, this ratio suggests a recent or ongoing problem of illegal hunting, which has led to a loss of most of the original population (DNPW 2016). However, this National Park makes up a small proportion of the national population (Thouless et al. 2016). With the help of World Wide Fund for Nature (WWF) and the Peace Parks Foundation, DNPW recruited an additional 30 rangers and built new housing for them in Sioma Ngwezi, with the intent of aiding anti-poaching efforts in the National Park (DNPW 2017).

According to Thouless et al. (2016), Zambia's elephant population appears to be relatively stable apart from losses in the southwest of the country, which amounts to approximately 2% of the overall population. Available range also appears to be increasing due to the Southern African Development Community (SADC) Trans-Frontier Conservation Areas[3] (TFCAs) initiative, and law enforcement representation in major protected areas has led to a rise in arrests from poaching incidents.

It is possible that population fluctuations in Lower Zambezi could be explained by the movements of elephants between Zambia, Zimbabwe, and Mozambique. Additionally, most of the subpopulations within Zambia are contiguous with populations in neighboring countries, hence the formation and implementation of the modern concept of TFCAs in southern Africa to promote the maintenance of movement corridors for elephants between countries in the region (CITES 2010). A main goal for TFCAs is to make fragments of protected areas in adjacent countries interconnected in order to "facilitate and enhance the free movement of animals across international boundaries" (NASCO, undated). A memorandum of understanding regarding the establishment of Kavango Zambezi (KAZA) TFCA, which stretches into southwestern Zambia, was signed in December 2006. A master integrated development plan (IDP), which is a five-year strategy that began in 2014 to steer development of the TFCAs at a regional level, was approved by partner countries in 2015 (PPF, undated). Protected Areas alone cover approximately 27% of Zambia in the form of National Parks and Game Management Areas (Thouless et al. 2016). With TFCA initiatives in and around Zambia, elephant habitat is growing due to the increased interconnectedness of protected areas in neighboring countries.

Human settlements and activities appear to be impacting the distribution of elephants, especially in southern portions of the Kafue ecosystem and Sioma-Ngwezi ecosystem (DNPW 2016). The primary risks to the long-term survival of the elephant in Zambia appear to be increasing human-elephant conflict, loss of habitat for agriculture use, and poaching. Zambian law requires that the government is responsible to the rural communities by conserving wildlife resources for the benefit of its people (CITES 2010). There were 10 and 16 elephants killed through problem

animal controls in 2015 and 2016, respectively. In that same time period, poaching occurred in Lower Zambezi, Sioma, South Luangwa, Lukusuzi, and Kafue National Parks as well as Rufunsa, Chiawa, West Petauke and Mulobezi Game Management Areas (GMAs). In 2015, 168 elephants were reported as being poached, and 155 were reported in 2016; there were 50 fresh and 22 recent carcasses recorded in national parks and GMAs across the country in recent patrols, indicating a need to address possible poaching (DNPW 2017).

African Elephant Management in Zambia: Zambia elephant hunting occurs in Game Management Areas (GMAs) and Open Game Ranches (OGRs). OGRs are unfenced private lands reserved for the wildlife conservation management of an individual or local community and are buffered by GMAs. DNPW issues annual non-resident hunting quotas to the OGRs in exchange for managing the wildlife; although all animals remain the property of the State (DNPW 2016).

[3] TFCAs were founded through SADC with the aim of collaboratively managing shared natural and cultural resources across international boundaries for improved biodiversity conservation and socio-economic development. http://www.sadc.int/themes/natural-resources/transfrontier-conservation-areas/

GMAs are primarily designated for safari (tourist) and resident hunting, but some GMAs also include photographic tourism. There are 36 GMAs in Zambia covering 177,404 km^2 (DNPW 2016). Most, but not all, GMAs have General Management Plans outlining basic management practices. All 20 of Zambia's national parks are surrounded by GMAs, but currently, elephant hunting only occurs within hunting blocks located in the GMAs that surround the National parks in the Luangwa and Lower Zambezi ecosystems. In 2015, DNPW stated that it was their policy that GMAs be managed with the guidance of management plans. At that time, land use plans had been developed for most GMAs and National Parks. All GMAs allow settlement. Community-Based Natural Resource Management (CBNRM) is implemented within GMAs through Community Resource Boards (CRBs) (DNPW 2016). The CRBs focus on the economic and social well-being of local communities. There are currently 75 registered CRBs within Zambia that employ approximately 750 community scouts and 79 support staff.

DNPW, in consultation with the local community, is mandated to grant hunting concessions within specific hunting blocks within GMAs. Hunting concessions must be registered in Zambia, have a tourism enterprise license, have a valid tax clearance certificate, provide proof that the company is not bankrupt, and they must meet any additional conditions set by an evaluation committee (DNPW 2016). Leases are stated to range from 7 - 15 years, with the length of lease time dependent on the abundance of species classified within the individual hunting block (DNPW 2016). Prime hunting blocks have greater species abundance and are generally awarded shorter lease agreements in comparison to secondary hunting blocks. Secondary hunting blocks are generally given longer lease periods in an effort to provide incentives for the concessionaire to invest greater resources and allow wildlife populations to increase before offering hunting (DNPW 2016).

Hunting block concessions are awarded through a bid process in accordance with the Zambia Public Procurement Act No 12 of 2008. Bids are taken from companies through a "two envelop system." The bids consist of a technical proposal and a financial proposal being placed in separate clearly marked envelopes. The technical bid is required to be evaluated by criteria outlined in Zambia's Wildlife Act before the envelope containing the financial bid is opened. Financial envelopes will only be opened for bidders that received meet a specific technical expertise (e.g., a score of over 80 on the established criteria). The lease is awarded to the bidder that qualified with a minimum technical rating of 80 and whom submitted the highest financial bid (DNPW 2016).

Successful bidders must address statutory obligations to communities and provide enforcement contributions when developing Concessionary Agreements. Concessionary Agreements are developed through a partnership between the communities, safari operators, professional hunters, and DNPW. As such, a hunting concession agreement is not valid without the signature of the Chief(s) or CRB associated with the hunting block (DNPW 2016). Concessionaires are required to use collected fees to support resource protection by providing community scouts, vehicles, fuel, patrols, and equipment. They must provide infrastructure development to local communities and also offer resource monitoring and fire management. Some concessionaires further benefit community development by supporting the employment of teachers and nurses, purchasing ambulances, building classrooms and clinics, and providing houses for teachers and health personnel. Moreover, they are mandated to provide 50% of the meat from hunted animals to the local community. Concessionaires are evaluated annually and those that do not comply with their

obligations can have their concession terminated before the end of the agreement's term (DNPW 2016).

According to an April 30, 2015, e-mail, Zambia is managing its elephant population using the 2005 National Strategy for Elephant Management in Zambia (However, this management plan is under review, with a new strategy scheduled for release in late 2017). DNPW has implemented several actions in the Elephant Management Plan, including but not limited to, building and implementing a management system for a central strong room for ivory, coordination of elephant management in TFCAs, carrying out Monitoring Illegal Killing of Elephants (MIKE) and Spatial Monitoring and Reporting Tool (SMART) systems in protected areas, as well as the improvement of funding. ZAWA's reincorporation as DNPW now allows the government to pay DNPW staff salaries while allowing the department to retain all revenue, which has improved resources for anti-poaching efforts. One hundred and sixty-eight elephants were reported to have been poached in 2015 and another 155 in 2016 (DNPW 2017). The government allocates K40 million (USD3.8 million) to DNPW annually, of which 75% is used for anti-poaching. The level of effort to curb poaching increased after the Presidential order for all security wings (Zambia Army, Air force, National Service, Police, Intelligence, Department of National Parks and Wildlife) to be involved in anti-poaching efforts. This led to increased number of man-days spent on patrol as well as the number of poaching arrests (DNPW 2017).

A major threat to the survival of elephants in Zambia appears to be increasing human-elephant conflicts. An increase in human elephant conflicts may imply that the species will continue to reclaim its former range; however, human settlements continue to expand in the GMAs and human-elephant conflicts will continue to be a management challenge (CITES 2010). From 2012 to 2014, there were 1,780, 2,400, and 1,261 reported human elephant conflicts, respectively (ZAWA 2015). A total of 26 elephants were killed through controls 2015-2016 (DNPW 2017 pers. comm., March 31). DNPW (ZAWA 2015) notes that an integrated elephant control approach is better than any single method. It is believed, however, that poor perception of elephants by HEC-affected communities could be counteracted if elephants are perceived to have value (CITES 2010).

Hunting and Utilization: Sport hunting of elephants, banned in Zambia between 1982 and 2004, was re-opened in 2005 under the Zambia Wildlife Act (Act No. 12 of 1998/Statutory Instrument No. 40 of 2005), authorizing the sport hunting of elephants for non-commercial purposes. From 2005 through 2010, the export quota was set at 20 elephants annually (Thouless et al. 2016). This quota apparently did not include elephants taken as part of problem elephant control. In 2011 and 2012, the export quota was increased to 80 elephants (Thouless et al. 2016). This quota, however, including hunting of problem animals involved in human-elephant conflicts (ZAWA 2015). In a letter to the Service, dated April 28, 2015, ZAWA explained elephant hunting had again been suspended in Zambia from 2013 to 2014. The Zambian Government was interested in ascertaining the status of wildlife populations in the Game Management Areas where hunting is done (ZAWA 2015, pers. comm., April 28). After re-opening elephant hunting in 2015, Zambia again established a quota of 80 individuals per year for trophy hunting for noncommercial purposes. The level of sport hunting appears to be based largely on the 0.5% of standing population guideline (Martin 1986 and Martin 2005).

While Zambia has established an export quota under CITES of 80 animals (160 tusks), the actual hunting quota has been established at a lower level. In 2015, different reports indicated that the

hunting quota was set at 36 elephants (ZAWA 2015) and 12 elephants (DNPW 2017). However, DNPW (2017) reported that only three elephants were harvested that year. In 2016, the hunting quota established at 30 sport-hunted elephants, but only 12 elephants were harvested; all were males. The elephant-hunting quota for 2017 was again set at 30 (DNPW 2017). Only hunting blocks located in the Luangwa and Zambezi Valley have allocated elephants to hunt. It is unclear if private wildlife estates are also regarded as private concessions in Zambia; ZAWA (2015) notes that there is no private hunting concession done by local communities, however, hunting is permitted in private wildlife estates. According to DNPW, hunting quotas are now set based on population size, distribution, trophy quality, occurrence of human-elephant conflicts, and demand from the community or outfitter. However, it does not exceed 1% of the total population. Hunters that harvest elephants with underweight tusks (below 15kg) are penalized; the average trophy weight for 2015-2016 was 19.2kg (DNPW 2017).

The information used to by develop quotas includes data from ground counts, patrol sightings, local and expert opinion, and hunting monitoring. CRBs use the information they collect to determine what the maximum hunting quota could be in GMA managed by them. Their proposals are submitted to DNPW for approval. Once a proposal is received, DNPW accepts feedback from field staff and safari hunting outfitters, before the quotas are approved by the Wildlife Conservation and Management Unit. The quotas are then distributed by DNPW's Licensing Unit to the CRBs and hunting companies. DNPW is required to share the approved quotas with other government agencies, including the Auditors General Office and Anti-Corruption Commission. For 2016 and 2017, Zambia established a quota of one elephant per hunting concession. Quotas are set for individual hunting blocks within the GMAs (DNPW 2017).

Besides a professional hunter, a wildlife officer from DNPW must also accompany hunters on all hunts (DNPW 2016). The officer is responsible for recording hunt activities on specified forms such as the Safari Hunting Monitoring form and Trophy Measurement form. The officer endorses licenses to ensure that they are not used more than once and the officer ensures that all harvested trophies are registered (DNPW 2016).

The season commences on May 1st and ends on December 31st each calendar year. According to DNPW (2017) only hunting blocks in Luangwa and Zambezi valley are allocated elephants to hunt, and it appears hunting may also take place on private game ranches.

Hunting-generated Revenue: Prior to the 1980s, wildlife management in GMAs was the sole responsibility of the Zambian Government, with little or no local community involvement or stake in the management of these wildlife resources. According to information obtained from ZAWA when evaluating Zambia's hunting program for the 2012 enhancement finding, this approach led to an escalation in the illegal harvesting of these resources. In the early 1980s, this reportedly changed with the development of the Administrative Management Design (ADMADE) program, a government initiative to guide and encourage the participation of local communities in managing wildlife in GMAs. In return for their participation in this program, the Government, under the ADMADE program, provided communities financial incentives derived from wildlife utilization in their respective areas. The revenue generated from safari hunting activities was divided in half with 50% going to the central treasury and 50% going to wildlife management.

Under the Zambia Wildlife Act No. 12 of 1998, with the transformation of the DNPWS to ZAWA, the concept of community participation in wildlife management was further advanced by providing a framework for the formation of Community Resource Boards (CRBs) in GMAs and open areas. The CRBs are local institutional bodies composed of elected community representatives, as well as representatives of the Chief and the local authorities, providing a link between the central government and local communities. In many rural areas where elephants exist in Zambia, there has been a steady rise in human-elephant conflicts that in turn creates a negative attitude toward elephant conservation efforts. This is of great relevance in rural communities where livelihoods are most affected by the presence of elephants (CITES 2010). Through this community-based approach to natural resource management, the creation of CRBs in designated GMAs is intended to give local communities a direct say in how these areas are managed and operated.

In 2008, a letter was sent to the Director General of ZAWA requesting a detailed accounting of the amount of funds generated in a given year associated with safari hunting, and details on how those funds were allocated and spent. The Service received a response that each CRB operated a bank account where the 50% allotment of funds accrued from wildlife hunting was deposited. The administration of these accounts was supervised by the Auditor General's Office. According to this response, between 2005 and 2007, a total of 44 elephants were taken in the four hunting blocks through licensed safari outfitters. The total income generated from this activity was $594,000, with $297,000 being the community share. Of that total income, 5% was paid to the Chiefs as the patrons of the CRBs. The remaining $267,300 was paid to the CRBs, with revenue amounting to $120,285 spent on wildlife management within the GMAs, $93,355 spent on community projects, and $53,460 spent on CRB administrative activities. While a detailed breakdown was received for several of the hunting blocks and the community projects undertaken with this funding, an accounting of the revenue ZAWA received during this same timeframe, and how it was utilized to further elephant conversation and management programs within Zambia, was not provided. This puts into question whether the revenue ZAWA collected from elephant sport hunting during this timeframe in any way furthered Zambia's efforts to establish a sustainable management program for elephants. These questions persisted until 2011 leading, in part, to the Service being unable to make a positive enhancement finding for the import of elephant trophies from Zambia.

In 2011, through ongoing discussion with the Zambian government, additional information on what percentage of elephant hunting revenue retained by ZAWA went towards activities involving elephant management, protection, and conservation in the National Parks and GMAs. Hunting fees for all species accounted for 32% of revenues that ZAWA received during 2010 - 2012. With improved accounting of received revenue and how it was being utilized, along with other factors being considered at that time, the Service was able to make a positive enhancement finding in 2012. However, that amount was reduced to about 4% during the 2013 and 2014 moratorium (DNPW 2016). Safari hunting creates other revenue for Zambia during this time, including activities such as tipping, eating in restaurants, staying at lodges, purchasing souvenirs, and paying for taxidermy. However, with the voluntary moratorium placed on elephant hunting by the Zambian government in 2013 and 2014, the Service did not request or receive any additional information from Zambia on revenue generated through hunting during this time.

With the lifting of the moratorium in 2015, the transition of ZAWA into DNPW, and renewed discussion between the Service and the Zambian government, there is a better understanding of the

revenue generated and how it is distributed. According to DNPW (2016), they receive revenue by charging GMA fees per elephant hunt. They also receive funds from annual professional hunter fees, certificate of valuation of trophies fees, certificate of ownership of trophies fees, permit fees, handling fees, and CITES security stamp fees. Hunting license fees in Zambia are statutory. The foreign hunter looking to take an elephant must pay the fee directly to the outfitter, with the minimum amount currently set at $4,200. DNPW collects these fees from the outfitter/concession and does not deal with the foreign hunter directly. Therefore, the outfitter may choose to charge the foreign hunter any amount greater than $4,200. The revenue generated from license fees (also referred to as Animal fees by DNPW) is mandated to be shared with CRBs under the Zambia Wildlife Act No. 14 of 2015. The fees are shared with CRBs and DNPW as follows:

License fees (animal fees):

- 5% of funds go to the CRB chief/leader.
- 45% of funds go to CRB community funds.
    - According to Zambia's "Guideline on the use of Community funds accrued from wildlife management", 45% of these community funds should go to wildlife protections and patrols, 35% should go to community projects such as constructing clinics, roads, schools, and wells, and 20% of the funds should go towards CRB administration costs.
- 50% of funds go to DNPW (mandated under the *Zambia* Wildlife Act No. 12 of 1998 and continued in the Wildlife Act) in the form of conservation funds, including, but are not limited to: scout/wildlife officer salaries, resource protection, consultancy and legal fees, animal surveys, staff training, administrative and operational expenses, repair and maintenances, and other conservation expenses.

According to Zambia's hunting guidelines, hunts involving elephants are required to be a minimum of 21 days (DNPW 2016). A daily conservation fee of $150 per hunter and $100 per observer is collected for monitoring purposes (DNPW 2016). These daily hunt fees typically cover combined hunt packages that include hunting elephant, along with other species such as hippos and impalas. The fees are allocated by percentages to CRBs and DNPW as follows:

Daily fees (Concession fees):

- 5% of funds go to the CRB chief/leader.
- 15% of funds go to CRB community funds.
    - Based on recommended guidelines, 45% of these community funds go to wildlife protections and patrols, 35% goes to community projects such as constructing clinics, roads, schools, and wells, and 20% of the funds go to CRB administration costs.
- 80% of funds go to DNPW in the form of conservation funds, including, but are not limited to: scout/wildlife officer salaries, resource protection, consultancy and legal fees, animal surveys, staff training, administrative and operational expenses, repair and maintenances, and other conservation expenses.

A total of USD150,000 was raised from elephant sport hunting in 2015-2016. As per Zambia's approved budget, DNPW retains all revenue from elephant sport hunting and distributed it proportionately to the CRBs and DNPW (DNPW 2017). Community funds have been used for

instances such as paying children's school fees and repairing classrooms and health centers. Current concession agreements require at least 80% of outfitter's employees be from local communities; outfitters also share 50% of meat from elephant hunting with the local communities as well as provide agricultural produce (DNPW 2017). As such, communities in wildlife areas are eager to conserve elephants as they earn income from doing so, both directly and indirectly.

Evaluation:

As explained earlier in General Considerations, the Service evaluates a number of factors to determine whether the killing of the trophy animal taken in a range country will enhance the survival of African elephants under 50 CFR 17.40(e)(6)(i)(B). The Service evaluates applications in accordance with the African elephant 4(d) rule and the permit issuance criteria outlined in 50 CFR 17.32(a)(2). In evaluating each of these criteria the Service has considered the information currently available to the Service as of the date of this finding on elephant hunting in Zambia, including information provided by the Government of Zambia, current applicants to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service. In accordance with the regulatory requirements, the Service is able to make a determination that the killing of the trophy animal in Zambia, on or after January 1, 2016, and on or before December 31, 2018, will enhance the survival of the African elephant. Therefore, with the information currently available, applications to import trophies hunted during this time period will be considered to have met this requirement unless we issue a new finding based on available information. In accordance with the 4(d) rule for the African elephant, 50 CFR 17.40(e), the Service will review each application received for import of such specimens on a case-by-case basis and each application also needs to meet all other applicable permitting requirements before it may be authorized. On an ongoing basis and as it evaluates each application, the Service will continue to monitor the status of the elephant population, the total management program for elephants in the country to ensure that the program is promoting the conservation of the species, and whether the participation of U.S. hunters in the program provides a clear benefit to the species. Accordingly, the Service may modify its determination based on available information consistent with the regulatory requirements. Further discussion for each of the criteria follows:

17.32(a)(2)(i): Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit:

Communities that bear the burden of dealing with problem elephants are more likely to support the conservation of the species as a whole if they benefit from them in some way. Sixty-seven percent of problem elephant reports involve crop and property damages; however, many community projects are made possible by encouraging the conservation and sustainable sport hunting of elephants, as Zambia has a scientifically based quota system. In addition, the TFCA initiative is linking several protected areas across international borders, which promotes regional support of elephant conservation and movement by expanding habitat availability.

Therefore, the purpose for which the permit is required is adequate to justify removing elephants from the wild or otherwise changing the status thereof.

In evaluating this criterion, the Service assesses whether the hunting program established for elephants has demonstrated the ability to contribute toward positive conservation outcomes that mitigate or improve the status of elephants throughout their range within Zambia, while addressing the main threats of habitat loss, human-elephant conflicts, and poaching.

The IUCN's 2012 Guiding principles on trophy hunting support the concept that hunting can provide a conservation benefit if it is part of a governance system that provides both implementation and enforcement at a level that adequately supports conservation. The Service also believes that conservation hunting can assist the elephant populations if managed well. Elephant hunting, if managed properly, could meet the Service's enhancement criteria under the Act. There must be adequate information and data clearly showing that removing elephants from the wild for trophy hunting will be done at a level and with sufficient oversight such that it improves the current status of elephants in the wild (50 CFR 17.32).

Zambia has demonstrated their desire to maintain the long-term conservation of their elephant population with their 2013-2014 moratorium on elephant hunting. When the Zambian government realized that population numbers were declining to an unstainable level, they applied the moratorium for 2 years, until they determined that their elephant population increased enough to tolerate a limited offtakes (DNPW 2016).
The Zambian government has done a good job of identifying how resources from hunting-generated revenue would be shared with communities. The local communities receive funds from concessions and license (animal) hunting fees. As outlined in the license fee distribution above, 35% of the funds allocated to CRBs help support community projects such as constructing clinics, roads, schools, and wells, thereby providing incentives for the local community to ensure the long-term conservation of elephants. In addition, 45% of the CRB license fees go to wildlife management, including resource protection and patrols.

Zambia's human population growth has contributed to conflicts within the GMAs. As clarified in detail on pages 16 and 17 of this document, DNPW contributes 50% of the license fees (animal fees) and 20% of the Concession fees to local communities. These financial benefits received from living in a GMA have provided incentives for newcomers to illegal squat in the GMAs looking to capitalize on the financial benefits. Consequently, the illegal squatting has caused enough conflict with local people to trigger the Zambian government to take action. In August of 2015, over 2,000 squatter households within the Mumbwa GMA were evicted so that the registered local communities could receive the full benefits of living within a conservation area (DNPW 2016). The long-term results of the eviction will need to be addressed in future analysis of Zambia's trophy hunting.

Based on the information available to the Service and provided that hunted elephants are properly permitted and in compliance with national and provincial regulations, we conclude that the purpose for which a permit being requested is adequate to justify changing the status (i.e., exporting trophy elephants) of animals taken in accordance to Zambian laws and regulations.
Therefore, provided that elephants harvested in the 2016, 2017or 2018 season were properly permitted and in compliance with international, national and provincial regulations, we find that the requirements of 17.32(a)(2)(i) is met.

17.32(a)(2)(ii): The probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit:

The elephant population appears to be stable or increasing, apart from Sioma-Ngwezi, which makes up a small portion of the national population, and where law enforcement efforts have been increased. Zambia's sport hunting quotas also do not exceed 1% of the total population. The subsequent increase in funds provided by U.S. sport hunters would allow DNPW to further vital conservation activities for elephants and incentivize local communities to protect them.

The two separate quotas that seem to exist for elephants in Zambia are a source of some confusion. Documents provided to the Service from Zambia note that there is both an export quota under CITES, which is 80 animals (160 tusks), and hunting quotas, for which conflicting information on the 2015 quota was reported (12 elephants in DNPW (2017 pers. comm., March 31) and 36 elephants in ZAWA (2015 pers. comm., April 30)). However, if looking at the GEC (2016) population estimate, the higher quota of 80 animals does not exceed the 1% mark that Zambia appears to use as a limit and, to date, does not appear to have ever been met.
Provided that the off-take of elephants continues to be monitored, the participation of U.S. hunters in elephant hunts would provide an indirect benefit to wild populations by helping to support the areas where elephants are found. Therefore, based on the information available to the Service and provided that elephant hunting remains at a sustainable level in Zambia, the probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit would be positive.

17.32(a)(2)(iii): Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed:

Zambia said in a personal communication that they are managing the elephant population using the National Strategy for Elephant Management, and that a new version of this strategy was going to be reviewed sometime this year (in 2017). It is clear, however, from the documents provided to the Service, that Zambia is actively implementing management actions to ensure sustainable sport hunting of elephants to further their conservation in the wild.

Issuing an import permit would not in any way conflict with the Zambia Wildlife Regulations No. 60 of 2007, providing all U.S. sport hunters obtain the proper permit and provided Zambia with pertinent information related to each hunt. In Wildlife Regulations No. 107 of 2010, it is required that at least 50% of meat and 45% of profits from elephant sport hunting be given to the local community in the game management area which the hunt(s) takes place.

Therefore, based on the information currently available to the Service, the issuance of import permits for legally hunted elephants will not conflict with known conservation programs and rules.

17.32(a)(2)(iv): Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit:

In evaluating this criterion, the Service assesses whether the hunting program established for elephants is subject to a governance structure that clearly allocates management responsibilities and supports regulatory pathways in support of positive conservation outcomes. Zambia's elephant management program is based on a precautionary quota and direct community benefits (DNPW 2016).

Currently, as per Zambia's approved budget, DNPW retains all revenue from sport hunting. A total of USD150,000 was raised from elephant sport hunting from 2015-2016. Fifty percent of animal fees, and 80% of concession fees, go to DNPW as conservation funds. This is a vital source of funding for ensuring the continued existing of elephants in the wild in Zambia; also important is the 45% of animal fees and 15% of concession fees that go to communities where the hunts take place. If local communities continue to benefit from the sport hunting of elephants, through job opportunities, funded community projects, and sharing of meat post-hunt, they will have incentive to protect it.

Therefore, based on the information available to the Service, the purposes for which import permits would be issued would likely reduce the threat of extinction facing elephants in Zambia.

17.32(a)(2)(v): The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application:

Based on our review of information obtained through personal conversations and literature, there is a general agreement that hunting, done properly and well managed, would not have an adverse effect on elephant populations. Researchers and others with substantial knowledge of elephant management have stated that, whether or not they support hunting in general, they see that benefits can be had through a scientifically based hunting program for elephants.

The IUCN Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives (Ver.1.0, August 2012) state that well-managed trophy hunting can "assist in furthering conservation objectives by creating the revenue and economic incentives for the management and conservation of the target species and its habitat, as well as supporting local livelihoods" and, further, that well-managed trophy hunting is "often a higher value, lower impact land use than alternatives such as agriculture or tourism." Lindsey et al. (2007), in their paper on the economic and conservation significance of the trophy hunting industry in sub-Saharan Africa, state their belief that, from a conservation perspective, "the provision of incentives which promote wildlife as a land use is the single most important contribution of the trophy hunting industry." In addition, they note that trophy hunting generates revenues in areas where alternatives, such as ecotourism, may not be viable. More recently, Di Minin et al. (2016) assert that trophy hunting "strongly contributes" to conservation in sub-Saharan Africa, where large areas currently allocated to use for trophy hunting support important biodiversity. They also note that, if revenue cannot be generated from trophy hunting, these natural habitats will be converted to other forms of land use. While recognizing that the degree to which trophy hunting contributes to conservation is a subject of debate, Mallon (2013), in his report on trophy hunting of CITES-listed species in Central Asia, states that "well-run hunting

concessions have an economic interest in maintaining the resource (*i.e.*, conserving the species) so will also aim to manage the area to conserve high-quality habitat that supports high numbers of the hunting species, and also to prevent unregulated use by others (poaching, overgrazing)." Naidoo et al. (2015) describe the complementary benefits of tourism and hunting to communal conservancies in Namibia.

We have reviewed a number of comments from NGOs and the public opposing hunting any elephants. This opposition, however, is primarily based on the perceived ethics of hunting. While these comments are an indication of concerns from some members of the public over hunting, they are not germane to our review process.

Therefore, based on the information available to the Service, there is general support for scientists and other persons or organizations having expertise concerning elephants that the legal well managed, science-based harvest of elephants, and the subsequent import of these trophies, would not have an adverse effect on the species, but would further efforts to conserve the species in the wild into the future.

17.32(a)(2)(vi): Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application:

Based on our understanding of the hunting program within Zambia, U.S. hunters must be accompanied by a professional hunter on land that is being managed by the landowner, concessionaire, or representatives of the communal land where the hunt occurs. Although the U.S. hunter may not have the expertise to ensure adequate and proper management of elephants on that land, the professionals associated with the hunt have the expertise and resources to successfully accomplish DNPW management goals. Along with oversight established by the DNPW, there are expertise and facilities available to U.S. hunters to accomplish the stated objective of their application that the killing of an elephant in Zambia whose trophy is intended for import into the United States would enhance the survival of the species in the wild. Therefore, based on the information available to the Service, that applicants that are hunting on properly permitted reserves that carry out their management practices in accordance with national and provincial regulations, have the expertise, facilities, or other resources available to them to successfully accomplish the objective of their application; i.e., the long-term survival of elephants in Zambia. In its evaluation of each application, the Service will further ensure that this criterion, along with the other criteria, is met by each applicant before issuing an import permit.

Conclusion:

Sport hunting of elephants is integral to ensuring the long-term survival of this species in Zambia; funding provided by U.S. sport hunters will further aid in the implementation of conservation objectives and the realization of community projects. These reasons, as well as the implementation of a scientifically based quota system, and clear regulations provided in Wildlife Regulations No. 107 of 2010, have enabled the Service to determine that **permits for sport-hunted elephants taken from Zambia on or after January 1, 2016 and on or before December 31, 2018 meet the enhancement requirements under 50 CFR 17.32 and 50 CFR 17.40(e)(6)(i)(B).**

The Service may replace this finding at any time that this finding no longer reflects the available information consistent with the regulatory requirements. While the Service is currently satisfied that U.S. hunters taking elephants in Zambia at this time and the subsequent import of such trophies meets the enhancement requirements, there are several areas where additional information and follow-up would be required before the Service could make another finding for the 2019 hunting season and beyond. Specifically, the Service would like to receive an update on the status of revision to the 2005 National Strategy for Elephant Management in Zambia that was scheduled for release in late 2017. While DNPW provided an accounting of the amount of revenue generated through elephant hunting in 2015 and part of 2016, additional information on 2017 revenue would be needed. The same would be true for 2018 revenue when such data are available. Further, current information on the success of CRB's implementation of elephant management and how DNPW is addressing poaching, human-elephant conflicts, and increasing human populations would be needed before future findings could be completed. The Service will formally reach out to Zambia in the beginning of 2018 to request such information.

REFERENCES:

CITES (2002). Consideration of Proposals for Amendment of Appendices I and II. Prop. 12.9.

CITES (2009). The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory. CoP15 Doc. 44.1.

CITES (2010). Consideration of Proposals for Amendment of Appendices I and II. Fifteenth meeting of the Conference of the Parties.

DNPW (2015). Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia.

DNPW (2016), *The 2015 Aerial Survey in Zambia. Population Estimates of African Elephants (Loxodonta africana) in Zambia. Vol. 1.* Chilanga, Zambia.

Douglas-Hamilton I. & A. Hillman (1981). Elephant carcasses and skeletons as indicators of population trends in low-level aerial survey technique. ILCA Monograph.

Douglas-Hamilton I. & A Burril (1991). Using carcass ratios to determine trends. In: Proceedings of the International symposium on African Wildlife: Research and Management.

Great Elephant Census (GEC) (2016). The Great Elephant Census: Country-by-Country Findings.

IUCN Species Survival Commission (2012). Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives, Ver. 1.0. IUCN SSC 2012.

Martin, R.B. (1986). Establishment of African ivory export quotas and associated control procedures. Report to CITES Secretariat.

Martin, R.B. (2005). Elephants. Transboundary Mammal Project. Ministry of Environment and Tourism. Windhoek, Namibia.

NACSO - Namibian Association of CBNRM Support Organizations (undated). Trans frontier conservation areas.

Thouless, C.R., H.T. Dublin, J.J. Blanc, D.P. Skinner, T.E. Daniel, R.D. Taylor, F. Maisel's, H.L. Frederick and P. Boucher (2016). African Elephant Status Report 2016: an update from the African Elephant Database. Occasional Paper Series of the IUCN Species Survival Commission, No. 60 IUCN / SSC Africa Elephant Specialist Group. IUCN, Gland, Switzerland. vi + 309pp.

ZAWA (2013). Preliminary Report: Dry Season Survey of Large Herbivores for Kafue and Luangwa Ecosystems.

ZAWA (2015). Enhancement and Non-Detriment Findings for African Elephant Sport Hunting in Zambia.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA

NOV 16 2017

Memorandum

To: The File

From: Chief, Branch of Permits

Date:

Subject: Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe On or After January 21, 2016 and On or Before December 31, 2018.

The African elephant (*Loxodonta africana*) is listed as threatened under the Endangered Species Act (ESA) and is regulated under an ESA section 4(d) special rule [50 CFR 17.40(e)]. The 4(d) special rule gives the requirements for the import of sport-hunted trophies. Under paragraph 17.40(e)(6)(i)(B), in order for the U.S. Fish and Wildlife Service (Service) to issue a threatened species permit under 50 CFR 17.32 authorizing the import of a sport-hunted elephant trophy, the Service must make a determination that the killing of the trophy animal will enhance the survival of the species. After evaluating the available data as of the date of this finding on elephant hunting in Zimbabwe in 2016, 2017, and 2018, including information provided by the Government of Zimbabwe, current applications to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service, under the regulatory requirements provided by 17.40(e)(6)(i)(B), the Service is able to make a determination that the killing of the trophy animal in Zimbabwe, on or after January 21, 2016 and on or before December 31, 2018, will enhance the survival of the African elephant. Applications to import trophies hunted during this time period will be considered to have met the enhancement requirement unless we issue a new finding based on available information. The Service may replace this finding at any time this finding no longer reflects the available information consistent with the regulatory requirements. The Service reviews each application received for import of such specimens and evaluates the information provided in the application as well as other information available to the Service on the status of the elephant population and

the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

General Considerations:

In evaluating whether the killing of the trophy animal will enhance the survival of African elephants in accordance with 50 CFR 17.40(e)(6)(i)(B), the Service considers the permit issuance criteria outlined in 50 CFR 17.32(a)(2). These include, in addition to the general permitting criteria in 50 CFR 13.21(b):

(i) Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit;

(ii) The probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit;

(iii) Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed;

(iv) Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit;

(v) The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application; and

(vi) Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application.

As with all permit applications submitted under 50 CFR 17.32(a), the individual requesting authorization to import a sport-hunted elephant trophy bears the burden of providing information in their application showing that the activity meets the requirements for issuance criteria under 50 CFR 17.32(a). In some cases, such as for import of sport-hunted trophies, it is not always possible for the applicant to provide all of the necessary information needed by the Service to make a positive determination under the ESA to authorize the activity. In such cases, the Service may consult with the range country and other interested parties to the extent practicable to obtain necessary information. The Service has the discretion to make the required findings on sport-hunted elephant trophy imports on a country-wide basis, although individual import permits will be evaluated and issued or denied for each applicant. While the Service may make enhancement findings for sport-hunted elephant trophy imports on a country-wide basis, the Service encourages the submission of information from individual applicants. We

rely on the information available to the Service and may rely on information from sources other than the applicant when making a permitting decision.

Neither the African elephant 4(d) rule nor 50 CFR 17.32(a)(2) specify what would constitute the enhancement of survival of a species regarding the authorization for the importation of an African elephant sport-hunted trophy. Therefore, when making a determination of whether the killing of the trophy animal will enhance the survival of African elephants, the Service examines the overall conservation and management of the species in the country where the specimen originated and whether that management addresses the threats to the species (*i.e.,* that it is based on sound scientific principles and that the management program is actively addressing the current and longer term threats to the species). In that review, we evaluate whether the import contributes to the overall conservation of the species by considering whether the biological, social, and economic aspects of a program from which the specimen was obtained provide a net benefit to the species and its ecosystem.

As stated in previous findings, in evaluating whether the killing of the trophy animal will enhance the survival of African elephants within a country, the Service looks at a number of factors. We evaluate whether a country has a valid national or regional management plan and if the country has the resources and political will to enact the plan. If there is a plan, what government entities implement the plan and how often is it reviewed and updated? Does the plan have clear, achievable objectives? Are the objectives measurable and are they being achieved? Is there an adaptive management approach within the plan so that enacting agencies can quickly respond to changing environmental or social issues?

The Service also evaluates the status of the elephant population within a country and trends over time. Particularly, we are interested in population numbers, sex and age-class distribution, and mortality rates (both natural and human-induced). Are standardized surveys being conducted and, if so, what are the timing, census methodology, and coverage? Since elephant populations can move across international borders, what level of cooperation is there between neighboring countries in management and surveying efforts for shared populations? How is poaching accounted for within survey efforts?

The Service takes into account all forms of offtake when evaluating population viability and sustainability, including human-elephant conflicts, problem animal control, poaching, and sport-hunting. While recognizing that there may be limited resources available for elephant management, the Service considers what national policies are in place to address human-elephant conflicts and problem elephant control. Is there a policy on culling surplus animals and removal of nuisance animals? Does domestic harvesting of elephants occur for local consumption or use? The amount of protected area either set aside for elephants or managed for elephant populations and the level of protection provided are also important in the Service's evaluation of whether imports of trophies could be authorized.

Finally, the Service considers the country's sport-hunting program and whether it contributes to the conservation and management of the species. Is the hunting program scientifically based and

has it been incorporated into national/regional management strategies, particularly in light of data on population numbers and trends and levels of utilization (both legal and illegal)? Are the funds generated by hunters going directly to in-situ conservation and management efforts or deposited into a general treasury fund? How are hunting quotas distributed? If there are concession areas, how are they managed and allocated? Do U.S. hunters, through their participation in the hunting program, contribute funds used to help address management needs of the species, and are those funds utilized in a meaningful manner?

In short, the Service is looking to determine if a country has sufficient numbers of elephants to support a hunting program, if the country has a management plan and adequate laws and regulations to effectively implement a hunting program, and if the participation of U.S. hunters in the program provides a clear benefit to the species to meet the requirements for the import of sport-hunted trophies under paragraph 17.40(e)(6)(i)(B).

The Service's approach to enhancement findings for the importation of sport-hunted trophies of African elephants is consistent with the purpose and intent of the ESA. Well-managed trophy hunting can benefit conservation by generating funds to be used for conservation, including for habitat protection, population monitoring, wildlife management programs, and law enforcement efforts. We are, of course, aware that not all trophy hunting is part of a well-managed, well-run program, and we evaluate import of sport-hunted trophies carefully to ensure that all legal requirements are met before allowing import.

We note that our approach is also consistent with the approach provided in the *IUCN Species Survival Commission (SSC) Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives, Ver. 1.0* (IUCN SSC 2012). The SSC document provides useful principles and sets out guidance from international experts in the field on the use of trophy hunting as a tool for "creating incentives for the conservation of species and their habitats and for the equitable sharing of the benefits of use of natural resources" (IUCN SSC 2012, p. 2) and recognizes that recreational hunting, particularly trophy hunting, can contribute to biodiversity conservation and more specifically, the conservation of the hunted species. The SSC document lays out the following five guiding principles:

(a) *Biological sustainability:* The hunting program cannot contribute to the long-term decline of the hunted species. It should not alter natural selection and ecological function of the hunted species or any other species that share the habitat. The program should not inadvertently facilitate poaching or illegal trade in wildlife by acting as a cover for such illegal activities. The hunting program should also not manipulate the ecosystem or its component elements in a way that alters the native biodiversity.

(b) *Net Conservation Benefit:* The biologically sustainable hunting program should be based on laws, regulations, and scientifically based quotas, established with local input, that are transparent and periodically reviewed. The program should produce income, employment, and other benefits to create incentives for reducing the pressure on the target species. The program should create benefits for local residents to co-exist with the target species and

other species. It is also imperative that the program is part of a legally recognized governance system that supports conservation.

(c) *Socio-Economic-Cultural Benefit:* A well-managed hunting program can serve as a conservation tool when it respects the local cultural values and practices. It should be accepted by most members of the community, involving and benefiting local residents in an equitable manner. The program should also adopt business practices that promote long-term economic sustainability.

(d) *Adaptive Management: Planning, Monitoring, and Reporting:* Hunting can enhance the species when it is based on appropriate resource assessments and monitoring (*e.g.*, population counts, trend data), upon which specific science-based quotas and hunting programs can be established. Resource assessments should be objective, well documented, and use the best science available. Adaptive management of quotas and programs based on the results of resource assessments and monitoring is essential. The program should monitor hunting activities to ensure that quotas and sex/age restrictions of harvested animals are met. The program should also generate reliable documentation of its biological sustainability and conservation benefits.

(e) *Accountable and Effective Governance:* A biologically sustainable trophy-hunting program should be subject to a governance structure that clearly allocates management responsibilities. The program should account for revenues in a transparent manner and distribute net revenues to conservation and community beneficiaries according to properly agreed decisions. All necessary steps to eliminate corruption should be taken and to ensure compliance with all relevant national and international requirements and regulations by relevant bodies such as administrators, regulators and hunters.

We explained in our final rule revising the 4(d) Rule for the African elephant, 81 FR 36388, 36394 (June 6, 2016) that, "[w]hen a trophy hunting program incorporates the following Guiding Principles, IUCN considers that trophy hunting can serve as a conservation tool: Biological sustainability; net conservation benefit; socio-economic-cultural benefit; adaptive management—planning, monitoring, and reporting; and accountable and effective governance. We support this approach."

Summary of 2014 and 2015 Findings for Zimbabwe:

On April 4, 2014, the Service announced an interim suspension of imports of sport-hunted elephant trophies taken in Zimbabwe during the 2014 season. This finding was revised on April 17, 2014, primarily to clarify that the suspension applied only to elephants hunted on or after April 4, 2014. The decision to establish an interim suspension of imports of elephant trophies from Zimbabwe was due to the Service having insufficient information on the status of elephants in Zimbabwe and on Zimbabwe's current elephant management program to make an enhancement finding. On July 17, 2014, the Service found that the import of elephant trophies

taken in Zimbabwe in 2014 on or after April 4, 2014, would be suspended; this finding was revised on July 22 to make non-substantive corrections. The decision to uphold the suspension on July 17, 2014, was due to the Service being unable to make an enhancement finding even after receiving additional materials from Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) and others. The Service decided on March 26, 2015, to continue the July 2014 suspension until such time as the Service can determine that the importation of sport-hunted elephant trophies from Zimbabwe meet the criteria under the regulations at 50 CFR 17.40(e)(3)(iii)(C). [The criteria are now found at 50 CFR 17.40(e)(6)(i)(B), following the Service's final rule revising the 4(d) Rule for the African elephant, 81 FR 36388, 36394 (June 6, 2016). The requirement for an enhancement finding has remained the same.] The Service's March 26, 2015, decision was again due to the Service being unable to make an enhancement finding even after receiving additional materials from Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) and others.

Prior to April 4, 2014, the Service had limited information regarding the elephant population in Zimbabwe, its management, and how U.S. hunters were contributing to the enhancement of the species within Zimbabwe. Due to this limited information, the Service determined that it did not have sufficient information to make the required determination under paragraph 17.40(e)(3)(iii)(C), and therefore announced an interim suspension on April 4, 2015 (revised on April 17), until such time as sufficient information was obtained that would allow the Service to make the required finding. On April 4, 2014, the Service also sent a letter to Zimbabwe requesting information regarding the status of elephants in Zimbabwe and the hunting program. On April 17, 2014, the Director-General of ZPWMA sent a response to the Service inquiry. Several weeks later, the Service received a number of documents, copies of Zimbabwean laws, and other supporting documentation that was referenced in the ZPWMA response. In addition, since that time, the Service has received additional supporting information from individuals and associations connected to the hunting industry in Zimbabwe or southern Africa and U.S.-based conservation and hunting nongovernmental organizations (NGOs). The Service also delivered a second letter, dated October 31, 2014, to ZPWMA while attending the 13th Annual African Wildlife Consultative Forum in Ethiopia. This letter requested clarification of information submitted to the Service, and also requested additional information to address questions that were raised from our review of available information. The Service received a response to this inquiry on December 10, 2014.

Based on the information provided, the Service determined in 2014 and 2015 Zimbabwe's national elephant management plan consisted primarily of two documents: *The Policy and Plan for Elephant Management in Zimbabwe* (1997) and *Elephant Management in Zimbabwe, third edition* (July 1996). Although the documents provided a well-developed list of goals and objectives, there was no information in these documents on how to achieve or fulfill these goals and objectives, nor did there appear to be any subsequent updates of the documents or reports that provided any indication of progress on fulfilling these management goals and objectives. Without management plans with specific goals and actions that are measurable and reports on the progress of meeting these goals, the Service could not determine if ZPWMA was implementing the general goals and objectives that appear in *Elephant Management in Zimbabwe* and *The*

Policy and Plan for Elephant Management in Zimbabwe. In December 2014, a workshop, hosted by ZPWMA, was held at the Hwange Safari Lodge, Zimbabwe, to discuss revisions to the management plans, particularly to establish clearer goals and measurable outcomes. It appeared that the participants of the workshop agreed on a framework for a revised management plan that maintained the original 1997 long-term vision and the three target goals (i.e., maintain at least four demographically and genetically viable populations; maintain or increase elephant range; maintain numbers/densities of elephants at levels that do not adversely impact biodiversity conservation goals while contributing to economically viable and sustainable wildlife-based land uses). The participants also began work on identifying strategic objectives and outputs, as well as recognizing some key activities, and starting to identify key performance indicators. Additional work was required to finalize the revised management plan. Once this work was completed, the Service explained that it would have an opportunity to evaluate the revised plan to determine if, in conjunction with other management actions, the criteria under 50 CFR 17.40(e)(3)(iii)(C) have been met. However, based on the information available to the Service in March 2015, there was not any information indicating that Zimbabwe was implementing, on a national scale, appropriate management measures for its elephant populations.

One concern expressed in the April 2014 and July 2014 findings was whether management of elephants in Zimbabwe was based on accurate population estimates. According to the *IUCN SSC African Elephant Database report 2013 Africa*, the elephant population in Zimbabwe in 2007 was estimated to be 99,107, and in 2012, it was estimated at 100,291. However, these estimates were primarily based on older surveys, some of which dated back to 2001. In 2014, a nationwide survey was conducted in Zimbabwe as part of the Pan African Elephant Aerial Survey. Preliminary results from the survey indicated that the overall estimated population of elephants in Zimbabwe was 82,000 to 83,000, approximately 20 percent lower than the 2012 estimate. There was an increase in two of the subpopulations within Zimbabwe (North West Matabeleland Region - 2001 estimate of 49,312 elephants, and 2014 estimate of 53,949; Gonarezhou National Park – 2013 estimate of 10,151 elephants, and 2014 estimate of 10,722), but a decline in the other two subpopulations (Mid Zambezi Valley – 2014 estimate of 12,211 elephants, down from 19,297 in 2001; Sebungwe Region – 2014 estimate of 3,634, compared to 13,988 in 2001). With the recent survey, we explained in 2015 that ZPWMA should have more accurate population estimates for each subpopulation to establish appropriate off-take levels to maintain a healthy population of elephants.

According to information provided to the Service for its 2015 finding, Zimbabwe had a methodology, including participation from a number of stakeholders, for establishing annual hunting quotas for all areas of the country. However, while the described methodology appeared to be based on sound wildlife management principles, the Service continued to have fundamental questions regarding how quotas were specifically established and how overall off-take, such as poaching and problem animal control, were taken into account, or to what degree biological factors were taken into consideration (as opposed to economic and societal considerations). As the Service explained, the quota setting process utilized by ZPWMA may take into consideration the issues raised in the Service's finding; however, without documentation of the system providing an explanation of the system used and describing the calculations, the Service was

unable to determine if sport-hunting quotas were reasonable or beneficial to elephant populations and, therefore, whether sport-hunting was enhancing the survival of the species.

The Zimbabwean Parks and Wild Life Act has established the regulatory mechanism for the ZPWMA and its programs, and also provides for substantial penalties for the unlawful possession of or trading in ivory. In addition, the General Laws Amendment Act (No. 5) of 2010 provides for mandatory imprisonment of not less than 9 years for poaching. If properly enforced, it appears these penalties would be a sufficient deterrent for poachers. However, based on the information available to the Service in 2015, we did not have a good understanding of the ZPWMA's annual operational budget, how much money is generated by elephant hunting, or how these funding levels impact the ability of ZPWMA to adequately implement the Parks and Wild Life Act or to carry out day-to-day management activities or anti-poaching efforts. In January 1996, the Government of Zimbabwe approved the establishment of the Parks and Wild Life Conservation Fund, a statutory fund responsible for financing operations directly from wildlife revenues. However, revenues generated through sport-hunting conducted on State and private lands are primarily used to finance ZPWMA, and only limited additional funding is available from appropriated funds from the Zimbabwe government or outside funding from NGOs. While the Service did receive additional information from ZPWMA and other sources on the revenue generated through hunting (in general) and other sources (in general), we still lacked sufficient information on revenue generated through elephant hunting, particularly from U.S. hunters. The Service explained that it was possible that additional documentation could be provided to substantiate claims that revenue from U.S. hunters generated through elephant hunting provides a significant benefit to elephants in the wild, but until such time, we were unable to determine if these claims are accurate.

In 1989, Zimbabwe established the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) to encourage reduction in human-elephant conflicts through conservation-based community development and to provide an economic incentive to improve community tolerance of wildlife, including elephants. At the time, the CAMPFIRE program was the model for community-based conservation efforts in several other African countries and was identified as an innovative program. Under a community-based conservation program, like CAMPFIRE, rural communities should benefit from revenue generated by sport-hunting. With increased human-elephant conflicts on Communal lands, sport-hunting may be an important tool that gives these communities a stake in sustainable management of the elephant as a natural and economic resource and provides the enhancement that would meet the U.S. criteria for authorizing imports of trophies. Much of the information provided to the Service in advance of our 2015 finding focused on the benefits U.S. hunters provided to CAMPFIRE activities and community-based wildlife management. However, the information did not provide a clear connection between hunting revenues coming from U.S. hunters (e.g., how much is generated for communities), and indicated that over time, the management of wildlife and benefits provided through CAMPFIRE may have declined. The Service noted that it appeared that these concerns were expressed during the November 2014 CAMPFIRE Stakeholder's Workshop held in Zimbabwe. The discussions and recommendations touched on the effectiveness of the CAMPFIRE concept and its relationship to tourist hunting. Participants at the workshop

appeared to have made a good start at addressing issues raised by representatives of Rural Development Councils (RDCs), as well as the need for CAMPFIRE to face challenges with limited resources and capacity. It was recognized that there needed to be strong involvement with ZPWMA and safari operators since CAMPFIRE is in areas where there have been both elephant population declines and increased poaching. While we noted that the Service's concerns expressed in our earlier 2014 findings regarding community-based wildlife management had not been sufficiently addressed in the information provided to the Service for our 2015 finding, there did appear to be movement in better defining the role that CAMPFIRE and community-based wildlife management can play in elephant management, particularly in association with U.S. hunters.

As was stated in the July 2014 and March 2015, findings, there are clearly "bright spots" of elephant conservation efforts being carried out by non-governmental entities and individuals in Zimbabwe that are providing a benefit to elephants. Individual safari outfitters and landowners have established their own management efforts, including anti-poaching activities, on areas under their control, either through ownership of the land or leases. These entities have made significant strides to ensure the long-term survival of elephants on their lands. These efforts, however, had been adversely affected by unilateral or seemingly arbitrary actions taken by the central government or RDCs, such as land redistribution activities, which minimize conservation efforts, and reduced lease durations. These "bright spots" were not numerous enough, in and of themselves, to overcome the problems facing Zimbabwe elephant populations or to support a finding that sport hunting throughout Zimbabwe would enhance the survival of the species. While additional information was provided since for our 2015 finding, much of this information only expanded on areas already identified in previous submissions. The Service noted, however, that two workshops involving multiple safari outfitters and leaseholders were scheduled for the beginning of 2015 to identify and address outstanding issues faced by the safari outfitters. It was the stated hope of the Service that these workshops would be successful and act as a springboard for similar workshops throughout Zimbabwe.

Based on the information available to the Service in 2015 on government efforts to manage elephant populations, efforts to address human-elephant conflicts and poaching, and the state of the hunting program within the country, and without current data on population numbers and trends being incorporated into a national management strategy or plan, the Service was unable to make a finding that sport-hunting in Zimbabwe is enhancing the survival of the species and that imports of trophies would meet the criteria established under the Act for African elephants.

Basis for 2016, 2017, and 2018 Finding for Zimbabwe:

Following the Service's March 26, 2015 finding, on May 12, 2015, Service Assistant Director for International Affairs Bryan Arroyo sent a letter to the Honorable Saviour Kasukuwere, (formerly) Zimbabwe's Minister of Environment, Water and Climate, outlining the concerns the Service still had regarding elephant trophy imports from Zimbabwe. The letter identified six areas of concern: the lack of a current management plan; the current population status of elephants in Zimbabwe; poaching levels and prevention; regulations and enforcement concerns;

the sustainable utilization of elephants in Zimbabwe; and the utilization of hunting revenues.

On July 20, 2015, the ZPWMA sent a letter responding to the May 12 letter. The letter addresses each of the questions outlined in the May 12 letter and included a draft version of the Action Plan for Elephant Conservation and Management in Zimbabwe (2015-2020). In January 2016, the Service received the final version of the Action Plan that had been approved and signed by the Director-General of ZPWMA Edson Chidziya, on January 20, 2016, and the Honorable Oppah Muchinguri-Kashiri, Minister of Environment, Water and Climate on January 21, 2016.

On April 4, 2016, the Service sent an e-mail to ZPWMA requesting clarification of the funding priorities for the 2015-2020 management plan. We received a response on May 9, 2016, but it did not clarify what ZPWMA's funding priorities were in 2016 or beyond. In September 2016, during the 17th Meeting of the Conference of the Parties to CITES, the Service met with representatives from Zimbabwe to further discuss the current status of the Service's evaluation of importation of elephant trophies. As a result of those conversations, the Service received a letter dated November 8, 2016, with supplemental information regarding Zimbabwe's elephant management plan priorities. Further, on January 27, 2017, the Service received a letter from ZPWMA containing a report, "The Role of Trophy Hunting of Elephants in Support of the Zimbabwe CAMPFIRE Program: December 2016" that more fully discussed the source and amount of revenue generated between 2010 and 2015 through the CAMPFIRE program, the current role of CAMPFIRE, and how revenue generated by elephant hunting has been utilized within communal areas over this 6 year period and into the future.

This finding is the result of an analysis of information available to the Service as of the date of this finding, having considered all of the information that has been obtained by the Service since 2014, including information on Zimbabwe's current management plan; the current population status of elephants in Zimbabwe, including poaching levels; regulations and enforcement concerns, such as anti-poaching efforts; the sustainable utilization of elephants in Zimbabwe; and the utilization of hunting revenues.

Management Plans: In its April 4, 2014, letter, the Service asked whether Zimbabwe had a current national management plan for elephants. In the ZPWMA response, Zimbabwe responded that the "management plan" consisted primarily of The Policy and Plan for Elephant Management in Zimbabwe (1997) and Elephant Management in Zimbabwe, third edition (July 1996). In addition, ZPWMA stated that they also implement other plans: "The African Elephant Action Plan" (CoP15 Inf. 68), SADC Protocol on Wildlife, and Elephant and Rhino Security Plan. In the ZPWMA response, ZPWMA stated that all of the protected areas in Zimbabwe have "specific aspects of elephant monitoring programs that are implemented and reviewed on an annual basis." ZPWMA stated that information on the status of the elephant is derived from aerial surveys, water hole counts, walking transects, visitor observation, and ranger-based monitoring. In addition, ZPWMA stated that they are regularly monitoring the status of the elephant population, including poaching, at two sites through the CITES "Monitoring the Illegal Killing of Elephants" (MIKE) program.

While Elephant Management in Zimbabwe provides a historical review of elephant status in Zimbabwe prior to 1996, it primarily focuses on intentional reduction of elephant populations through culling rather than on maintenance or increase of populations under threat. Although the Service recognizes the potential role of culling as part of a management program, Elephant Management in Zimbabwe is largely irrelevant as a management plan given its age and because it does not establish specific measurables or management actions that need to be taken. The document does state that when managing elephant males for sport hunting, it is essential to account for all adult males removed from a population, including animals taken through problem animal control and poaching.

The Policy and Plan for Elephant Management in Zimbabwe was the outcome of a "Zimbabwe Elephant Management Framework" workshop held on January 13, 1997, in Harare. The document summarizes the issues that were affecting elephant populations in Zimbabwe at the time, and recommends policy statements on elephant management. While the document states a clear goal and establishes ten objectives with management actions identified, it does not provide a methodology to meet the objectives or complete management actions. Without a plan to take specific actions to meet the objectives, or at least a clear framework on how adaptive management efforts would be monitored to ensure that they are meeting the stated objectives, it is not clear to the Service how the document would serve as a "management plan." Other documents provided by ZPWMA in response to our inquiries, e.g. "The African Elephant Action Plan" (CoP15 Inf. 68), SADC Protocol on Wildlife, and Elephant and Rhino Security Plan also establish broad policy goals and objectives, but provide very little with regard to specific management actions or measurables.

Either as an outcome of our 2014 negative finding or internal discussions, ZPWMA recognized that The Policy and Plan for Elephant Management in Zimbabwe was out of date and did not address key elements that had changed since 1997. To address this, ZPWMA held a three-day workshop at Hwange Safari Lodge (December 2-4, 2014) to review Zimbabwe's elephant management regime. The workshop was attended by the ZPWMA Director General, the Permanent Secretary for Environment, Water and Climate, members of the Zimbabwe Parks and Wildlife Board, Executive Directors of Rural District Councils, and various NGOs. Both the Permanent Secretary and the Director General acknowledged at the workshop that the 1997 management plan was outdated and had been overtaken by events at the global, regional, and local levels and cannot address current challenges.

The workshop participants agreed on a framework for an upcoming management plan. The proposed revised management plan had the same long-term vision of the 1997 plan and basically the same target goals (i.e., maintain at least 4 demographically and genetically viable populations; maintain or increase elephant range; maintain numbers/densities of elephants at levels that do not adversely impact biodiversity conservation goals while contributing to economically viable and sustainable wildlife-based land uses). The workshop participants identified the beginnings of strategic objectives and outputs, as well as some key activities. The outcome of the workshop was the starting point for reevaluating Zimbabwe's management program. However, according to the Proceedings, there was insufficient time at the workshop to complete the section on means of verifying the key performance indicators. A schedule was agreed upon: by Dec. 15, 2014,

ZPWMA would appoint a drafting team to write up the management plan; the 1st draft of the plan would be ready by Jan. 30, 2015; the Elephant Management Plan Coordinating Committee would be convened by ZPWMA by Feb. 28, 2015; Final draft of management plan by April 30, 2015; and Operational annual management plans for 4 sub-regions by May 30, 2015.

While this schedule was not followed closely, since the December 2014 workshop, significant work has been done to develop a revised elephant management plan. As an outcome of this workshop, the participants identified that each of the four primary elephant ranges needed a regional plan to address specific challenges in each area. A workshop was held at the end of April 2015, to discuss an anti-poaching strategy for Mana Pools National Park, the results of which was later expanded to cover the mid-Zambezi Valley region. Likewise, in May and September 2015, workshops were held in Sebungwe and the South East Lowveld, respectively, to develop action plans for each region. An anti-poaching workshop for Hwange National Park was held in June 2015 and, according to ZPWMA, was combined with the management plan for the park to develop the basis for an action plan for Northwest Matabeleland.

As a result of these various workshops, and other efforts ZPWMA and their collaborators put into developing a revised national management plan, the Zimbabwe National Elephant Management Plan (2015-2020) (EMP) was approved for implementation by the Director-General of ZPWMA and the Minister, Ministry of Environment, Water and Climate, on January 20, 2016, and January 21, 2016, respectively. The revised elephant management plan addresses the challenges identified by the 2014 workshop participants and concerns identified by the Service about the failure of Zimbabwe's former management plan to identify specific action items, deliverables, and deadlines. The revised EMP incorporates an adaptive management framework with higher-level targets, with key components, strategic objectives, and outputs. Each key component has management actions that can be measured and verified through "Key Performance Indicators." A set deadline for each action was identified. These measurables allow ZPWMA to monitor the success of the new management plan and, through an adaptive management approach, address newly emerging concerns and long-term management needs.

The EMP focuses on five major components: Protection and Law Enforcement; Biological Monitoring and Management; Social, Economic, and Cultural Framework; Building Conservation Capacity; and Coordination, Collaboration, and Program Management. While addressing elephants on a national basis, the plan also contains annexes with regional management plans for each of the four main elephant populations in Zimbabwe. Differences in management requirements and regional challenges were addressed in the actions and indicators of each regional plan. The intent of the EMP, and its regional components, is to provide for accountability, transparency, and effective implementation. The EMP calls for the establishment of a national elephant manager position tasked with directing elephant management in Zimbabwe. The plan calls for the creation of a National Elephant Management Committee and four range-specific committees to review progress and oversee implementation.

The EMP (page 31) states that the plan "is an ambitious plan" and that the implementation would "require more human and financial resources than are currently available for the conservation and management of elephants in Zimbabwe." Recognizing that ZPWMA may not currently have

adequate resources to implement the Plan as drafted, and that well-prioritized implementation of the plan in a manner to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe could still help serve as the basis for a finding of enhancement, the Service requested on April 4, 2016, that ZPWMA identify its priorities for implementation and progress in implementation. On May 9, 2016, the Service received a response from (former) Director-General Chidziya. Unfortunately, Mr. Chidziya's response did not identify any priorities. It was not until the Service was able to meet with representatives of the Zimbabwe government and ZPWMA in South Africa in September 2016 that we were able to discuss the issue further. As a result, the Service received a letter dated November 8, 2016, that contained a document, apparently drafted between August 2016 and the end of October 2016, titled "The Zimbabwe National Elephant Supplementary Management Plan (2015-2020)" (the Supplement). This document identified four priority areas: Law Enforcement, Biological monitoring and management, Investigations/Intelligence, and the appointment of an Elephant Manager. The document identified that a national Elephant Manager has been hired (but did not identify how long the manager had been in place) and is currently working with ZPWMA personnel, regional intergovernmental agencies, private sector, and nongovernmental organizations to begin implementing the EMP. The Supplement also emphasized law enforcement and training to combat poaching and ivory trafficking. According to the document, as of August 2016, more than $1 million had been spent on priority activities. In addition, the document contained a summary on the status and progress, as of August 2016, of action items identified in the EMP for each of the four regions. While the summary does indicate that there are clearly areas where additional actions should be carried out, it does reflect a concerted effort on the part of ZPWMA and its partners since the EMP was signed into effect January 21, 2016, to implement the EMP in a manner to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe now and to make progress toward full implementation that achieves further benefits for elephants from sport hunting going forward.

Population Status: To manage any population to ensure an appropriate population level and determine whether sport-hunting is having a positive effect on the survival of African elephants, it is vital to have sufficient data on population numbers and population trends to base management decisions. Without current population data, it is not clear how one can calculate the number to offtake. Without information on population demography and mortality, it is not possible to determine accurately what impact hunting, in conjunction with other offtakes, including problem animal control and poaching, is having on Zimbabwe's elephant population. At the time the Service made its April and July 2014 findings, there did not appear to be sufficient data on the population status of elephants within Zimbabwe. According to the IUCN SSC African Elephant Database report "2013 Africa", the elephant population in Zimbabwe in 2007 was estimated to be 99,107, of which 85% (84,416) was classified as "definite", although less than 1% of these animals were identified by aerial or direct counts, and only 0.3% (291) was classified as "speculative". While the total population in 2012 was estimated at 100,291, only 47% (47,366) was classified as "definite" and 45% (45,375) was classified as "speculative." Only 304 "definite" animals were counted by aerial or ground counts (less than 1% of the definite animals), while 41,840 of these animals were counted through sample counts or dung counts, a less accurate methodology than properly conducted aerial surveys, and the remaining 5,222 were estimated through "other guesses." In a November 3, 2014, letter to the Service, the IUCN/SSC African

Elephant Special Group (AfESG) stated that data had been inadvertently left out of the 2013 provisional report. Specifically, a 2007 survey of Hwange National Park which added an additional 30,000 elephants to the "definite" category (from the "speculative" category), while not changing the overall population estimate. In addition, according to information provided by ZPWMA, two surveys were conducted in 2012-2013 in Save Valley Conservancy and in Gonarezhou National Park (and surrounding areas). In Aerial Survey of the Larger Herbivores, Save Valley Conservancy, Zimbabwe, a report compiled in September 2013 by the Technical Advisory Committee of the Save Valley Conservancy, 1,538 elephants were counted. Based on nine years of aerial surveys (2004-2010 and 2012-2013), not all of which covered all of the Save Valley Conservancy, there appears to have been a short-term increase in elephant population density of 9.5%.

In 2014, the Pan African Aerial Elephant Survey (http://www.greatelephantcensus.com/), or the Great Elephant Census (GEC), was carried out over a significant portion of the savanna elephant's range in Africa. The GEC developed standardized survey methodology to establish a consistent continent-wide population basis line. However, it is important to emphasize that Zimbabwe did not modernize its elephant survey method nor did it conduct surveys comparable to the rest of the continent during the GEC. The surveys, approved by the organizers of the GEC, that were conducted used the same methodology, coverage, and transects that have been used since the 1960s in Zimbabwe. The results of this approach is that, while the surveys did not calculate a new baseline, or a more accurate population value, Zimbabwe was able to replicate past surveys that is comparable to past iterations to determine relative population trends over time. In 2015, confirmed results from the GEC reported an estimate for elephant abundance in Zimbabwe to be 82,304 individuals (73,715-90,893), with a total carcass ratio of 7.8%. This was a 6% decrease from the 2001 population estimate. It should be noted, however, that a carcass ratio of greater than 8% generally indicates a declining population.

In African Elephant Status Report – 2016, the AfESG estimated Zimbabwe's elephant population at 82,630 ± 8,589 across a range of 81,228 km^2. According to this report, Zimbabwe maintains the second-largest elephant population in Africa. The population is most concentrated in the North West Matabeleland and South East Lowveld ranges. There was an estimated increase in population for Northwest Matabeleland from 49,310 ±7,051 in 2001 to 53,991 ±7,711 in 2014. There were no significant differences in totals, but the carcass ratio in 2014 was 7% compared to 3% in 2001. According to the report, the 2014 estimate for Sebungwe (northern Zimbabwe) was 3,407 ±1,215 compared to 15,024 ± 2,133 in 2006. The observed carcass ratio of 30% indicated an unsustainably high offtake with almost no elephants left in the communal areas, with the main surviving sub-population in Matusadona and Chizarira National Parks and the Chirisa Safari Area. There was also a decrease in estimates for the Lower Zambezi Valley from 11,656 ± 2,259 in 2014, compared to 19,297 ±2,527 in 2003. However, the report stated that the observed carcass ratio of 6% is not as high as one would expect given the rate of population reduction and might suggest that the level of poaching has reduced in recent years.

Although Zimbabwe chooses not to use the same survey methodology that other countries used during the 2014 GEC, the results of the GEC, and subsequent survey data reported in the 2016 AfESG report, provided more reliable data and a better basis for establishing management

priorities than previous surveys and guesses. Prior to the GEC survey, ZPWMA had stated that the national elephant population was approximately 100,000 animals. This determination was based on guesses and old population estimates, many of which were over 10 years old, and was used to establish quotas or to facilitate management decisions. While establishing the EMP was paramount to improving Zimbabwe's elephant management regime, it was only by incorporating the current population estimates into the framework of the EMP that more effective management would be possible. The targets and goals of the EMP have taken these more reliable population estimates into consideration when establishing hunting offtakes to implement the EMP.

Regulations and Enforcement: The regulatory mechanisms for ZPWMA and its programs were established primarily under the Parks and Wild Life Act 1996 (amended), but also include a number of other laws and regulations. The Parks and Wild Life Act include sections on virtually every aspect of ZPWMA, including requirements for annual financial audits and reporting to the central government. The law also provides for substantial penalties for the unlawful possession of or trading in ivory. The first offense carries a minimum of 5 years and a maximum of 15 years in prison. The second offense carries a minimum prison term of 7 years and a maximum of 15 years. However, according to the response from ZPWMA to our April 4, 2014, inquiry, the General Laws Amendment Act (No. 5) of 2010 provides for a mandatory imprisonment of not less than nine years for poaching.

In January 1996, the Government of Zimbabwe approved the establishment of the Parks and Wild Life Conservation Fund that provides for financing wildlife operations directly from revenues generated through wildlife-related activities. The funding for ZPWMA is therefore coming from revenue generated through sport hunting conducted on state and private lands, concession leases, National Park visitor fees, and other wildlife related fees. While there have been requests by ZPWMA for funding from the central treasury in the past, to our knowledge, no other significant government funding has been provided, and only limited outside funding from NGOs or other governments appears to be available.

In response to the Service's May 12, 2015, letter, ZPWMA sent a letter on June 20, 2015, with additional information on their elephant hunting program. While the document did not specifically identify the amount of revenue generated from elephant hunting, it did state that in 2014, $5,072,493 was generated as hunting revenue. The document went on to state that historically 54% of the hunting market in Zimbabwe is made up of US hunters. Assuming the historical average provided by ZWPMA, US hunters may have contributed approximately $2.74 million of the total hunting revenue for 2014. The document estimated that 2015 revenues from hunting would increase to $6.2 million in 2015. While the document did not provide updated estimates on the role of U.S. hunters, it did assume the role of U.S. hunters would remain consistent with historical averages absent the fact that the Service was not approving the importation of elephant trophies at that time. ZPWMA stated that they had an operating budget of $25.7 million for 2014 and (budgeted) $34.1 million in 2015. According to this document, ZPWMA had revenue equaling $26.4 million in 2014 and estimated revenue of $35.5 million for 2015. While the Service did not receive information regarding ZWPMA's full 2016 or 2017 budget or the estimated revenue, we did receive information that as between January 2016 and August 2016, ZPWMA had spent $1.010 million on the implementation of the EMP. In addition,

we received more specific information regarding revenue generated in the communal areas that were managed by CAMPFIRE (see Revenue Utilization section below).

According to "The Role of Trophy Hunting of Elephant in Support of the Zimbabwe CAMPFIRE Program – December 2016", a report the Service received on December 17, 2016, the Reserve Bank of Zimbabwe, in collaboration with relevant stakeholders, has established the Tourism Receipts Accounting System (TRAS) that required all outfitters to submit returns listing the revenue generated for hunting activities. This system has been in place for several years, but required manual analysis of the data to extract information on hunting revenue. In January 2015, a web-based system (TRAS2) was introduced that links Safari Operators, ZPWMA Authority, Taxidermists, Shipping Agents, International Marketing Agents and Reserve Bank. Under this system all authorized hunts are registered allowing for the capture of hunting data, such as the origin of clients, value of trophies and hunts, and area hunted, to monitor hunting quota utilization and track hunted trophies. According to the December 2016 report, the Exchange Control Division of the Reserve Bank of Zimbabwe and the ZPWMA are now able to:

1. Assess regional price differentials of similar hunts and the reasons thereof;
2. Present TRAS2 system updates and reports to the users, including international marketing agents;
3. Engage with international marketing agents of sport hunting;
4. Obtain relevant insights on governing of the hunting sector; and
5. Come up with an effective mechanism to fully account for export proceeds from the hunting sector.

This system would be very beneficial in obtaining data in the future on how funds generated by elephant hunting in Zimbabwe, particularly from U.S. hunters, are utilized to enhance the survival of the species. .

One concern expressed by the Service in its previous findings was whether ZPWMA was responding to the apparent poaching crisis facing Zimbabwe. One particular concern was the poisoning event in Hwange. Based on communication from ZPWMA, as well as information received from NGOs, ZPWMA specifically responded to the threat of poaching in Hwange by improving radio communications, adding aerial surveillance, and holding 35 public awareness meetings in the area. ZPWMA has also stepped up its anti-poaching nationally by adopting a number of "Urgent Measures" (as identified in ZPWMA's July 2015 letter). ZPWMA has acted to increase poaching penalties, criminalize the use of cyanide in poaching, increase air surveillance of protected areas, collaborate with national law enforcement and military agencies to raise a national concern regarding elephant poaching, and improve intelligence-sharing across international borders. According to available information, ZPWMA has also held a judiciary awareness program to support better implementation of relevant poaching laws and penalties throughout prosecution and sentencing. As shown in the July 2015 Response, most of ZPWMA's budget (77%) is allocated for staff costs and patrol provisions. These expenditures reportedly fund anti-poaching efforts throughout the elephant range. ZPWMA reportedly has a staff of 1,504 active field rangers and has stated that there is an intent to increase this number. According to "The Zimbabwe National Elephant Supplementary Management Plan (2015-2020)", over 80% of spending under the new EMP has been on law enforcement (anti-poaching) and training, with law

enforcement identified as the top priority going forward.

The Parks and Wildlife Act Chapter 20:14 devolved authority to manage and benefit from wildlife on communal and private lands to the landholders. Although the Service raised questions on how successful this approach would be in previous findings, the Zimbabwe government has established dialogue and collaborated with NGOs, landowners, and safari area concessionaires to improve elephant management and anti-poaching efforts. According to their July 2015 response to the Service, and supported by the report on the implementation of the EMP provided in November 2016, ZPWMA is engaging private players in co-management in some areas and entering into long-term lease agreements (10-25 years) to manage some protected areas. In certain areas, ZPWMA is reportedly partnering with safari operators; in others, they partner with non-profits, such as the Tashinga Initiative in the Zambezi Valley and WWF in the Hwange-Sanyati Biological Corridor.

On November 12, 2015, a stakeholders conference was held in Harare. The meeting was called by Minister Mrs. Opah Muchinguri-Kashiri, Minister of Environment, Water and Climate, as the chairperson of a multi-ministerial cabinet committee established to look into the poaching crisis within Zimbabwe. In attendance were the Minister of Tourism and Hospitality, and the Minister of Rural Development, Preservation of Culture and Heritage. Other delegates included the Permanent Secretaries from the Ministries of Environment and Agriculture, representatives from the Zimbabwe National Army, the Air Force, the Zimbabwe Republic Police, Rural District Councils, NGO's, industry and civil society. The conference, partially funded by the African Wildlife Foundation, noted that Zimbabwe needed to reinstate a level of custodianship over wildlife to the local level and give communities and land owners broad user rights. It also noted the need to review the efficiencies of the private wildlife sector, community wildlife programs, and ZWPMA. A number of recommendations were made at the conference including addressing resource concerns of rangers in the field; evaluate how CAMPFIRE is interacting with local communities; and building greater trust between various ministries and agencies to address sport hunting issues. The Minister also called for establishing regular meetings of stakeholders to ensure that there is continual movement in addressing identified issues.

While no information was provided on whether these stakeholder meetings are proceeding as called for by the Minister, the Service was informed by AWF that they have established, and partially fund, the Environment and Wildlife Advisory Committee (EWAC) for the Minister. According to AWF, this committee will advise the Minister and provide technical assistance to ZWPMA. AWF stated that the November conference was the first of its kind to bring together such a wide array of ministries and agencies and, according to AWF, will greatly improve the wildlife industry in Zimbabwe.

At the 16th Meeting of the Conference of the Parties to CITES in 2013, the report on ETIS (CoP16 Doc. 53.2.2) expressed concerns about Zimbabwe in regard to illegal trade in ivory. The report stated that, as a group, Zimbabwe, Botswana, and Namibia, were in the middle range, when compared to 64 other consumer or producer countries of elephant ivory, in terms of the mean number of seizures identified, but ranked fifth in the measure of scale, indicating most of the seizures were in the 10-100 kg class (i.e., an average number of seizures that were predominately

smaller in size). The report noted that 65% of the ivory trade between 2006 and 2011 had occurred since 2009, indicating that illegal ivory trade is increasing. Governance indicators were mixed, with a much lower than average World Bank "rule of law" score, but the second highest law enforcement ratio of any group of countries evaluated.

At the 17th Meeting of the Conference of the Parties to CITES in 2016, the "Report on the Elephant Trade Information System (ETIS)" (CoP17 Doc. 57.6) reflected that there were some improvements in Zimbabwe. As in the previous report, the document grouped Botswana, Namibia, and Zimbabwe together in terms of their level of government oversight and capacity. These countries regularly report data to ETIS. In terms of all data that implicate these countries in an ivory seizure, this southern African grouping reflects middle range values in terms of mean number of seizures and the mean weight of ivory seized. The measure for assessing the presence of organized crime stands at zero which, according the document, is indisputably a good sign. Governance indicators are mixed, however, with the rule of law score problematic and suggesting the presence of corruption, but the relatively high law enforcement ratio partially mitigates that concern. As reported in earlier ETIS reports, Zimbabwe was the country that pulls the rule of law score down, indicating far greater governance challenges exist in that country. The domestic ivory market score is low, reflecting the complete absence of a market in Botswana and a very low level of trade in Namibia. Again, Zimbabwe is the exception with the tenth largest ivory market of any country in this analysis. While not directly addressed in the two ETIS reports, there is some evidence of corruption or collusion within the wildlife sector. It was revealed in 2016 that there was not adequate control of its rhino horn stockpile, and the former Director General Edson Chidziya was recently fired over the loss of a significant number of rhino horns. While this event raises concerns over ZPWMA's ability to maintain control over stockpiles and other resources, it should also be acknowledged that there are mechanisms in place, that were utilized, to address such governance issues.

***Sustainable Use*:** According to the AfESG 2016 report, poaching for ivory has escalated in the past 10 years and has become a major problem in Zimbabwe. Poaching impacts are highest in the north of the country, particularly in the Sebungwe Region. However, at the same time, concerns have been expressed about the impact of high numbers of elephants on vegetation and other biodiversity in protected areas, particularly in areas with elephant densities higher than 0.5 elephants per km^2 (some areas of Zimbabwe have densities higher than 1 elephant per km^2). These two apparently opposing factors (uncontrolled poaching that may adversely affect elephant populations in some areas of Zimbabwe and overutilization of habitat by high numbers of elephants in other parts of Zimbabwe) previously raised concerns by FWS on what would constitute a sustainable utilization of elephants in Zimbabwe.

In previous findings, the Service did not have sufficient information regarding offtake in Zimbabwe, including basic information like the number of elephants that have been sport-hunted annually. For both the 2014 and 2015 hunting seasons (January – December), Zimbabwe had established an annual export quota of 500 elephants (1000 tusks). This is the same quota that

Zimbabwe has reported to the CITES Secretariat since 2004. Likewise, for 2016 and 2017, Zimbabwe has reported the same annual export quota to the Secretariat. It is unclear, given the improved population data now available to Zimbabwe and the revised management plan that specifically recognizes the use of population data when establishing quotas, why Zimbabwe maintains the same CITES export quota year to year. While the Service will request additional insight into Zimbabwe decision not to amend the voluntary quota provided to the CITES Secretariat before making a 2018 finding, unlike what was available to the Service when it made its previous findings, there is now clear information that Zimbabwe has not reached this export quota in the past and is unlikely to do so in the future given the new management efforts under the EMP. In ZPWMA's July 20, 2015, response, a chart was provided that identified the level of offtake between 2010 and 2014, as well as approximately six months of 2015. Based in this response, the average of 215 sport-hunted elephant trophies was taken each year between 2010 and 2014, with the first half of 2015 (75 trophies) being consistent with this annual average (between 2011 and 2013, the average off-take was 260 annually (274, 247, and 258, respectively), so a lower offtake in 2010 (134 trophies) and 2014 (162 trophies) made a significant difference in average annual offtake). Over this period, there were 57 and 23 animals culled in 2010 and 2011, respectively. According to ZPWMA, the number of live exports were low, with a total of 11 live elephants exported in 2012 and 2014 (however, according to the WCMC trade database, Zimbabwe reported the export of 3 live elephants in 2011, 18 in 2012, and 27 in 2015).

Of the five years of data (2009-2013) ZPWMA provided in their April 17, 2014, response, an average of 190 elephants were identified as being poached annually. In 2009 and 2010, there was an average of 111 elephants poached; however, between 2011 and 2013, the average more than doubled to 243 elephants. According to the information received in July 2015, 293 elephants were poached in 2013, including the 105 elephants poisoned in Hwange National Park. However, according to more recent information, the number of elephants poached in 2014 declined to 194, with 70 being identified as poached in the first 6 months of 2015. This identified decline was also corroborated by data presented at CoP17 (CoP17 Doc. 57.6).

While the number of elephants taken as problem animals was not elucidated in material provided by ZPWMA in 2014, their July 20, 2015, response did provide more details. Over a 5-year period (2010 to 2014), an average of 76 elephants was taken annually. There was a spike in 2012 of 173 animals, but other years the annual offtake was reportedly between 44 and 61 animals annually. The July 20, 2015, document also provided more information regarding natural mortality rates. According to this information, between 2010 and 2014, there was a spike of natural mortality in 2011 (1,015 mortalities), 2012 (1,373), and 2014 (1,981), with a five-year average of 940 animals (although the reported natural mortality in 2010 and 2013 was substantially lower, which raises questions regarding the reliability of the 2010 and 2013 figures). The partial data for 2015 (455 reported mortalities) is consistent with average annual mortality rate of 940 animals.

Taking into consideration all of the reported offtake between 2010 and 2014, there was an average offtake of approximately 1,500 animals. Based on this average and the reported population estimates coming from the 2014 GEC, Zimbabwe appears to be experiencing approximately 2% offtake of their elephant population. Even if the annual export quota was 500 elephants, based on the most recent survey data, the hunting offtake would be less than 1% of the total population

(noting, of course, that hunting offtake is typically focused on a select group of larger, tusked elephants). With the reported average hunting offtake of 215 trophies, as reported in 2015, the hunting offtake would be approximately 0.2% of the total population.

In our previous findings, the Service raised concerns about how quotas were established and allocated among safari outfitters and landowners. According to information from ZPWMA, as well as information provided by many of the comments received by the Service from safari outfitters and professional hunters associations, the principal form of utilization of the elephant in Zimbabwe is sport hunting. According to ZPWMA, quotas established in previous years (before the EMP) were set to maximize the sustainable production of high-quality trophies without detriment to the population. It appeared that the national export quota of 500 elephants was the goal to reach when establishing quotas for each hunting area, as opposed to determining the best quota to facilitate management goals for those areas. According to the material provided to the Service in 2014 and 2015, it appears that the complete quota of 500 elephants was allocated proportionally to each area based on recommendations from ZPWMA ecologists, field staff, safari operators, other stakeholders, and technical specialists through "multiple stakeholders participatory quota setting." Then, on an annual basis, stakeholders use available population data to propose a particular quota for an area to a Quota Setting Workshop. At this workshop, it is determined if the proposed quota should be adopted or modified in relation to other proposed quotas. Factors that are apparently considered each year include population estimates, growth rates of populations, size of hunting areas, status of habitat, and target elephant population size.

With the establishment of the EMP, there is a more systematic, scientifically-based approach to establish national quotas. According to a presentation made by the Zimbabwe elephant coordinator at a workshop in South Africa at the end of November 2016, Zimbabwe looks at a number of factors. While they are still starting with the quota identified to the CITES Secretariat (500 elephants), they are not immediately dividing this quota between all of the hunting areas. Instead, they are taking into consideration the results of the 2014 survey and subsequent surveys, results from research efforts, the size of the hunting area in relation to elephant habitat requirements, illegal off-take and other forms of off-take, how the hunting areas are managed in relation to land use or fencing, human-wildlife conflicts that have occurred previously, and recommended sustainable off-take levels developed based on ecological assessments of the hunting area. This information is then further evaluated in light of other species within the hunting area, past elephant trophy quality, and community benefits of proposed harvests.

The proposed quota is then discussed at stakeholder workshops in each of the four elephant regions. This process is presented in the District Quota Setting Toolbox and the Quota Setting Manual, published in 2000 and 1997, respectively, that were discussed in previous Service findings. The significant difference between how the quotas were set previously and the methodology carried out now is the weighted input of elephant ecologists and managers. While stakeholder interests are considered, the final quota determination is made by ZPWMA ecologists to ensure the quotas are assessed at a sustainable level, having negligible impact on the population. According to their July 2015 response, ZPWMA reduced the starting number from 500 to 300. For 2016, they stated that they were raising the starting point for determining a national quota to 400. However, based on the 2014 census data, a quota of 400 elephants would

constitute 0.49% of the total population of over 82,000. It should be noted that to date, the annual trophy harvest of 215 elephants is well below this value and therefore would account for less than a 0.49% off-take (It should be noted, however, that the proportional off-take of trophy animals would be higher when considering that trophy hunting is targeting a specific sub-group of the total population).

Revenue Utilization: On communal lands in Zimbabwe, the protection of elephants falls primarily under the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE), which encourages reductions in human-elephant conflicts through conservation-based community development. The program was established in 1989 as a means of providing an economic incentive and return to rural communities while encouraging tolerance for the elephant and sustainable use of natural resources. This program has been the model for community-based conservation efforts in several other African countries and identified as an innovative program in the past. Under this program, there are currently 29 Rural District Councils (RDCs) that have been granted Appropriate Authority status under the Parks and Wild Life Act. Based on several CAMPFIRE documents presented to the Service, between 12 and 16 RDCs with exploitable wildlife resources make up the core of the CAMPFIRE program.

According to the Revised CAMPFIRE Revenue Sharing Guidelines, which were incorporated into the Constitution of the CAMPFIRE Association in 2007, at least 55% of generated revenue from hunting should be devolved to producer communities, no more than 26% and 15% for management and overhead at RDC level, respectively, and 4% as a levy to the CAMPFIRE Association. According to an undated document (but presumably produced in late 2014, since it references data from 2014 but does not include any references to 2015 data) produced by CAMPFIRE (CAMPFIRE report undated) at least 10 RDCs comply with the Revenue Guidelines. As reported in this document, data were presented in an October 2013 report stating an estimated US$2,496,349 was generated by 15 RDCs in 2012 from hunting revenue. While this report states that 5 out of 13 RDCs contributed 84% of the hunting revenue, the supporting table to this statement does not reflect this number. Further, the report states that an assessment of 18 main CAMPFIRE districts allocated hunting quotas for 2014 shows that 106 out of 167 bull elephant hunts were booked by U.S. hunters and that elephant hunting contributes more than 70% of the income to the CAMPFIRE program, and that 90% of all CAMPFIRE revenue comes from all hunting.

The CAMPFIRE report (undated) stated that in the Community Based Natural Resources Management Stocktaking Assessment Report by Mazambani and Dembetembe (2010) [Service does not have a copy of this report], between 1989 and 2006, US$88.9 million in gross revenue was realized by key stakeholders in the CAMPFIRE program. Of this revenue, 55% went to safari outfitters, 23.4% to producer communities, 19.8% to RDCs, and 1.8% to the CAMPFIRE Association. (The Service has no additional documentation or information to validate these figures.)

On 17-18 November 2014, a workshop titled "CAMPFIRE Stakeholder's workshop: Towards the Development of a New Elephant Management Plan and Policy" was held in Zimbabwe. The

discussions and recommendations touched on the effectiveness of the CAMPFIRE concept and its relationship to tourist hunting. At the workshop, Charles McCallum Safari reported that they had contributed over $349,000 to CAMPFIRE wards and the RDC in 2013 – U.S. elephant hunters contributed 40% of this total ($132,870). In 2014, the total was up to $400,995 but contributions due to U.S. hunters dropped to 27% ($100,800) – all elephant hunting was only 32% of the total ($118,425). It appears that the workshop may have been a good starting point to address issues faced by RDCs and to improve the effectiveness of CAMPFIRE. However, according to Conservation Force, represented at the workshop, CAMPFIRE needed to find a balance between a large elephant population and human population pressures, as well as ensure that revenue from tourist hunting and other resource uses flows to local communities. The 2014 Pan African survey results confirmed that elephant populations in the Zambezi Valley and in Sebungwe have decreased significantly. These areas include communal land. The declines indicate that the persistence of elephants in these areas may be in question in future years if the trend is not halted or reversed.

In a November 11, 2015, presentation by CAMPFIRE to the 14th African Wildlife Consultative Forum in South Africa, it was reported that new CAMPFIRE Revenue Sharing Guidelines have been established where revenue are paid by Safari Operators within CAMPFIRE communities directly into community controlled bank accounts, not through RDCs. CAMPIRE areas would receive 100% of trophy fees for all animals hunted. The communities within the RDC would receive 55% of CAMPFIRE income for their projects, while 41% would be provided to the Rural District Councils for field patrols, monitoring of hunts, problem animal control, water, fire management, and district development. The remaining 4% would be given to the CAMPFIRE Association to coordinate the program and represent its interests at all levels. However, on average, 52% (below required 55%) went to communities, 44% (vs 41% required) went to councils, and 4% to the CAMPFIRE Association.

According to this presentation, the total income of all hunting in 2014, within CAMPFIRE areas that were surveyed, was $2,102,007, compared to $2,229,910 in 2013. It was stated that, on the average, elephant hunting contributed 54% ($1,138,375) of the total hunting income in 2014. Only one district, Matobo, did not generate any income from elephant hunting. Hwange district generated 100% of its income from elephant hunts. Average revenue was $82,475 per district, but one district, Matobo, generated $0 and Tsholotsho generated $381,500. Based on the actual division of the revenue, communities received $1,100,643, RDC received $917,283, and CAMPFIRE Association received $84,080 from all hunting related activities in 2014.

Reports received since 2014 indicate that funds have been invested in projects that benefit the communities overall, such as building classrooms or clinics; purchasing farm equipment; rehabilitating water supplies; purchasing vehicles used in wildlife monitoring and anti-poaching; installing solar power; and other infrastructure improvements. The purpose behind CAMPFIRE is to stimulate the long-term development and sustainable use of natural resources in Zimbabwe's communal areas. By linking these tangible benefits to the protection of wildlife within the communal areas, CAMPFIRE can provide a clear connection to rural residents for the

protection of wildlife, including elephants. Its infrastructure also creates jobs for conservation officers and in monitoring programs, as well as employing game scouts.

In September 2016, the Service received information regarding efforts to review the CAMPFIRE program, which is being supported by the EU through a 12 million Euros contribution. The review was to start in February 2016 and last for 18 months, with a report by the end of 2017. The review was stated to be an effort to develop an improved policy, regulatory, and institutional framework for CAMPFIRE. While this review is still under way and the Service has not received any information on the potential outcome of the review, this appears to be a significant move forward in addressing issues that have been raised about CAMPFIRE, such as their support to communities to better manage wildlife resources and equitably utilize their financial resources.

"The Role of Trophy Hunting of Elephant in Support of the Zimbabwe CAMPFIRE Program – December 2016," a report the Service received on December 17, 2016, contained a recent audit of nine CAMPFIRE districts that receive funds from elephant hunting. In these districts, approximately 60% of the allocated elephant quota (approximately 114 elephants/year of the annual average quota of 180 elephants) has historically been utilized and the majority of hunters (53%) originate from the United States. These U.S. hunters have contributed US$9 million toward the CAMPFIRE Program during 2010-2015, compared to US$8 million from hunters from 40 other nations. Based on this report, approximately 25% of Zimbabwe's people are receiving incentives to conserve wildlife and prevent anti-poaching through CAMPFIRE. Between 1994 and 2012, CAMPFIRE generated US$39 million of which US$21.5 million was allocated to communities and used for resource management (22%), household benefits (26%), and community projects (52%). According to this report, about 90% of CAMPFIRE revenue comes from hunting, with elephant hunting contributing up to 70% of annual revenue.

According to the report, a total of 1,087 elephants have been allocated on quotas to the nine CAMPFIRE areas since 2010. The distribution of this quota among the nine CAMPFIRE areas is dictated by the relative density of elephants in the neighboring protected areas and those residing in the CAMPFIRE areas. Tsholotsho, for example, which borders the southern boundary of Hwange National Park, was allocated 158 elephants (or approximately 26/year) while Hwange, Binga and Hurungwe CAMPFIRE Areas, which do not border onto areas of high elephant densities, received approximately 10 elephants/year. Over the six years, Tsholotsho (99%), Mbire (71%) and Chiredzi (68%) have successfully utilized their allocated quotas while areas such as Hurungwe (20%) and Binga (26%) have utilized a smaller percentage of their allocated quotas. Based on this information, and information in the "Supplement", approximately 53% of all sport-hunted elephant trophies taken annually in Zimbabwe were hunted CAMPFIRE areas.

As stated earlier, to fully account for earnings in the hunting sector, the Reserve Bank of Zimbabwe established the Tourism Receipts Accounting System (TRAS) and its web-based system, TRAS2 to links Safari Operators, ZPWMA, Taxidermists, Shipping Agents, International Marketing Agents and Reserve Bank. Under this system all authorized hunts are registered allowing for the capture of hunting data (origin of clients, value of trophies and hunts,

area hunted etc.), monitoring hunting quota utilization and tracking hunted trophies. Outfitters that operate hunting concessions in CAMPFIRE Areas are required to deposit copies of the TRAS2 form with the CAMPFIRE Office in their respective RDCs/Wards. Each Office is therefore able to extract data on daily rates, trophy fees and other incidental revenues. These data confirm the major role of American hunters to the CAMPFIRE program who contribute 52% of the overall income, but do not break down this contribution to species hunted, such as elephants.

Local conservation efforts: As was identified in our previous findings, Conservation Force and other commenters emphasized the economic impact of the suspension to local conservation efforts being carried out by individual landowners and leaseholders, safari outfitters, and conservancies. In our previous findings, we acknowledged that there were "pockets" of conservation work being carried out. It is now evident that after our 2014 and 2015 findings, due to greater efforts by ZWPMA and NGOs, there has been an increased effort by land owners and leaseholders to take a greater effort in addressing conservation needs of elephants and the habitat that they rely on. As stated previously, a number of regional and national workshops were held in 2014 and 2015 that promote a greater public-private partnership. While ZWPMA stated in 2014 that legislation was in place to decentralize management of wildlife within Zimbabwe, it does not appear that efforts were actually initiated until the workshops that were held after our original 2014 finding and the completion of the EMP in January 2016. In addition to the regional and national workshops that have been convened between ZWPMA and safari operators throughout Zimbabwe, there have been meetings targeting specific conservation needs with operators in the Lower Zambezi Valley and South East Lowveld. In addition, there appears to be a greater effort on the part of ZWPMA to put mechanisms into place to support these efforts. This has been reflected in collaboration between ZWPMA, WWF, Friends of Hwange, and other stakeholders on law enforcement efforts and funding conservation efforts in Northwest Matabeleland. In the Lower Zambezi Valley, ZWPMA has established joint ventures with WWF, Zambezi Society, the Tashinga Initiative, and other organizations to carry out anti-poaching efforts. Awareness campaigns to education local communities on wildlife conservation have been expanded in the South East Lowveld Northwest Matabeleland.

The Parks and Wildlife Act Chapter 20:14 devolved authority to manage and benefit from wildlife on communal and private lands to the landholders. Although the Service raised concerns about this approach in previous findings, there appears to have been an increase in working with NGOs, landowners, and safari area concessionaires to improve elephant management and anti-poaching efforts. According to their July 2015 response to the Service, and supported by the report on the implementation of the EMP provided in November 2016, ZPWMA is engaging private players in co-management in some areas and entering into long-term lease agreements (10-25 years) to manage some protected areas. In certain areas, ZPWMA is reportedly partnering with safari operators; in others, they partner with non-profits, such as the Tashinga Initiative in the Zambezi Valley and WWF in the Hwange-Sanyati Biological Corridor.

Evaluation:

As explained earlier in General Considerations, the Service evaluates a number of factors to

determine whether the killing of the trophy animal taken in a range country will enhance the survival of African elephants under 50 CFR 17.40(e)(6)(i)(B). The Service evaluates applications in accordance with the African elephant 4(d) rule and the permit issuance criteria outlined in 50 CFR 17.32(a)(2). In evaluating each of these criteria the Service has considered the information currently available to the Service as of the date of this finding on elephant hunting in Zimbabwe in 2016, 2017, and 2018, including information provided by the Government of Zimbabwe, current applicants to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service. In accordance with the regulatory requirements, the Service is able to make a determination that the killing of the trophy animal in Zimbabwe, on or after January 21, 2016 and on or before December 31, 2018, will enhance the survival of the African elephant. Therefore, with the information currently available, applications to import trophies hunted during this time period will be considered to have met this requirement unless we issue a new finding based on available information. In accordance with the 4(d) rule for the African elephant, 50 CFR 17.40(e), the Service will review each application received for import of such specimens on a case-by-case basis and each application also needs to meet all other applicable permitting requirements before it may be authorized. On an ongoing basis and as it evaluates each application, the Service will continue to monitor the status of the elephant population, the total management program for elephants in the country to ensure that the program is promoting the conservation of the species, and whether the participation of U.S. hunters in the program provides a clear benefit to the species. Accordingly, the Service may modify its determination based on available information consistent with the regulatory requirements. Further discussion for each of the criteria follows:

17.32(a)(2)(i): Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit:

Zimbabwe has adequate legislation in place and on January 21, 2016, adopted the Zimbabwe Elephant Management Plan 2015-2020 (EMP), with regional components, which has clear objectives, action items, and measurables to more effectively monitor and evaluate elephant populations and management and facilitate a more systematic management regime. Further, ZWPMA has demonstrated through recent reports that the EMP, while somewhat constrained due to limited resources, is being implemented. Overall beginning January 21, 2016, while there are still concerns over the ability to fully implement the EMP, ZPWMA has provided a well-designed elephant management plan to incorporate an adaptive approach to management that considers regional variation in elephant management requirements. There is no doubt that efforts must continue in implementing the EMP to ensure adequate management of elephants in each of the four regions within Zimbabwe, but to date ZPWMA appears to have established a strong mechanism for national elephant management and has documented that identified targets and measurables are being achieved in a manner to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe now and is making an effort to make progress toward full implementation that achieves further benefits for elephants from sport hunting going forward.

The Pan African Elephant Aerial Survey, or Great Elephant Census (GEC), that was conducted in Zimbabwe in 2014, and became available in 2015, has provided ZPWMA a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. Although Zimbabwe did not conform to the new methods that GEC hoped to establish as the new standard, they opted to conduct surveys using other methods which were not necessarily more accurate but were directly comparable to previous surveys. While the revised population data was available in 2015, as well as other survey data obtained after the 2014 GEC it was not until implementation of the EMP in January 2016 that the data was fully incorporated into a systematic management regime. From information provided by ZPWMA in late 2016, it is clear that this population data has been incorporated into the implementation of the EMP and establishing scientifically defensible hunting quotas.

ZWPMA stated that U.S. hunters historically contribute approximately $3 million annually through all hunting activities. ZWPMA, as well as other commenters, has stated that elephant hunting is the key component of the hunting industry since the species is the primary draw for U.S. hunters to Zimbabwe. For the most part, the central Zimbabwean Government does not directly allocate treasury funds to ZPWMA. Therefore, the vast majority of funding for ZPWMA must come from hunting revenues. The same is true for CAMPFIRE. With the implementation of TRAC2, ZPWMA and CAMPFIRE can now better document and track revenue generated through sport hunting and how it is utilized. For the 2014 and 2015 hunting seasons, the Service received limited evidence to support a positive enhancement finding. With information provided by ZPWMA in 2016 in response to additional inquiries from the Service, as well as meetings with ZPMWA officials in late 2016, there are now accounting mechanisms in place that document hunting revenue.

According to the information provided to the Service in late 2014 and 2015, Zimbabwe has established hunting quotas for all areas of the country. However, it was not until late 2015 and 2016 that the Service received more specific information on how these quotas are established, including how other forms of offtake, such as poaching and problem animal control, were taken into account. Further, it was not until the EMP was signed into effect January 21, 2016 that the Service could have confidence that ZWPMA had in place effective mechanisms to establish scientifically based hunting quotas that took into consideration other forms of off-take to ensure the sustainable utilization of their elephant population.

Since our findings in 2014 and 2015, CAMPFIRE has provided significantly more information on how their programs support the conservation of elephants and provide benefits to and promote greater tolerance of wildlife in rural communities. While the program has come under criticism in recent years relating to excessive retention of generated funds by district councils and diminished benefits to communities and elephants, strides are being taken to address these concerns. An overarching analysis of CAMPFIRE, supported by a grant of 12 million Euros from the EU, is currently being conducted and is scheduled to be completed by the end of 2017. While this review is still under way and the Service has not received any information on the potential outcome of the review, significantly more information has been provided to the Service in regard to how funds are utilized and the basis for hunting off-takes.

As stated in the previous findings, there have been "bright spots" regarding elephant conservation efforts, particularly those carried out by non-governmental entities that are providing a benefit to elephants. Since our 2014 and 2015 findings, there appear to be strong indications that the efforts of private landowners and consortiums to management elephants within their areas of control have received greater support from ZWPMA and the Zimbabwe government. There is increased support from the Central Government and Rural District Councils to expand and support local conservation efforts and evidence that local conservation efforts are meeting management deficiencies that were identified previously by the Service.

Based on the information currently available to the Service, we believe that these efforts will continue through the remainder of 2017 and 2018 to address Zimbabwe's national and regional management issues, including monitoring the current population status of elephants, addressing poaching levels and prevention, and the appropriate utilization of hunting revenues that the Service identified in its previous Zimbabwe findings. Therefore, based on the information available to the Service and provided that elephants harvested in the 2016, 2017, and 2018 season were properly permitted and in compliance with international, national and provincial regulations, we find that the requirements of 17.32(a)(2)(i) is met.

17.32(a)(2)(ii): The probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit:

As a national management plan with regional management components, the EMP is extensive and addresses many aspects of elephant conservation and management. As reviewed above, the EMP provides a history of the relevant legislation in regard to elephant conservation and puts the current efforts into context. Objectives for elephant conservation are articulated in the EMP with clear goals identified. The monitoring plans have scientifically sound methodologies. While it is recognized that Zimbabwe does not currently have sufficient resources to fully implement the EMP, it has identified priority areas that have been established and are being implemented. To date ZPWMA appears to have established a strong mechanism for national elephant management and have documented that identified targets and measurables are being achieved in a manner to enable elephant sport-hunting that benefits the survival of African elephants in Zimbabwe from January 21, 2016, to present and is making an effort to make progress toward full implementation that achieves further benefits for elephants from sport-hunting going forward. Based on the information currently available to the Service, we have confidence that these efforts will continue in 2017 and 2018.

Evaluating the information provided by the Zimbabwe government and other sources, it appears that the elephant hunting program in Zimbabwe will address the concerns that were identified by the Service in our previous findings. Therefore, the management of elephants in Zimbabwe contributes to the on-going survival of the species.

Provided that the off-take of elephants continues to be monitored and the actions identified in the EMP be implemented, and that effective measures are taken to limit the illegal offtake of

elephants from poaching and offtake due to conflict with people, the participation of U.S. hunters in elephant hunts would provide an indirect benefit to wild populations by helping to support the ongoing management of the species. Therefore, based on the information available to the Service, the probable direct and indirect effect that issuing an import permit for a legally hunted elephants would have on the species would be a net positive.

17.32(a)(2)(iii): Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed:

As stated above, Zimbabwe is monitoring and controlling the harvest of elephants through the EMP. The issuance of import permits for elephants legally hunted in Zimbabwe would not conflict with any programs intended to enhance the survival probability of the species in Zimbabwe. As with all aspects of an adaptive management approach to managing a species, the Service will continue to monitor the effectiveness of the hunting program to ensure that it continues to provide the stated benefits to elephants.

Therefore, based on the information available to the Service, the issuance of import permits for legally hunted elephants would not conflict with any known conservation programs.

17.32(a)(2)(iv): Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit:

In some parts of Zimbabwe, elephant populations remain robust. In three of the four primary areas where elephants are found, population numbers exceed the desired density established by stakeholders in the EMP and resulting in significant modification of plant communities. A major component of the EMP is to manage elephant populations at a level that supports the biodiversity of the habitat and associated wildlife, as well as address poaching issues that have been a significant issue in the recent past. As identified in the EMP, with increased monitoring and oversight of elephant management efforts at both the national and regional level, the legal hunting activities that U.S. hunters would be involved in would contribute to reducing the threat of extinction of elephants by supporting ongoing management efforts. This legal hunting off-take must be evaluated in light of other off-takes, including poaching, to ensure that populations of elephants, particularly in the Sebungwe, are adequately maintained.

Therefore, based on the information available to the Service, the purposes for which import permits would be issued would likely reduce the threat of extinction facing elephants in Zimbabwe.

17.32(a)(2)(v): The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application:

Based on our review of comments provided to the Service since our 2014 finding, as well as information obtained through personal conversations and literature, there is a general agreement

that hunting, done properly and well managed, would not have an adverse effect on elephant populations. Researchers and others with substantial knowledge of elephant management have stated that, whether or not they support hunting in general, they see that benefits can be had through a scientifically based hunting program for elephants.

The IUCN Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives (Ver.1.0, August 2012) state that well-managed trophy hunting can "assist in furthering conservation objectives by creating the revenue and economic incentives for the management and conservation of the target species and its habitat, as well as supporting local livelihoods" and, further, that well-managed trophy hunting is "often a higher value, lower impact land use than alternatives such as agriculture or tourism." Lindsey et al. (2007), in their paper on the economic and conservation significance of the trophy hunting industry in sub-Saharan Africa, state their belief that, from a conservation perspective, "the provision of incentives which promote wildlife as a land use is the single most important contribution of the trophy hunting industry." In addition, they note that trophy hunting generates revenues in areas where alternatives, such as ecotourism, may not be viable. More recently, Di Minin et al. (2016) assert that trophy hunting "strongly contributes" to conservation in sub-Saharan Africa, where large areas currently allocated to use for trophy hunting support important biodiversity. They also note that, if revenue cannot be generated from trophy hunting, these natural habitats will be converted to other forms of land use. While recognizing that the degree to which trophy hunting contributes to conservation is a subject of debate, Mallon (2013), in his report on trophy hunting of CITES-listed species in Central Asia, states that "well-run hunting concessions have an economic interest in maintaining the resource (*i.e.,* conserving the species) so will also aim to manage the area to conserve high-quality habitat that supports high numbers of the hunting species, and also to prevent unregulated use by others (poaching, overgrazing)." Naidoo et al. (2015) describe the complementary benefits of tourism and hunting to communal conservancies in Namibia.

We have reviewed a number of comments from NGOs and the public opposing hunting any elephants. This opposition, however, is primarily based on the perceived ethics of hunting. While these comments are an indication of concerns from some members of the public over hunting, they are not germane to our review process.

Therefore, based on the information available to the Service, there is sufficient support by scientists and other persons or organizations having expertise that the well-managed, legal harvest of elephants, and the subsequent import of these trophies, would not have an adverse effect on the species, but can further efforts to conserve the species in the wild.

17.32(a)(2)(vi): Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application:

Based on our understanding of the hunting program within Zimbabwe, U.S. hunters must be accompanied by a professional hunter on land that is being managed either by the landowner, concessionaire or representatives of the communal land where the hunt occurs. Although the U.S. may not have the expertise to ensure adequate and proper management of elephants on that

land, the professionals associated with the hunt have the expertise and resources to successfully accomplish the management goals of the EMP. Along with oversight established by the ZWPMA, there are expertise and facilities available to U.S. hunters to accomplish the stated objective of their application that the killing of an elephant in Zimbabwe whose trophy is intended for import into the United States would enhance the survival of the species in the wild. Therefore, based on the information available to the Service, that applicants that are hunting on properly permitted reserves that carry out their management practices in accordance with national and provincial regulations, have the expertise, facilities, or other resources available to them to successfully accomplish the objective their application; i.e., the long-term survival of elephants in Zimbabwe. In its evaluation of each application, the Service will further ensure that this criterion, along with the other criteria, is met by each applicant before issuing an import permit.

Given the significant amount of information that has been presented to the Service over the last three years, it can be difficult to clearly see how efforts in Zimbabwe since the 2015 finding have resulted in a clear improvement in the overall management of elephants to the point that the importation of elephant trophies by U.S. hunters would enhance the propagation or survival of the species. Therefore, the following comparison table is being provided to summarize the improvements and where we hope to see additional progress, as discussed more fully above.

Issue	2015 Finding	Present Finding
Management Plan	Zimbabwe's elephant management plan consisted of two primary documents drafted in 1996 and 1997. Although the documents provided a well-developed list of goals and objectives, there was no information on whether these goals and objectives had been met or could be met. Statements from ZPWMA that the plans were outdated and needed to be revised supported this view. In December 2014, ZPWMA hosted a workshop to review Zimbabwe's Elephant Conservation Policy and Management Plan. The workshop participants agreed on a framework for the revised management plan with the same long-term vision of the 1997 plan, similar target goals, and the beginnings of strategic objectives and outputs, as well as some key activities. However, there was insufficient time at the workshop to complete the revised plan. At the	On January 21, 2016, Zimbabwe adopted the Zimbabwe National Elephant Management Plan (EMP) that replaced The Policy and Plan for Elephant Management in Zimbabwe (1997) and Elephant Management in Zimbabwe, third edition (July 1996). The EMP incorporates an adaptive management framework with higher-level targets, with key components, strategic objectives, and outputs. Each key component has management actions that can be measured and verified through "Key Performance Indicators." A set deadline for each action was identified. These measurables allow ZPWMA to monitor the success of the new management plan and, through an adaptive management approach, address newly emerging concerns and long-term management needs. The EMP addresses the challenges identified by the 2014 workshop participants and concerns identified by the Service about the

	time of the 2015 finding, the work had not been completed and the plan had not been adopted by the Zimbabwe government.	previous management plans. The EMP was developed as an outcome of several national and regional workshops that included government officials, NGOs, Rural community leaders, and safari outfitters and landowners.
Population Status	In the 2014 findings, the Service found that Zimbabwe did not have adequate data to determine the elephant population levels in the four primary elephant areas. In 2014, the Pan African Elephant Aerial Survey was conducted in Zimbabwe and preliminary findings reported a preliminary estimate of between 82,000 and 83,000 elephants. This represented a 6% decline since 2001 surveys. The 2015 finding concluded that if a better elephant baseline population abundance estimate were to be used as part of a revised national management plan to assess future off-take quotas, management efforts, and anti-poaching activities, that Zimbabwe could establish scientifically defensible hunting quotas. If this were done, the Service would have a better basis to re-evaluate our determination not to authorize elephant trophy imports.	The 2014 Pan African Elephant Aerial Survey, available in 2015, provided ZPWMA with a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. Confirmed results from the GEC reported an estimate for elephant abundance in Zimbabwe to be 82,304 individuals (73,715-90,893), with a total carcass ratio of 7.8%. While this represented a 6% decline in the 2001 population estimate, the estimate is based on more accurate and more recent survey data then was available to Zimbabwe previously. The IUCN AfESG African Elephant Status Report – 2016 estimated Zimbabwe's elephant population at 82,630 ± 8,589 across a range of 81,228 km^2. The results of the 2014 GEC, and subsequent survey data reported in the 2016 AfESG report, being utilized in the EMP and quota setting, is more reliable and provide a better basis for establishing management priorities than previous surveys and guesses.
Regulation and Enforcement	The 2015 finding confirmed that the Zimbabwe laws and regulations in place to address elephant	As identified in the 2015 finding, the Service still finds that if properly implemented, the ZPWMA regulatory

	management are sufficient provided they were appropriately implemented, but it was not clear if or to what extent ZPWMA was able to successfully implement them. While the Parks and Wild Life Conservation Fund provides for financing wildlife operations directly from revenues generated through wildlife related activities, no other government funding was provided, and only limited outside funding from NGOs or other governments appeared to be available. Therefore, appropriate utilization of funds was necessary. The Service concluded that proper accounting mechanisms need to be in place to document hunting revenue and how it was being used to support elephant conservation efforts. While ZPWMA stated that elephant hunting contributes in excess of US$14 million annually and that approximately 30% of ZPWMA's revenue was from hunting, we did not have adequate information about how much money is generated by elephant hunting, particularly from U.S. hunters, how these funds are distributed, or how these funds impact the ability of ZPWMA. Both of the Elephant Trade Information System (ETIS) reports at the 15th and 16th Meetings of the Conference of the Parties to CITES expressed concerns about Zimbabwe, specifically regarding illicit ivory trade. The reports noted the existence of organized criminal activities within Zimbabwe, including reports of the involvement	mechanisms for managing elephants appears to be adequate. The key issue in the 2015 finding was whether there is an adequate mechanism in place to reliably document the financial benefits US hunters are providing for elephant conservation to demonstrate that U.S. hunters, through their participation in the hunting program, contribute funds to address management needs of the species, and that the funds were utilized in a meaningful manner. Since the 2015 finding, the Service has received information regarding the Tourism Receipts Accounting System (TRAS) and its web-based system (TRAS2) under which the Reserve Bank of Zimbabwe, in collaboration with relevant stakeholders, can now track all revenue generated through hunting activities. Under this system, all authorized hunts are now being registered allowing for the capture of hunting data, such as the origin of clients, value of trophies and hunts, and area hunted, to monitor hunting quota utilization and track hunted trophies. This system will provide data that was not previously easily obtained and, presumably, greatly improve the tracking of hunting revenue. One concern expressed by the Service in its previous findings was whether ZPWMA was responding to the apparent poaching crisis facing Zimbabwe. Based on communication from ZPWMA, as well as information received from other sources, ZPWMA has also stepped up its anti-poaching nationally by adopting a number of "Urgent Measures". As shown in the July 2015 Response, most of ZPWMA's budget (77%) is allocated for staff costs and patrol provisions.

	of politicians, military personnel, and Chinese nationals in illicit wildlife trade. The CoP15 report stated that the law enforcement effort ratio within the three countries grouped for the analysis had dropped to 40%, a decline of 4% from the CoP14 analysis, and was attributed to the situation in Zimbabwe. The CoP16 report indicated that Governance indicators were mixed, with a much lower than average World Bank "rule of law" score, again contributed to Zimbabwe. The Service received several statements from Zimbabwean safari outfitters that stated that the large number of US hunters in Zimbabwe were a major deterrent to poaching. However, the Service was not provided any evidence to support this statement. The 2015 finding did recognize, however, that it was possible the various meetings and workshops that occurred in December 2014 and in 2015 might lead to a clearer understanding of funding levels and the utilization of ZPWMA revenue or result in improved mechanisms for demonstrating that U.S. hunters, through their participation in the hunting program, contribute funds to address management needs of the species, and that the funds were utilized in a meaningful manner.	These expenditures reportedly fund anti-poaching efforts throughout the elephant range. ZPWMA reportedly has a staff of 1,504 active field rangers and has stated that there is an intent to increase this number. According to "The Zimbabwe National Elephant Supplementary Management Plan (2015-2020)", over 80% of spending under the new EMP has been on law enforcement (anti-poaching) and training, with law enforcement identified as the top priority going forward. With the adoption of the EMP in January 2016, it appears that ZPWMA has the mechanism to successfully implement these laws and regulations. Moreover, ZPWMA has a mechanism in place to monitor the effects of the EMP and adapt to changing environmental and social factors that would adversely affect elephant populations within Zimbabwe. The "Report on the Elephant Trade Information System (ETIS)" (CoP17 Doc. 57.6) reflected that there were some improvements in Zimbabwe. As in the previous report, the document grouped Botswana, Namibia, and Zimbabwe together in terms of their level of government oversight and capacity. These countries regularly report data to ETIS. In terms of all data that implicate these countries in an ivory seizure, this southern African grouping reflects middle range values in terms of mean number of seizures and the mean weight of ivory seized. The measure for assessing the presence of organized crime stands at zero which, according to the document, is indisputably a good sign. Governance indicators are mixed, however, with the rule of law score

		problematic and suggesting the presence of corruption, but the relatively high law enforcement ratio partially mitigates that concern. As reported in earlier ETIS reports, Zimbabwe was the country that pulls the rule of law score down, indicating far greater governance challenges exist in that country than others in the group.
Sustainable Utilization	According to the information provided for the 2015 finding, Zimbabwe had established hunting quotas for all areas of the country. However, the Service did not receive adequate information regarding offtake, including how hunting quotas were established and whether other forms of offtake, such as poaching and problem animal control, were taken into account in establishing these quotas. Further, the Service had limited information to what extent biological factors are taken into consideration (as opposed to economic and societal considerations). While there was information that supported ZPWMA statements that the full quota is not actually met each year, we did not get complete information on how many trophies were taken annually. At the time the Service made its finding in 2015, we determined that without more definitive population data, it was difficult to determine whether these numbers, combined with other offtake, was sustainable. We had fundamental questions regarding how the number of elephants to be hunted in an area is decided. In addition to questions about how the overall offtake is	According to the information provided to the Service in late 2014 and 2015, Zimbabwe had established hunting quotas for all areas of the country. However, it was not until late 2015 and 2016 that the Service received more specific information on how these quotas are established, including how other forms of offtake, such as poaching and problem animal control, were taken into account. Further, it was not until the EMP was signed into on January 21, 2016, that the Service had confidence that ZWPMA had in place effective mechanisms to ensure long-term sustainability of its elephant population. For 2016 and 2017, Zimbabwe established the same annual export quota of 500 elephants and reported that quota to the CITES Secretariat. While the Service will request clarification before making a finding for the 2019 hunting season as to why Zimbabwe maintains the same voluntary export quota as it has since 2004, given the improved population data now available to Zimbabwe and the revised management plan that specifically recognizes the use of population data when establishing quotas, there is now clear information that Zimbabwe has not reached this export quota in the past and is unlikely to do so in the future given the current

	determined, we also had not received an adequate explanation on how the quota is allocated geographically.	management efforts. According to ZPWMA, quotas established before the EMP were set to maximize the sustainable production of high-quality trophies without detriment to the population. With the establishment of the EMP, there is a more systematic, scientific approach to establish national quotas. While ZPWMA still currently starts with the quota of 500 elephants, they are not immediately dividing this quota between all of the hunting areas. Instead, they are taking into consideration the results of the 2014 survey and subsequent surveys, results from research efforts, the size of the hunting area in relation to elephant habitat requirements, illegal off-take and other forms of off-take, how the hunting areas are managed in relation to land use or fencing, human-wildlife conflicts that have occurred previously, and recommended sustainable off-take levels developed based on ecological assessments of the hunting area. This information is then further evaluated in light of other species within the hunting area, past elephant trophy quality, and community benefits of proposed harvests.
Revenue Utilization by rural communities	Based on information the Service had when making its previous findings, CAMPFIRE has provided conservation benefits in the past and improved tolerance of wildlife in rural communities. However, the program has come under criticism relating to excessive retention of generated funds by district councils, resulting in diminished benefits to communities and elephants. While sport hunting may be an important tool that gives these communities a stake in sustainable management of	Since our findings in 2014 and 2015, CAMPFIRE has provided more information on how their programs support the conservation of elephants and provide benefits to and promote greater tolerance of wildlife in rural communities, including new efforts to improve the effectiveness of CAMPFIRE and new revenue sharing guidelines. An overarching analysis of CAMPFIRE, supported by a grant of 12 million Euros from the EU, is currently being conducted and is scheduled to be completed by the end of 2017. While

	the elephant as a natural and economic resource and offsets the costs of conflict with wildlife, without current information on how funds are utilized and the basis for hunting off-takes, the Service was unable to confirm whether revenue generated through sport hunting actually provided an incentive to local communities to conserve elephants.	this review is still under way and the Service has not received any information on the potential outcome of the review, more information has been provided to the Service regarding how funds are utilized and the basis for hunting off-takes.
Local conservation efforts	As was stated in the 2014 finding, the Service acknowledged that there were "bright spots" regarding elephant conservation efforts, particularly those carried out by non-governmental entities that are providing a benefit to elephants in some areas. We had received statements from several sources that emphasized the economic impact of the suspension to local conservation efforts being carried out by individual landowners and leaseholders, safari outfitters, and conservancies. In our 2015 finding, the Service recognized that effective conservation work is being carried out in some independently managed areas; however, it was unknown whether and to what extent these individuals would reduce their conservation efforts based on the inability of U.S. hunters to import a sport-hunted trophy. In addition, the information available to the Service on the conservation work being carried out by non-governmental entities was limited, and is not the norm for Zimbabwe as a whole. The Service recognized that without support from the Central Government and Rural District Councils, these efforts were not likely to be successful or to	Since our 2014 and 2015 findings, there are strong indications that the efforts of private landowners and consortiums to manage elephants within their areas of control have received greater support from ZWPMA and the Zimbabwe government. The Parks and Wildlife Act Chapter 20:14 devolved authority to manage and benefit from wildlife on communal and private lands to the landholders. There now appears to be a greater effort on the part of ZPWMA to work with NGOs, landowners, and safari area concessionaires to improve elephant management and anti-poaching efforts. According to their July 2015 response to the Service, and supported by the report on the implementation of the EMP, ZPWMA is engaging private players in co-management in some areas and entering into long-term lease agreements (10-25 years) to manage some protected areas. In certain areas, ZPWMA is reportedly collaborating with safari operators; in others, they collaborate with non-profits, such as the Tashinga Initiative in the Zambezi Valley and WWF in the Hwange-Sanyati Biological Corridor. There is increased support from the Central Government and Rural District Councils to expand and support local conservation efforts and there is evidence that local conservation efforts

	compensate for the management deficiencies described above.	are meeting management deficiencies that were identified previously by the Service.

Conclusion:

The issue before us, in accordance with the 4(d) rule for African elephants, is whether the killing of a trophy animal in Zimbabwe would enhance the survival of the species. In short, as previously explained, the Service is assessing whether Zimbabwe has sufficient numbers of elephants to support a hunting program, if the country has a management plan and adequate laws and regulations to effectively implement a hunting program, and if the participation of U.S. hunters in the program provides a clear benefit to the species to meet the requirements for the import of sport-hunted trophies under paragraph 17.40(e)(6)(i)(B).

Since our 2014 and 2015 findings, Zimbabwe has carried out a number of actions at the national level and in collaboration with regional and local communities and interested partners on the ground that together demonstrate a clear interest in and concrete efforts toward establishing a better management regime and providing greater support for conservation efforts to enable elephant sport hunting that provides a clear benefit to the survival of African elephants in Zimbabwe.

Importantly, on January 21, 2016, Zimbabwe adopted the National Elephant Management Plan, with regional components, to more effectively monitor and evaluate elephant populations and management. The National Elephant Management Plan has clear objectives, action items, and measurables to facilitate a more systematic management regime than was previously established in Zimbabwe. Further, ZWPMA has demonstrated through recent reports that the effort to implement the EMP, while somewhat constrained due to limited resources, is being implemented. There is no doubt that efforts must continue in implementing the EMP to ensure adequate management of elephants in each of the four regions within Zimbabwe, but to date ZPWMA appears to have established a strong mechanism for national elephant management and has documented that identified targets and measurables are being achieved in a manner to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe now and is making an effort to make progress toward full implementation that achieves further benefits for elephants from sport hunting going forward.

The Pan African Elephant Aerial Survey that was conducted in Zimbabwe in 2014, although it utilized the same methodology used by Zimbabwe since the 1960s, did provide ZPWMA with a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. ZPWMA has demonstrated it is incorporating these data for these purposes through the EMP. Having up to date information and population estimates was a critical first step in the process of establishing scientifically defensible hunting

quotas.

While ZPWMA had established hunting quotas for all areas of the country in the past, it was not until late 2015 and 2016 with the implementation of the EMP, that the Service received more specific information on how these quotas are established, including how other forms of offtake, such as poaching and problem animal control, were taken into account. Further, it was not until the EMP that the Service could have confidence that ZWPMA had in place effective mechanisms to establish scientifically based hunting quotas that took into consideration other forms of off-take to ensure the sustainable utilization of their elephant population.

Since our findings in 2014 and 2015, CAMPFIRE has provided significantly more information on how their programs support the conservation of elephants and provide benefits to and promote greater tolerance of wildlife in rural communities. While the program has come under criticism in recent years relating to excessive retention of generated funds by district councils and diminished benefits to communities and elephants, strides are being taken to address these concerns. An overarching analysis of CAMPFIRE, supported by a grant of 12 million Euros from the EU, is currently being conducted and is scheduled to be completed by the end of 2017. While the Service has not received any information on the potential outcome of the review, significantly more information has been provided to the Service in regard to how funds are utilized and the basis for hunting off-takes.

As stated in the previous findings, there have been "bright spots" regarding elephant conservation efforts, particularly those carried out by non-governmental entities that are providing a benefit to elephants. Since our 2014 and 2015 findings, there appear to be strong indications that the efforts of private landowners and consortiums to management elephants within their areas of control have received greater support from ZWPMA and the Zimbabwe government. There is increased support from the Central Government and Rural District Councils to expand and support local conservation efforts and evidence that local conservation efforts are meeting management deficiencies that were identified previously by the Service.

Further Actions:

The Service currently has a number of applications pending for the import of elephant trophies taken in Zimbabwe in 2016 and for import of elephant trophies taken or to be taken in 2017 and 2018. Based on the Service's determination, applications for permits currently pending before the Service for import of trophies taken in Zimbabwe on or after January 21, 2016 and on or before December 31, 2018, will be considered to have met the enhancement requirement. The Service will complete its review of each application to determine whether they meet all other applicable permitting requirements, and if so, issue the required import permit. In order to assist the Service in its ongoing efforts to assess whether imports of elephant trophies may meet the enhancement requirement in 2019 and beyond, the Service will send a letter to ZPWMA requesting the following information:

- An up-to-date report on the progress that has been made implementing the Zimbabwe

Elephant Management Plan (2015-2020), including the status of each action item identified in the plan and progress on meeting the goals of that action.

- A report generated through the TRAS2 system identifying hunting revenue for 2016 and 2017, and to the extent available, 2018. In addition, an accounting of the funds generated by each of the US hunters who hunted elephants in 2016 and 2017, and up to date in 2018 that a letter is sent requesting the report. This accounting should be broken down by hunter (hunter's name would be redacted) and should include money provided to ZPWMA, CAMPFIRE, or other agencies. (A similar report will be requested from each hunter for comparison).

- Annual reports on implementation of the elephant plan, including budgets allocated for elephant management and specific activities undertaken for anti-poaching and reduction of human-elephant conflict.

- Additional information on elephant distribution and population trends with respect to land custodianship/land use.

- An explanation of how Zimbabwe sets its voluntary CITES export quota each year and why is has been consistently 500 elephants between 2004 and 2017. Further, if this export quota remains the same for 2018, an explanation for this continuation in 2018.

- Specific information on the 2017 quota set for each of the four major elephant populations and how the quota was distributed between communal areas, concession, and safari companies. In addition, information on the quota set for the 2018 hunting season and any explanation on why it was maintained/decreased/ increased.

- Information on the continued cooperation and coordination between ZWPMA, CAMPFIRE, landowners, safari outfitters, and NGOs to implement continued conservation benefits for elephants in Zimbabwe.

Further, the Service will be requesting a copy of the EU funding review of CAMPFIRE that will reportedly be finalized by the end of 2017.

June 22, 2016

U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg
Pike Falls Church, VA 22041-3803

Dear Sir,

Please rush this permit application. My taxidermist in South Africa has already exported the trophy elephant parts by ship because of the airline embargoes. He was not aware of the new FWS regulation requiring import permits for CITES Appendix II listed elephant trophies that is going into effect on July 6, 2016. The ship is not expected to arrive until late July but I will not be comfortable until the import permit is issued. Note that this elephant does not require a current enhancement determination by DSA because it was taken several years ago, 2013.

Sincerely,

James L Hill 6/23/2016

James Hill

Department of the Interior
U.S. Fish and Wildlife Service

Federal Fish and Wildlife Permit Application Form

OMB No. [illegible]
Expires [illegible]

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
IMPORT OF SPORT-HUNTED TROPHIES
(Appendix I of CITES and/or ESA) Zimbabwe elephant taken September 2013

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1 a Last name: HILL/HILL		1 b First name: JAMES/JAMES	1 c [redacted]	1 d Suffix
2 [redacted]	3 Social Security [redacted]	4 Occupation [redacted]	5 [redacted] Doing business as (see instructions)	
6 a [redacted]	[redacted]	[redacted]	6 d [redacted]	

B. Complete if applying on behalf of a business, corporation, public age[redacted] institution

1 a Name of business, agency, Tribe, or institution		1 b Doing business as (dba)	
2 Tax identification no	3 Description of business, agency, Tribe, or institution		
4 a Principal officer Last name	4 b Principal officer First name	4 c Principal officer Middle name/initial	4 d Suffix
5 Principal officer title		6 Primary contact name	
7 a Business telephone number	7 b Alternate telephone number	7 c Business fax number	7 d Business e-mail address

C. [redacted] All applicants complete address information

1 [redacted]				
1 [redacted] POWAY POWAY	1 c State: CA CA	[redacted]	1 e County/Province: U.S.A/USA	1 f Country: [redacted]
2 a Mailing Address (include if different than physical address, include name [redacted] if applicable): SAME DR. JAMES HILL				
2 b City	2 c State	2 d Zip code/Postal code	2 e County/Province	2 f Country

D. All applicants MUST complete

1 Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE in the amount of $100, nonrefundable processing fee. Federal, Tribal, State and local government agencies, and those acting on behalf of such agencies are exempt from the processing fee. *attach documentation of fee exempt status as outlined in instructions.* (50 CFR 13.11(d))

2 Do you currently have or have you ever had any Federal Fish and Wildlife permits? Yes ☒ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue LEOPARD ZIMBABWE 2007 No ☐

3 Certification: I hereby certify that I have read and am familiar with the regulations contained in *Title 50, Part 13 of the Code of Federal Regulations* and the other *applicable parts in subchapter B of Chapter I of Title 50*, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature (in blue ink) of applicant/person responsible for permit (No photocopied or stamped signatures) 06/23/2016 Date of signature (mm/dd/yyyy) 06/23/2016

Please continue to next page

E. **IMPORT OF SPORT-HUNTED TROPHIES** *(Appendix I of CITES* and/or (ESA) Threatened ESA listed

Note 1: If you hold an import permit for trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but are unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: Applications for species listed as endangered under the U.S. Endangered Species Act are published in the Federal Register for a 30-day public comment period. Please allow at least 90 days for the application to be processed.

Note 3: USFWS has determined that a trophy consists of raw or tanned parts of a specimen taken by a hunter during sport hunt for personal use. It may include the bones, claws, hair, head, hide, hooves, horns, meat, skull, teeth, tusks, or any taxidermied part, including, but not limited to, a rug or taxidermied head, shoulder, or full mount. It does not include articles made from a trophy, such as worked, manufactured, or handicraft items for use as clothing, curios, ornamentation, jewelry, or other utilitarian items. If you wish to import such products, please contact the Division of Management Authority for the proper application form.

Note 4: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If needed, use a separate sheet of paper. On all attachments or separate sheets you are submitting; please indicate the application question number you are addressing. If applying for more than one trophy, be sure to answer questions 1-5 for each trophy addressed in this application. If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. For each trophy to be imported, provide:
   a. Scientific name (genus, species, and, if applicable, subspecies) and common name.

      SEE ATTACHED FROM HIGHVELD TAXIDERMY

   b. Sex (if known).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and PLACE (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and PLACE (area, region, GIS coordinates, ranch AND nearest city) where wildlife was removed from the wild (provide a map if possible):

      ZIMBABWE MATETSI 3 NOT TOO FAR FROM ROBIN'S CAMP

   b. Date wildlife was hunted:

      SEPTEMBER 2013

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks). All parts. See attached statement of taxidermist.

d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export documents]:
HIGHVELD TAXIDERMY PRETORIA, SOUTH AFRICA
ERASMIA, GAUTENG

4. Complete name and address of oversees person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you must provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will also appear on your Namibian export permit and must match the U.S. import permit].

Name: HIGHVELD TAXIDERMY
Business Name:
Address: FARM 354, VLAKPLAATS,
Address: HENNOPSRIVER, 0023
City: ERASMIA, GAUTENG
State/Province:
Country, Postal Code: SOUTH AFRICA

5. Please be aware that the U.S. Fish and Wildlife Service must make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., population status or trend data; how the funds from license/trophy fees will be spent; what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.
This elephant trophy was taken in September 2013

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement:

I acknowledge that the sport-hunted trophy trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year (if applicable). In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: Date:

7. **If you are the hunter applying to import your own trophy,** please read and sign the following statement.

I acknowledge that the sport-hunted trophy trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year (if applicable). In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported. This is the only elephant trophy I am importing in 2016.

Applicant's signature: Date: 06/23/2016

Be aware that there may be additional permitting or approval requirements by your local or state government, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist you, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish permit mailed. If different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below): Please Federal Express to me.

VICTOR HAHN INTERNATIONAL INC
[redacted] 10926 S. LA CIENEGA BLVD, LENNOX, CA 90304

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☑ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email): Me or my authorized attorney John J. Jackson III, 504-837-1233, jjw-no@att.net

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(e)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

PERMIT / CERTIFICATE № 143074

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

- [ ] EXPORT
- [ ] RE-EXPORT
- [x] IMPORT
- [ ] OTHER

ORIGINAL

2. Valid until 2015/01/29

3. Importer (name and address) James Hill
c/o Highveld Taxidermists
354 Vlakplaats, Hennopsriver
Gasmia 0023

3a. Country of import RSA

4. Exporter / Re-exporter (name, address and country)
Sajariland Taxidermy
10 Luton Street, Belmont
Bulawayo ZIMBABWE

5. Special conditions
Invalid without attached permit conditions (page 20 (2) Integrated permit doc attached. ZW/4873/2014 and ZW/4874/2014 dd 16/05/2014
For live animals, this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations. Permit / certificate valid for one consignment only.

5a. Purpose of the transaction (see reverse) H

5b. Security stamp No. 1269697

6. Name, address, national seal / stamp and country of Management Authority

Department of Environmental Affairs
Private Bag X447
PRETORIA
0001
SOUTH AFRICA

7.8 SCIENTIFIC NAME (genus and species) AND COMMON NAME OF ANIMAL OR PLANT	9. Description of specimens, including identifying marks or numbers (age/sex) if live	10. Appendix No. and source (see reverse)	11. Quantity (including unit)	11a. Total exported / quota
A (7.8 Loxodonta africana) African elephant ZW2013-25090.16kg ZW2013-25089.16kg	9. Tusks	10. II W	11. 2 (Two)	11a.
12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date / 12b. No. of the operation ** or date of acquisition ***				
B (7.8 Loxodonta africana) African elephant	9. Feet	10. II W	11. 4 (Four)	11a.
12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date / 12b. No. of the operation ** or date of acquisition ***				
C (7.8 Loxodonta africana) African elephant	9. Panels	10. II W	11. 2 (Two	11a.
12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date / 12b. No. of the operation ** or date of acquisition ***				
D (7.8 Loxodonta africana) African elephant	9. Skin piece (Cape)	10. II W	11. 1 (one)	11a.
12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date / 12b. No. of the operation ** or date of acquisition ***				

* Country in which the specimens were taken from the wild, bred in captivity or artificially propagated (only in case of re-export)
** Only for specimens of Appendix I species bred in captivity or artificially propagated for commercial purposes
*** For Pre-Convention specimens

13. THIS PERMIT / CERTIFICATE IS ISSUED BY:

Johannesburg — Place
2014/07/30 — Date

14. EXPORT ENDORSEMENT:

Block	Quantity
A	2 (Two)
B	4 (Four)
C	2 (Two)
D	1 (one)

15. Bill of Lading/Air Waybill Number: 16805647121

Port of Export — Date

GAUTENG PROVINCIAL GOVERNMENT
CONSIGNMENT RELEASED BY ENVIRONMENTAL MANAGEMENT INSPECTOR
NAME IN PRINT — DATE 15/10/2014
Signature — Official stamp and title

V & R Printing Works (Pty) Ltd (012) 333 2462 (2621)

PERMIT / CERTIFICATE № 143074

PERMIT / CERTIFICATE № 143073

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

- [ ] EXPORT
- [ ] RE-EXPORT
- [x] IMPORT
- [ ] OTHER

ORIGINAL

2. Valid until 2015/01/29

3. Importer (name and address)
c/o Highveld James Hill Taxidermists
354 Vlakplaats. Hennopsriver
Erasmia 0023

4. Exporter / Re-exporter (name, address and country)
Safariland Taxidermy
10 Luton Street. Belmont
Bulawayo ZIMBABWE

3a. Country of import RSA

5. Special conditions
Invalid without attached permit conditions (page 2 of 2) Integrated permit doc attached. ZW/4873/2014 dd 16/05/2014

For live animals, this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations. Permit / certificate valid for one consignment only.

6. Name, address, national seal / stamp and country of Management Authority
Department of Environmental Affairs
Private Bag X447
PRETORIA
0001
SOUTH AFRICA

5a. Purpose of the transaction (see reverse): H

5b. Security stamp No.: 1269695

	7.8 SCIENTIFIC NAME (genus and species) AND COMMON NAME OF ANIMAL OR PLANT	9. Description of specimens, including identifying marks or numbers (age/sex) if live	10. Appendix No. and source (see reverse)	11. Quantity (including unit)	11a. Total exported / quota
A	(Loxodonta africana) African elephant	Femur bone	10. IIW	11. 1 (one)	11a.
B	(Loxodonta africana) African elephant	Lower jaw bone	10. IIW	11. 1 (one)	11a.
C	7.8	9.	10.	11.	11a.
D	7.8	9.	10.	11.	11a.

	12. Country of origin*	Permit No.	Date	12a. Country of last re-export	Certificate No.	Date	12b. No. of the operation ** or date of acquisition ***
A							
B							
C							
D							

* Country in which the specimens were taken from the wild, bred in captivity or artificially propagated (only in case of re-export)
** Only for specimens of Appendix I species bred in captivity or artificially propagated for commercial purposes
*** For Pre-Convention specimens

1269695

13. THIS PERMIT / CERTIFICATE IS ISSUED BY:

Johannesburg — Place
2014/07/30 — Date
Security stamp signature and official stamp

14. EXPORT ENDORSEMENT:

Block	Quantity
A	1 (one)
B	1 (one)
C	nil
D	nil

15. Bill of Lading/Air Waybill Number: 16805647121.

Port of Export — Date

GAUTENG PROVINCIAL GOVERNMENT
CONSIGNMENT RELEASED BY ENVIRONMENTAL MANAGEMENT INSPECTOR
NAME IN PRINT — DATE 15/10/2014
Signature — Official stamp and title
SIGNATURE

V & R Printing Works (Pty) Ltd (012) 333 2462 (2621)

PERMIT / CERTIFICATE № 143073

Zimbabwe Parks and Wildlife Management Authority

CITES PERMIT/CERTIFICATE ZW/4874/2014
NP CITES FORM 2

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Permit/Certificate No ZW/4874/2014

[X] Export
[ ] Re-Export
[ ] Import
[ ] Other

Original

2. Valid Until: 16-11-2014

3. Importer (name and address): JAMES HILL
C/O HIGHVELD TAXIDERMISTS
VLAKPLAATS 354
HENNOPSRIVER
ERASMIA

4. Exporter (name, address and country Zimbabwe
SAFARILAND TAXIDERMY
10 LUTON STREET
BELMONT
BULAWAYO
ZIMBABWE

3a. Country Of Import South Africa

5. Special Conditions
For live animals this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations

5a. Purpose of transaction (see reverse) H

5b. Security stamp no. [illegible]

6. Name, address, stamp and country of Management Authority

Zimbabwe Parks and Wildlife Management Authority
P.O. Box CY 140
Causeway
Harare, Zimbabwe

6a. Declaration by Exporter or Agent
I hereby declare that I am aware of the provision of the Convention contained in the *Statutory Instrument 76 of 1998*, for the purpose of Exporting / Re- exporting / Importing the Wildlife listed below.
The total value of this consignment is:
$US .....Signature of applicant...SMlambe.....

7. Scientific Name	8. Common Name	9. Description of specimens including no. (age/sex if live)	10. Appendix and Source (see reverse)	11. Quantity (including unit)	11a. Total exported quota	11b. Tag Number	11c. Mark
LOXODONTA AFRICANA	ELEPHANT	TUSKS :	II W	16 kg	186-500-2014	ZW249/500/2013-LOX	ZW2013-25090
LOXODONTA AFRICANA	ELEPHANT	TUSKS :	II W	16 kg	186-500-2014	ZW249/500/2013-LOX	ZW2013-25089
LOXODONTA AFRICANA	ELEPHANT	SKIN PIECES :	II W	1 no	186-500-2014	ZW249/500/2013-LOX	n/a
Hippopotamus amphibius	Hippopotamus	PANELS :	II W	2 no	n/a	n/a	n/a
Hippopotamus amphibius	Hippopotamus	SKIN PIECES WITH 2 FEET :	II W	1 no	n/a	n/a	n/a
Hippopotamus amphibius	Hippopotamus	SKULLS :	II W	1 no	n/a	n/a	n/a
Hippopotamus amphibius	Hippopotamus	TEETH :	II W	12 no	n/a	n/a	n/a

2. Country of origin:	Permit No	Date of Issue	12a. Country of last re-export	Certificate No	Date:

This permit is issued by

lace: Bulawayo Date: 16-05-2014 Security stamp, signature and official seal: 1045524

Exchange Control Information
01 number.....649312...../or
01 not applicable to export (delete)

ate stamp and signature of authorized official):.....
te: Permit/certificate invalid unless this section is completed.

15. Date Stamp of Zimbabwe Revenue Authority inspector

Export endorsement:

ecimens	Quantity	Specimens	Quantity
phant tusk	1	Hippo skull	1
phant tusk	1	Hippo teeth	12
phant skin	1		
20 panels	2		
po skin with feet	1		

17. Bill of landing/Air waybill number:

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY INSPECTORATE 17 SEP 2014 P.O. BOX CY 140, CAUSEWAY HARARE, ZIMBABWE TEL (04) 70[illegible]

Port of Export Date Signature

Zimbabwe Parks and Wildlife Management Authority

CITES PERMIT/CERTIFICATE ZW/4875/2014
NP CITES FORM 2

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Permit/Certificate No ZW/4875/2014

[X] Export
[ ] Re-Export
[ ] Import
[ ] Other

Original

2. Valid Until: 16-11-2014

1. Importer (name and address): JAMES HILL
C/O HIGHVELD TAXIDERMISTS
VLAKPLAATS 354
HENNOPSRIVER
ERASMIA

4. Exporter (name, address and country Zimbabwe
SAFARILAND TAXIDERMY
10 LUTON STREET
BELMONT
BULAWAYO
ZIMBABWE

1a. Country Of Import South Africa

5. Special Conditions
For live animals this permit or certificate is only valid if the transport conditions conform to the guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations

5a. Purpose of transaction (see reverse)
H

5b. Security stamp no.
1045531

6. Name, address, stamp and country of Management Authority

Zimbabwe Parks and Wildlife Management Authority
P.O. Box CY 140
Causeway
Harare, Zimbabwe

6a. Declaration by Exporter or Agent
I hereby declare that I am aware of the provision of the Convention contained in the *Statutory Instrument 76 of 1998*, for the purpose of Exporting / Re- exporting / Importing the Wildlife listed below.
The total value of this consignment is:
$US .....Signature of applicant. SMlambo

7. Scientific Name	8. Common Name	9. Description of specimens including no. (age/sex if live)	10. Appendix and Source (see reverse)	11. Quantity (including unit)	11a. Total exported quota	11b. Tag Number	11c. Mark
Aepyceros melampus	*Impala*	*SKIN PIECES :*	*NE W*	*1 no*	*n/a*	*n/a*	*n/a*
Aepyceros melampus	*Impala*	*SKULLS :*	*NE W*	*1 no*	*n/a*	*n/a*	*n/a*
Canis mesomelas	*Jackal(black backed)*	*SKINS : full*	*NE W*	*1 no*	*n/a*	*n/a*	*n/a*
Canis mesomelas	*Jackal(black backed)*	*SKULLS :*	*NE W*	*1 no*	*n/a*	*n/a*	*n/a*
Phacochoerus aethiopicus	*Warthog*	*SKINS : full*	*NE W*	*1 no*	*n/a*	*n/a*	*n/a*
Phacochoerus aethiopicus	*Warthog*	*SKULLS :*	*NE W*	*1 no*	*n/a*	*n/a*	*n/a*
Phacochoerus aethiopicus	*Warthog*	*TUSHES :*	*NE W*	*4 no*	*n/a*	*n/a*	*n/a*

12. Country of origin:	Permit No	Date of issue	12a. Country of last re-export	Certificate No.	Date:

. This permit is issued by

Place: Bulawayo Date: 16-05-2014 Security stamp, signature and official seal: 1045531

. Exchange Control Information
ED1 number.....649312...../or
ED1 not applicable to export (delete)

Date stamp and signature of authorized official):.....
Note: Permit/certificate invalid unless this section is completed.

15. Date Stamp of Zimbabwe Revenue Authority Inspector

Export endorsement:

Specimens	Quantity	Specimens	Quantity
Impala Skin	1	Warthog Skull	1
Impala Skull	1	Warthog tusk	4
Jackal Skin	1		
Jackal Skull	1		
Warthog Skull	1		

17. Bill of landing/Air waybill number:

Port of export Date Signature

ZIMBABWE PARKS AND WILDLIFE INSPECTORATE 11 SEP 2014 P. BAG CY 140 CAUSEWAY HARARE ZIMBABWE (04) 707624/9 MANAGEMENT AUTHORITY

Zimbabwe Parks and Wildlife Management Authority

CITES PERMIT/CERTIFICATE ZW/4873/2014
NP CITES FORM 2

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Permit/Certificate No ZW/4873/2014

[X] Export
[ ] Re-Export
[ ] Import
[ ] Other

Original

2. Valid Until: 16-11-2014

3. Importer (name and address): JAMES HILL
C/O HIGHVELD TAXIDERMISTS
VLAKPLAATS 354
HENNOPSRIVER
ERASMIA

3a. Country Of Import South Africa

4. Exporter (name, address and country Zimbabwe
SAFARILAND TAXIDERMY
10 LUTON STREET
BELMONT
BULAWAYO
ZIMBABWE

5. Special Conditions
For live animals this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations

5a. Purpose of transaction (see reverse) H

5b. Security stamp no. [illegible]

6. Name, address, stamp and country of Management Authority

Zimbabwe Parks and Wildlife Management Authority
P.O. Box CY 140
Causeway
Harare, Zimbabwe

6a. Declaration by Exporter or Agent
I hereby declare that I am aware of the provision of the Convention contained in the *Statutory Instrument 76 of 1998*, for the purpose of Exporting / Re- exporting / Importing the Wildlife listed below.
The total value of this consignment is:
$US .....21,810.00.....Signature of applicant. Mlambo.....

7. Scientific Name	8. Common Name	9. Description of specimens including no. (age/sex if live)	10. Appendix and Source (see reverse)	11. Quantity (including unit)	11a. Total exported quota	11b. Tag Number	11c. Mark
PAPIO URSINUS	CHACMA BABOON	SKIN PIECES :	II W	1 no	n/a	n/a	n/a
PAPIO URSINUS	CHACMA BABOON	SKULLS :	II W	1 no	n/a	n/a	n/a
CROCODYLUS NILOTICUS	CROCODILE	SKINS : full	II W	1 no	n/a	ZW2013-200/086 NIL	n/a
LOXODONTA AFRICANA	ELEPHANT	PANELS :	II W	2 no	186-500-2014	ZW249/500/2013-LOX	n/a
LOXODONTA AFRICANA	ELEPHANT	FEET :	II W	4 no	186-500-2014	ZW249/500/2013-LOX	n/a
LOXODONTA AFRICANA	ELEPHANT	JAW BONES : lower jaw	II W	1 no	186-500-2014	ZW249/500/2013-LOX	n/a
LOXODONTA AFRICANA	ELEPHANT	FEMUR BONES :	II W	1 no	186-500-2014	ZW249/500/2013-LOX	n/a

12. Country of origin:	Permit No	Date of issue	12a. Country of last re-export	Certificate No	Date:

. This permit is issued by

lace: Bulawayo Date: 16-05-2014 Security stamp, signature and official seal 1848523

Exchange Control Information
D1 number.....649312...../or
D1 not applicable to export (delete)

Date stamp and signature of authorized official):.....
ote: *Permit/certificate invalid unless this section is completed.*

15. Date Stamp of Zimbabwe Revenue Authority inspector

Export endorsement:

ecimens	Quantity	Specimens	Quantity
[illegible]	1	Elephant lower jaw	1
[illegible]	1	Elephant femur bones	1
[illegible]	1		
[illegible]	2		
[illegible]	4		

17. Bill of landing/Air waybill number:

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY
INSPECTORATE
SEP 2014
P. BAG CY 140, CAUSEWAY
HARARE, ZIMBABWE
TEL. (04) 707[illegible]

Port of export Date Signature

PERMIT / CERTIFICATE № 143077

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

☐ EXPORT
☐ RE-EXPORT
☒ IMPORT
☐ OTHER

ORIGINAL

2. Valid until 2015/01/30

3. Importer (name and address) James Hill
c/o Highveld Taxidermists,
354 Vlakplaas. Hennopsriver
Erasmia 0023

3a. Country of import RSA

4. Exporter / Re-exporter (name, address and country)
Safariland Taxidermy
1d Luton Street. Belmont
Bulawayo ZIMBABWE

5. Special conditions: Invalid without attached permit conditions (page 2 of 2) A-ZW/4874/2014 dd 16/07/2014. B-C-ZW/4873/2014 dd 16/07/2014

For live animals, this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations. Permit / certificate valid for one consignment only.

6. Name, address, national seal / stamp and country of Management Authority

Department of Environmental Affairs
Private Bag X447
PRETORIA
0001
SOUTH AFRICA

5a. Purpose of the transaction (see reverse): H

5b. Security stamp No. 1269700

	7.a SCIENTIFIC NAME (genus and species) AND COMMON NAME OF ANIMAL OR PLANT	9. Description of specimens, including identifying marks or numbers (age/sex) if live	10. Appendix No. and source (see reverse)	11. Quantity (including unit)	11a. Total exported / quota
A	(Hippopotamus amphibius) Hippo	Panels	II W	2 (Two)	11a.
	12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date / 12b. No. of the operation ** or date of acquisition ***				
B	(Papio ursinus) Baboon	Skull	II W	1 (one)	11a.
	12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date / 12b. No. of the operation ** or date of acquisition ***				
C	(Papio ursinus) Baboon	Skin piece	II W	1 (one)	11a.
	12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date / 12b. No. of the operation ** or date of acquisition ***				
D	7.a	9.	10.	11.	11a.
	12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No / Date / 12b. No. of the operation ** or date of acquisition ***				

* Country in which the specimens were taken from the wild, bred in captivity or artificially propagated (only in case of re-export)
** Only for specimens of Appendix I species bred in captivity or artificially propagated for commercial purposes
*** For Pre-Convention specimens

CITES 1269700

13. THIS PERMIT / CERTIFICATE IS ISSUED BY:

Johannesburg — Place
2014/07/31 — Date

GAUTENG PROVINCIAL GOVERNMENT
Security stamp, signature and official seal
CONSIGNMENT RELEASED BY ENVIRONMENTAL MANAGEMENT INSPECTOR
NAME IN PRINT
15/10/2014 DATE
SIGNATURE
Signature — Official stamp and title

14. EXPORT ENDORSEMENT:

Block	Quantity
A	2 (Two)
B	1 (one)
C	1 (one)
D	n/a

15. Bill of Lading/Air Waybill Number: 168056471 21.

Port of Export — Date

V & R Printing Works (Pty) Ltd (012) 333 2462 (2621)

PERMIT / CERTIFICATE № 143077

PERMIT CONDITIONS FOR THE NATIONAL/ INTERNATIONAL IMPORT, EXPORT OR RE-EXPORT OF CITES AND NON-CITES SPECIES AND ANY PRODUCTS THEREOF; NON-CITES LIVE WILD ANIMALS, LIVE EXOTIC ANIMALS, HUNTING TROPHIES, WILD ANIMAL PRODUCTS, PROTECTED PLANTS AND LIVE FISH

These conditions will be applicable to all National/ International Imports, Exports and Re-Exports of CITES and Non-CITES species and any products thereof; live wild animals, live exotic animals, hunting trophies, wild animal products, protected plants and live fish by air, mail, rail and road within the Gauteng Province of which the first port of entry into and/ or the last port of exit out of the Province of Gauteng/ South Africa will be OR Tambo International Airport.

Import permits are not valid unless the imported consignment is accompanied by a valid ***(original)*** export permit from the country/ province of origin ***(if required)***, which must be handed to the authorized Environmental Management Inspector on inspection.

THE FOLLOWING CONDITIONS ARE APPLICABLE TO:

(A) ALL NATIONAL/ INTERNATIONAL IMPORTS, EXPORTS AND RE-EXPORTS OF CITES AND NON-CITES SPECIES AND ANY PRODUCTS THEREOF; LIVE WILD ANIMALS, LIVE EXOTIC ANIMALS, HUNTING TROPHIES, WILD ANIMAL PRODUCTS, PROTECTED PLANTS AND LIVE FISH (INCLUDING AIR, MAIL, RAIL, ROAD)

THIS PERMIT:

1. a) Shall not be transferable;
   b) Shall be invalid until the signature of the holder/ Recipient thereof been appended thereto;
   c) This permit is not valid unless it has been endorsed and released by an authorized Environmental Management Inspector/ official prior to the import, export or re-export taking place. In cases of importation of live animals, which are to be quarantined at OR Tambo International Airport's Quarantine Station, the permit must be released prior to the animals leaving quarantine. Original import permits to be inserted into a sealed envelope and placed in the Environmental Management Inspector box that's provided at the quarantine station, no more than 14 working days after import;
   d) Shall be subject to the provisions of any other law and or regulation;
   e) Shall be valid for one consignment only;
   f) This permit is subject to the compliance of Veterinary and Agricultural requirements; and to the compliance of IATA Live Animal Regulations.

2. The permit holder or his delegated agent must contact one of the authorized Environmental Management Inspector/ officials, per telephone ***and*** confirm per fax a minimum of ***48 hours*** prior to the import, export or re-export taking place to book an inspection (the inspection booking must be requested a minimum of 48 hours prior to the intended inspection), applicable for shipments done over weekends and public holidays, with the following information:
   a) Name / Company Name of Importer / Exporter;
   b) Name of Airline and Warehouse where intended inspection will take place;
   c) Date and Time of Import / Export / Re-Export;
   d) Date and Time of intended inspection (subject to approval);
   e) Agents particulars (if applicable), Carrier Name, Flight Number, Flight Time and Waybill Number;
   f) The applicable permit number/s and relevant expiry dates; and
   g) Detailed packing list as per condition 6.

3. Inspections are by appointment only and early booking is necessary. An authorized Environmental Management Inspector/ official may be contacted at the following telephone numbers during office hours ***(07:00 – 15:30):***
   Office: +27 (11) 390-3687/ 2311
   Fax: +27 (11) 390-1720

4. All relevant documentation, including ***original*** permit/s ***(CITES permits must include original and coloured copy)***, Packing List/s, A photo copy of all these documents must also be handed to the Environmental Management Inspector/ official on inspection. The original permit/s, these conditions and packing list/s must accompany the consignment/s.

5. All transport containers must be numbered and the numbers must coincide with the numbers on the packing list/s. The country/ province of destination as shown on the containers must coincide with the country/ province of destination as on the permit. The details on the packing list/s must coincide with the details on the permit/s.

6. Detailed packing list/s, that are signed and dated must accompany the consignment/s, with the following information:
   a) Details of Importer and Exporter (Names, addresses and contact numbers);
   b) Waybill number/s and name of carrier, flight number, date and time;
   c) Transport container number/s;
   d) Scientific name of species (in full) with relevant transponder / tag / ring numbers; a detailed description of specimen / product and the origin thereof;
   e) Common name of species (in full);
   f) Number per species per container (actual number exported / imported); and
   g) Applicable permit number/s

7. If this permit is not used, the ***original permit (CITES permits must include coloured copy)*** must be returned to the issuing authority within ***14 working*** days after expiry thereof. Import permits must be returned to the issuing authority within ***14 working days*** after use. Export permits must be handed to a Management Authority of the importing country/ province within ***14 working days*** after use.

8. The permit holder must make and retain photo copies of permit/s for audit inspections. Copies of import permits must be made and retained ***after endorsement,*** for Re-export permit applications. When applying for a Re-export permit, a copy of the ***endorsed import permit*** must be submitted to the Permit office with the application.

9. A person authorized thereto by the Premier may only make any alteration on the permit.

10. Failure to comply with any of the permit conditions renders the permit invalid and may result in criminal proceedings, cancellation of the permit/s and seizure of the consignment/s.

11. The holder of the permit and / or his/ her delegated agent will be held responsible for any legal costs; costs incurred for delays and / or storage fees due to irregularities and / or due to the consignment being withheld due to incorrect documentation, and / or incorrect consignment/s and / or failure to comply with permit conditions.

12. Permit holders or their delegated agents must inform the Environmental Management Inspector/ official if an inspection is cancelled, or if they are to be late for an inspection within a reasonable time before the inspection is due to take place.

Signature of Issuing Officer	Date	Signature of Recipient	Date
Full Name		Full Name	

Conditions to this permit been issued subject to the provisions of section 100 (2), Ordinance 12 of 1983

GAUTENG
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

PREMIER OF THE PROVINCE OF GAUTENG
NATURE CONSERVATION

CPC5 5110

PERMIT TO IMPORT DEAD GAME OR GAME PRODUCTS INTO THE PROVINCE.

Issued in terms of the provisions of the Nature Conservation Ordinance, 1983 (Ordinance 12 of 1983)

PARTICULARS OF THE PERMIT

GAUTENG PROVINCIAL GOVERNMENT
DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT
2014 -07- 31
DIRECTORATE OF CONSERVATION
PERMIT OFFICE
PO BOX 8769 JOHANNESBURG 2000

DATE STAMP

Name of permit holder: James Hill

Residential address or business address: C/o Highfield Taxidermy
Vlakplaats 354
Hennopsrivier, Erasmia

DETAILS OF PERMIT

From	Details of Import	Destination
Safariland	1(one) Fullskin Zebra (Equus burchelli)	
Taxidermy	1(one each) Skull, Cape Impala (Aepyceros	
10 Littonstr		Melampus)
Belmont	1(one each) Skull, Fullskin & 4 tusks warthog	
Bulawayo	(Phacocoerus africanus)	
	1(one each) Skull & Fullskin Tsessebe (Damaliscus Mesomelas)	
	ZW/4875/2014 dd 16/05/2014	

GAUTENG PROVINCIAL GOVERNMENT
CONSIGNMENT RELEASED BY
ENVIRONMENTAL MANAGEMENT
INSPECTOR
15/05/2014
DATE
NAME IN PRINT
SIGNATURE

Date and signature of permit holder to be appended here: _____

In terms of and subject of the provisions of the **Nature Conservation Ordinance, 1983 (Ordinance 12 of 1983)** and the regulations framed above, the abovementioned person is hereby authorised, subject to the conditions appearing on this permit to import into the Province dead game or game products referred to above from the place referred to above during the period of validity of this permit and to convey it by the shortest route to the destination referred to above:

This permit is valid from date of issue to: 30/01 2015

Pedorgeni

SIGNED ON BEHALF OF THE MEC

SIGNATURE OF PERMIT HOLDER

This permit is invalid without attached permit conditions (page 2 of 2)

(See conditions on reverse side)

CORE MARKETING: (011) 838 7994

PERMIT / CERTIFICATE № 143076

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

- [ ] EXPORT
- [ ] RE-EXPORT
- [x] IMPORT
- [ ] OTHER

ORIGINAL

2. Valid until 2015/01/29

3. Importer (name and address)
James Hill
c/o Highveld Taxidermists
354 Vlakplaats · Hennopsriver
Grasmia 0023

4. Exporter / Re-exporter (name, address and country)
Safariland Taxidermy
10 Luton Street · Belmont
Bulawayo ZIMBABWE

3a. Country of import RSA

5. Special conditions
Invalid without attached permit conditions (page 2 of 2) Integrated permit. do L. attached. A-C/ZW/4874/2014 D. ZW/4873/2014 all dd 16/05/2014

For live animals, this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations. Permit / certificate valid for one consignment only.

6. Name, address, national seal / stamp and country of Management Authority
Department of Environmental Affairs
Private Bag X447
PRETORIA
0001
SOUTH AFRICA

5a. Purpose of the transaction (see reverse): H

5b. Security stamp No.: 1269699

	7.8 SCIENTIFIC NAME (genus and species) AND COMMON NAME OF ANIMAL OR PLANT	9. Description of specimens, including identifying marks or numbers (age/sex) if live	10. Appendix No. and source (see reverse)	11. Quantity (including unit)	11a. Total exported / quota
A	7.8 (Hippopotamus amphibius) Hippo	Skull	10. II W	11. 1 (one)	11a.
	12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date			12b. No. of the operation ** or date of acquisition ***	
B	7.8 (Hippopotamus amphibius) Hippo	Teeth	10. II W	11. 12 (Twelve)	11a.
	12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date			12b. No. of the operation ** or date of acquisition ***	
C	7.8 (Hippopotamus amphibius Hippo	Skin piece (with two feet)	10. II W	11. 1 (one)	11a.
	12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date			12b. No. of the operation ** or date of acquisition ***	
D	7.8 (Crocodylus niloticus) Nile crocodile ZW2013-200/086 NIL	Fullskin	10. II W	11. 1 (one)	11a.
	12. Country of origin* / Permit No. / Date / 12a. Country of last re-export / Certificate No. / Date			12b. No. of the operation ** or date of acquisition ***	

* Country in which the specimens were taken from the wild, bred in captivity or artificially propagated (only in case of re-export)
** Only for specimens of Appendix I species bred in captivity or artificially propagated for commercial purposes
*** For Pre-Convention specimens

13. THIS PERMIT / CERTIFICATE IS ISSUED BY:

Johannesburg — Place
2014/07/30 — Date

Security stamp, signature and official seal

1269699

14. EXPORT ENDORSEMENT:

Block	Quantity
A	1 (one)
B	12 (Twelve)
C	1 (one)
D	1 (one)

15. Bill of Lading/Air Waybill Number: 16505647121

JWB — Port of Export
Date

GAUTENG PROVINCIAL GOVERNMENT
CONSIGNMENT RELEASED BY ENVIRONMENTAL MANAGEMENT INSPECTOR
NAME IN PRINT — DATE 15/10/2014
Signature — Official stamp and title
SIGNATURE

V & R Printing Works (Pty) Ltd (012) 333 2462 (2621)

PERMIT / CERTIFICATE № 143076

RCVD JUN 29 2016

(b) (6) [redacted]

(b) (6) [redacted]

DATE 6-23-16

PAY TO THE ORDER OF U. S. Fish and Wildlife Service $ 100.00

One Hundred and 00/100 DOLLARS

FIFTH THIRD BANK

FOR (b) (6) [redacted]

FORM 3-201A (1/97)

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

IMPORT PERMIT

Page 1 of 1

1. Original Permit/Certificate No.
16US00861C/9

2. Valid
07/27/2017

3. Permittee (name and address, country)
JAMES (b) HILL
(b) (6)
POWAY, CA (b) (6)
U.S.A.

4. Consignor (name and address, country)
FARM 354
VLAKPLAATS
HENNOPSRIVER 0023
SOUTH AFRICA

5. Special Conditions
MUST COMPLY WITH ATTACHED GENERAL PERMIT CONDITIONS.

SPECIMEN(S) MAY NOT BE SOLD OR TRANSFERRED FOR ANY FINANCIAL REMUNERATION.

TWO AFRICAN ELEPHANT TUSKS;

TAG #ZW249/500/2013-LOX; MARK # ZW3013-25090; 16KG AND

TAG #ZW249/500/2013-LOX; MARK # ZW2013-25089; 16KG

TROPHY MUST HAVE BEEN TAKEN DURING THE 2013 HUNTING SEASON.

-May not be used for commercial purposes. For live animals, only valid if the transport conditions comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport, with IATA Live Animals Regulations.

5a. Purpose of Transaction
H

6. U.S. Management Authority
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

U.S. CITES Management Authority

07/28/2016
Issuing Date

United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

7/8. Common Name and Scientific name (genus and species) of Animal or Plant	9. Description of Part or Derivative, including identifying marks or numbers (age/sex if live)	10. Appendix No. and Source
A. Common Name: AFRICAN ELEPHANT Scientific Name: LOXODONTA AFRICANA	9. PERSONAL SPORT HUNTED TROPHY (shipment may contain bones, claws, hide, skull, teeth, or any taxidermied part, as well as worked, manufactured, or handicraft items such as curios or jewelry, that must accompany raw or tanned parts.)	10. 1 W 11. Quantity (including units): 1 NO 12. Country of Origin: ZIMBABWE
B. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
C. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
D. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
E. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin

583917

RCVD AUG 5 2016

OMB No. 1018-0093
Expires 05/31/2017

Department of the Interior
U.S. Fish and Wildlife Service

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Hixson	Robert	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)		
2. Tax identification no.	3. Description of business, agency, Tribe, or institution		
4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix
5. Principal officer title	6. Primary contact name		
7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Carrollton	TX	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country
Dallas	TX	(b) (6)		USA

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE in **the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes [X] If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: 2006-USUS108781/9 2002-01US043605/9 No [ ]

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature (in blue ink) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 4/25/16

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: The U.S. FWS has determined that a trophy consists of raw or tanned parts of a specimen taken by a hunter during a sport hunt for personal use. It may include the bones, claws, hair, head, hide, hooves, horns, meat, skull, teeth, tusks, or any taxidermied part, including, but not limited to, a rug or taxidermied head, shoulder, or full mount. It does not include articles made from a trophy, such as worked, manufactured, or handicraft items for use as clothing, curios, ornamentation, jewelry, or other utilitarian items. If you wish to import such products, please contact the Division of Management Authority for the proper application form.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy. If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: _____ (Limited to the import of two per calendar year)

African elephant (*Loxodonta africana*) Quantity: 1 (Import permit is not required for trophies harvested in Botswana, Namibia, South Africa, or Zimbabwe). **Note: once imported, ivory cannot be re-exported.**

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: _____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you are looking to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild: Zambia, Chikwa Hunting Block, Luangwa Valley, Eastern Province Nearest Town - Lundazi
   b. Date wildlife is to be hunted: 7/23/16 - 8/21/16
   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:
   b. Date wildlife was hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Michael W. Borman
Business Name: Bangweulu Taxidermy Ltd
Address: 4142/K Chifwema Road
Address: New Kasama
City: Lusaka
State/Province: Lusaka Province
Country, Postal Code: Zambia

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

e information attached with this application and the information submitted by Za

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year (if applicable). In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: _____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year (if applicable). In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 9/25/14

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):
John J. Jackson or Regina Lennox, 504-837-1233, jjw-no2@att.net or regina.lennox@conservationforce.org

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

NOTICE OF REPRESENTATION

This is a notice to the U.S. Fish and Wildlife Service that I have appointed John J. Jackson, III and Regina Lennox of the non-profit firm Conservation Force as my attorneys and legal representatives for all matters concerning my application for a permit to import an African elephant trophy and an African lion trophy from Zambia.

This authority is inclusive and extends to all applications and filings, whether administrative or judicial, including but not limited to any request for reconsideration, appeal, and litigation.

I also request that these attorneys, through the address for Conservation Force below, be copied with all correspondence, acknowledgements, notices and decisions concerning my application to import my lion trophy at the following address:

John J. Jackson, III
Regina Lennox
Conservation Force
3240 S. I-10 Service Road W., Suite 200
Metairie, Louisiana 70001 USA
T: (504) 837-1233
F: (504) 837-1145
E: jjw-no2@att.net
E: regina.lennox@conservationforce.org

Signed: _____ (b) (6)

Name: Robert (b) (6) Hixson (b) (6)

Date: 4/13/16

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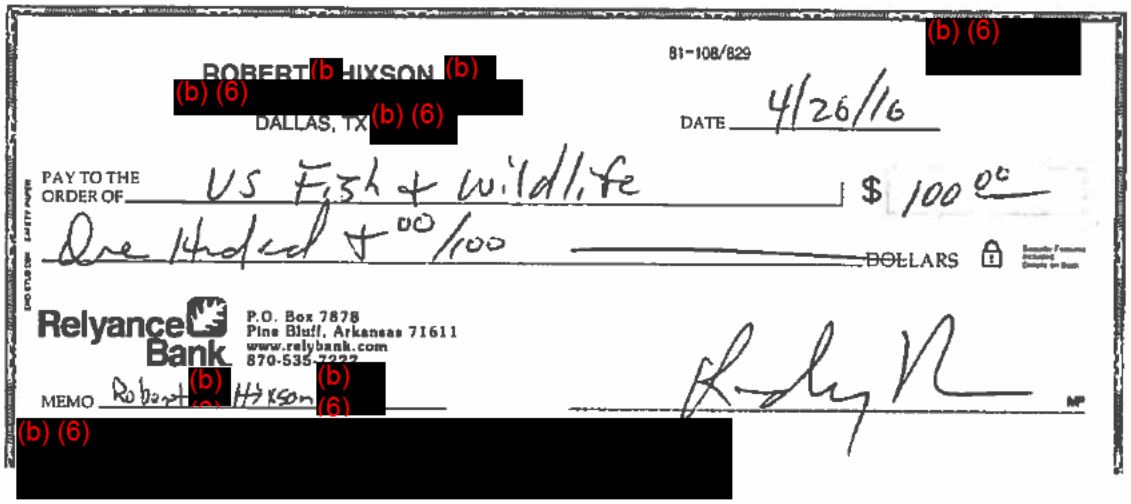


(b) (6)

81-108/829

ROBERT (b) HIXSON (b)
(b) (6)
DALLAS, TX (b) (6)

DATE 4/26/16

PAY TO THE ORDER OF US Fish + Wildlife $ 100 00

One Hundred + 00/100 DOLLARS

Reliance Bank
P.O. Box 7878
Pine Bluff, Arkansas 71611
www.relybank.com
870-535-7222

MEMO Robert (b) Hixson (b) (6)

(b) (6)

United States Department of the Interior

FISH AND WILDLIFE SERVICE

International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803

SEP 12 2017

MEMORANDUM

To: Chief, Division of Management Authority

From: Chief, Division of Scientific Authority Rosemarie Gnam

Subject: General Advice on Importation of Sport-hunted Trophies of African Elephants taken in Zambia in the Calendar Years 2016 and 2017

This General Advice represents our Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) finding for permit applications that you have received, or may receive in the future, for the import of sport-hunted trophies of African elephants (*Loxodonta africana*) taken in Zambia in the calendar years 2016 and 2017.

Please be advised that, based on the available information as of the date of this finding, we are able to determine that the importation of sport-hunted trophies of African elephants taken in Zambia in the calendar years 2016 and 2017, will be for purposes that are not detrimental to the survival of the species. This General Advice applies only to African elephant sport-hunted trophies lawfully taken in Zambia during calendar years 2016 and 2017 (i.e., January 1 through December 31), provided that they are to be imported by the persons who hunted them for personal use or personal display.

This finding is based on the best available biological information and is made consistent with the requirements at 50 CFR § 23.61. In making this finding, the U.S. Fish and Wildlife Service (Service) reviewed the pending applications to import sport-hunted trophies of African elephants taken in Zambia in 2016 and 2017 for any new or additional information to consider. The Service also considered trade information, including trade demand, and other scientific management information available to the Service on the status and management of African elephant populations in Zambia.

This finding does not establish any conditions that must be satisfied for a permit to be granted. The Service monitors the status and management of African elephant populations in Zambia and retains discretion to replace this finding at any time when it no longer reflects the best available biological

information consistent with the requirements at 50 CFR § 23.61. In addition, this finding is subject to new analysis in the context of individual permit applications for import of sport-hunted trophies of African elephants taken in Zambia. The Service reviews and evaluates each individual application to determine whether it includes new or additional information regarding the status of elephants in Zambia such that the requirements of 50 CFR § 23.61 are satisfied. Each application for import also needs to meet all other applicable permitting requirements before it may be granted.

BASIS FOR ADVICE:

On July 23, 2012, we issued a General Advice on the import of sport-hunted trophies of African elephants from Zambia for the calendar year 2012. However, since the Government of Zambia suspended elephant hunting between 2013 and 2014, and we did not receive any application requests to import African elephant sport-hunted trophies taken in Zambia in 2015, we have not made findings for the import of sport-hunted elephant trophies from Zambia since 2012.

In 2015, the Service was informed that the Government of Zambia planned to lift the suspension of the elephant sport-hunting program in Zambia for 2015. On March 4, 2015, the Service sent a letter to the Zambia Wildlife Authority (ZAWA) seeking confirmation on whether Zambia had decided to open a sport-hunting season for elephants in 2015, and if so, asking Zambia to please provide the information we requested to assist us in making our required findings. On April 30, 2015, we received a response from ZAWA to our March 4, 2015, letter, which noted the conclusion and adoption of the National Policy and Action Plan on Elephant Management in Zambia and Management Plan, the rationale for the suspension of the elephant sport-hunting program in Zambia from 2013 to 2014, and the 2015 elephant sport-hunting quota declared to CITES (ZAWA *pers comm.* 2015). In addition, Zambia provided a copy of their "Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia (March 2015)," as well as a document regarding their "Response to USFWS/EU Questions on Zambian Elephant Hunting 2015" to address the questions we posed in our March 4, 2015, letter.

On December 22, 2015, ZAWA sent the Service additional information regarding African elephants in Zambia, including the following documents:

- Possible Explanation for the Elephant Increase in the Kafue Area;
- Revised version (July 2015) of the "Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia;"
- Preliminary Report of the Dry Season Survey of Large Herbivores for Kafue and Luangwa Ecosystems (2013); and
- 65th CITES Standing Committee Meeting Summary – 7 to 11 July, 2014.

In February 2017, the Service hand-delivered a letter to a Department of National Parks and Wildlife (DNPW) official dated January 30, 2017, requesting any new and updated information regarding the management and conservation of elephants in Zambia, including information concerning the distribution, status and trends of African elephant populations in Zambia, and the sustainability of offtake. On March 31, 2017, the Service received a response from DNPW to the

questions outlined in our January 30, 2017, letter, as well as information regarding their 2016 Non-Resident Hunting Quota.

We also received additional information from other sources, all of which is referenced within the text of this document. The new information received from the Government of Zambia and other sources are discussed below as they relate to our finding for sport-hunted trophies of African elephants taken in Zambia in the calendar years 2016 and 2017.

Conservation and Management

1. African elephants are distributed in seven sub-regions throughout Zambia, including the Luangwa Valley, Mid/Lower Zambezi, Kafue, Mosi oa Tunya, Sioma - upper Zambezi, Bangweulu, Nsumbu – Mweru wa Ntipa, Lusenga – Tanganyika, and West Lunga (CoP15 Prop. 5). Zambia's CoP15 proposal notes that each sub-region exceeds 10,000 square kilometers (km^2) in area, and that the total area far exceeds 200,000 km^2. Zambia's Protected Area (PA) network covers 30% of the country (224,075 km^2) and currently falls under the responsibility of the Department of National Parks and Wildlife (DNPW). This includes 20 National Parks covering over 63,587 km^2 (28%) and 34 Game Management Areas (GMA) covering over 160,488 km^2, or 72% of the country's PA network (Nyirenda et al. 2008 and IUCN 1987, as cited in CoP15 Doc. 68 Annex 6b; Zambia Tourism 2017). Most GMAs are inhabited by rural farmers and either surround National Parks or are adjacent to them (CoP15 Doc. 68 Annex 6b). According to the Government of Zambia, "protected areas in Zambia are managed to ensure minimal disturbance and to ensure the maintenance of biodiversity through research and monitoring of key environmental parameters and the provision of security through anti-poaching work by wildlife protection units" (CoP15 Prop. 5).

2. In Zambia, the Ministry of Tourism and Arts has jurisdiction over its National Parks and wildlife (Ministry of Tourism and Arts 2017). The Zambia Wildlife Act No. 12 of 1998, which was the country's primary legislation for wildlife protection, established the Zambia Wildlife Authority (ZAWA) in 1999. ZAWA was responsible for establishing, controlling, and managing Zambia's National Parks and Game Management Areas (GMA), and for the licensing of hunting and control of the processing, sale, import, and export of wild animals and trophies (CoP15 Doc. 68 Annex 6b).

However, in 2015, the Government of Zambia decided to transform the wildlife sector due to operational challenges that ZAWA was facing (ZAWA *in litt.* 2015). As a result, the Zambia Wildlife Authority was disbanded in 2015 and reincorporated as a government department, the Department of National Parks and Wildlife (DNPW). The Government of Zambia also repealed Zambia Wildlife Act No. 12 of 1998, replacing it with Zambia Wildlife Act No. 14 of 2015, which established the Department of National Parks and Wildlife under the Ministry of Tourism and Arts, provided for the appointment of a Director and other officers responsible for National Parks and Wildlife, provided for the transfer of the functions of ZAWA to the Ministry of Tourism and Arts' Department of National Parks and Wildlife and its Director, as well as laid out the regulatory framework and legislation for the management and conservation of wildlife in Zambia (Parliament 2015; ZAWA *in litt.* 2015).

3. The Department of National Parks and Wildlife (DNPW) is responsible for the administration of Zambia Wildlife Act No. 14 of 2015 (Act). According to the Act (Parliament 2015), the functions of DNPW are to:

(a) control, manage, conserve, protect and administer National Parks, Community Partnership Parks, bird and wildlife sanctuaries and Game Management Areas and coordinate activities in these areas;
(b) in partnership with local communities, share the responsibilities of management in Community Partnership Parks and Game Management Areas;
(c) adopt methods to ensure the sustainability, conservation and preservation in the natural state of ecosystems and biological diversity in the National Parks, Community Partnerships Parks, bird and wildlife sanctuaries and Game Management Areas;
(d) encourage the general development of National Parks, Community Partnership Parks, bird and wildlife sanctuaries and Game Management Areas, including the development of facilities and amenities within these areas in accordance with the management plans for those areas;
(e) sensitize and educate the general public on the necessity of wildlife conservation and the importance of wildlife to foster appreciation of the economic and aesthetic value of wildlife as natural assets;
(f) undertake measures to ensure the proper balance between the sustainable use of wildlife and the management of ecosystems in National Parks, Community Partnership Parks, bird and wildlife sanctuaries and Game Management Areas;
(g) enhance the economic and social well-being of local communities in or around Community Partnership Parks and Game Management Areas;
(h) prepare and implement management plans for National Parks, Community Partnership Parks, bird and wildlife sanctuaries and Game Management Areas in consultation with relevant stakeholders;
(i) issue licenses, certificates and permits under this Act;
(j) in partnership with local communities, grant hunting concessions to hunting outfitters and non-consumptive tourism operators in Game Management Areas;
(k) assist and advise the boards in the management of human and natural resources in Game Management Areas and open areas which fall under their jurisdiction;
(l) formulate and advise the Minister on the regulations for the preparation and implementation of general management plans for National Parks, Community Partnership Parks, bird and wildlife sanctuaries and Game Management Areas;
(m) ensure the systematic management of financial, human and natural resources for wildlife conservation so that the abundance and diversity of species is maintained at optimum level;
(n) advise the Minister on the regulations required to conserve, protect and manage wildlife in National Parks, Community Partnership Parks, bird and wildlife sanctuaries, Game Management Areas, open areas and private wildlife estates;
(o) deposit revenue into a fund established by a board and regulate the use of the funds from profits accrued from the revenues payable under this Act in respect of licenses,

certificates and permits issued, hunting concessions granted and services rendered from the use of wildlife within an area of a board as the Minister may prescribe, in consultation with the Director;

(p) regulate trophy hunting operations and non-consumptive tourism operations in Game Management Areas;
(q) grant and regulate tourism block concessions in tourism blocks;
(r) cooperate with persons and organizations with an interest in the activities of the Department and are prepared to assist the Department on a voluntary basis and comply with the requirements set by the Ministry;
(s) regulate private wildlife estates;
(t) carry out commercial activities related to consumptive and non-consumptive tourism; and
(u) carry out any other activities relating to wildlife conservation and management that are necessary to the performance of its functions under this Act.

4. In 2005, Zambia produced a National Strategy for Elephant Management in Zambia, which established the following goal and objectives (CoP15 Doc. 68 Annex 6b):

> *Goal: "Conservation of elephants at population level which promote conservation of biodiversity while providing for sustainable utilization."*
>
> *Objective 1. To mitigate human – elephant conflicts*
> *Objective 2. To reduce poaching levels*
> *Objective 3. To establish and maintain a comprehensive ivory management system*
> *Objective 4. To provide for sustainable elephant utilization*

Management Plans for specific areas (e.g. Lower Zambezi) provide management objectives, activities, and guidelines (CoP15 Doc. 68 Annex 6b).

5. In 2015, ZAWA (*in litt.* 2015) identified the following actions they had implemented since the formulation of the national elephant conservation strategy, in order to achieve effective management of the African elephant:

> *Mitigate human – elephant conflicts*
>
> - ZAWA has developed land use plans in most Game Management Areas and National Parks. A few protected areas are remaining but efforts are being made to ensure that even in these areas Management Zone Plans could be developed so that there is a management guide. This has prevented human encroachment into wildlife areas and hence has reduced human–wildlife conflict.
> - In the event of elephant–human conflict, the area Warden is able to make a decision to control it without having to call headquarters. This has sped up reaction time and prevented damage to property and threat to human life. Camps and offices have been established in elephant conflict hot spots so that there is rapid response to situations. This has also built a positive image about ZAWA.
> - Ivory that is coming from GMAs and open areas is identified and labeled and stored in

the Ivory Strong room. Ivory from different mortalities is also categorized and labeled as such. This helps establish areas of frequent conflicts and management can be alerted about frequency of cases coming through.

- Revenue from the sale of ivory and other by-products obtained from elephant control operations in GMAs and open areas is shared with communities.
- ZAWA has initiated negotiations with the relevant individuals of the state responsible for resettlements so that where practicable, human settlements which have encroached upon or have taken away or altered elephant habitat or blocked elephant movement and migratory routes can be removed or alleviated in a humane and appropriate manner.
- ZAWA has also established a human–wildlife conflict resolution protocol which sets out procedures on how to monitor and document all elephant/human conflicts and effectiveness control measures.

Reduce poaching levels

- Conduct regular and consistent field patrols. Surveillance of protected areas has been increased in all elephant range protected areas: Luangwa, Kafue, Lower Zambezi, and the Sioma Ngwezi areas.
- Developed and implemented proactive law enforcement by using strike force units. This has been effective in the Kafue and Luangwa systems.
- Use specialized law enforcement techniques (ground-air communication, use of Global Positioning System (GPS) units, and night vision binoculars).
- Improved upon intelligence, surveillance, investigation and prosecution skills.
- Developed and implemented forensic techniques in examining elephant specimens to improve handling of court cases to deter potential poachers.
- Improved local community involvement in co-management and benefit sharing.
- Strengthened use of informers.

Provide adequate trained personnel

- Recruited and trained additional law enforcement staff.
- Deployed optimum levels of personnel to maximize area coverage.
- Implemented in-service training to upgrade skills.

Secure and allocate adequate financial resources

- Secured Government financial support. Government has significantly supported ZAWA in obtaining funding so that it can be self-sustaining. It has also supported countrywide aerial surveys of the African elephant so that its status can be understood better.
- Opened an elephant conservation account and attracted funding. ZAWA has been using resources from safari hunting without distinguishing sources from different species. Protection has been on an ecosystem scale so that it is biodiversity that is ultimately protected. However, ZAWA is considering a mechanism of enhancing the protection of certain species, like lion and elephant, because of their status.
- Lobbied and prepared project proposals to cooperating partners for funding. ZAWA has

established an office that is solely for lobbying, writing of project proposals and formation of partnerships with non-governmental organizations (NGOs), private sector, universities and other relevant institutions in order to establish a larger constituency of supporters in conservation.

Establish and maintain a comprehensive ivory management system

- Constructed a modern ivory strong room.
- Procured equipment and facilities for an efficient ivory management system in compliance with CITES.
- Trained personnel in ivory management skills.
- Established and maintained a database.
- Conducted regular auditing of the stock.

Provide a favorable environment for resumption of sustainable elephant hunting

- Monitored elephant populations (including status, trends, sex ratios and age structure).
- Established a database for monitoring internal and external trade controls.
- Complied with CITES, where international trade is permissible.

Strengthen and maintain coordination of elephant conservation in transfrontier areas

- Harmonized land use practices, where possible.
- Participated in the establishment of cross-border/trans-frontier parks.
- Conducted joint elephant research and monitoring.
- Attended consultative meetings through the diplomatic relations, agreements, and protocols.
- Strengthened links with the International Police Organization (INTERPOL) for intelligence information sharing and monitoring of illegal trade between countries, and ensured elephant surveillance throughout its range in the sub region.

6. In 2017, DNPW (*in litt.* 2017) acknowledged further implementation with regard to the National Strategy for Elephant Management in Zambia, including the following actions:

1) A central strong room for ivory stockpiles was built. An Ivory Management System has been put in place – which includes management of ivory stockpiles. The ivory database and comprehensive auditing system have been established. The ivory movement system from source to headquarters has also been put in place. Accountable documents for ivory movement systems have been developed. The ivory stockpile includes identified ivory from the following sources:
    - Natural mortality;
    - Problem animal control;
    - Law enforcement/recovered from poachers;
    - Collected from wildlife estate and/or natural breakage; and
    - Unknown origin, including ivory from other countries,

    as well as coordinates of the source where the mortality or ivory was collected.

2) DNPW monitors collection, registration, weighing and storage of ivory in accordance with the standards recommended by CITES Resolution Conf. 10.9 on *Consideration of proposals for the transfer of African elephant populations from Appendix I to Appendix II.*
3) Monitoring the Illegal Killing of Elephants (MIKE) has been implemented. In addition, the Spatial Monitoring and Reporting Tool (SMART) system is being rolled out across Protected Areas.
4) Coordination of elephant management in Transfrontier Areas - a corridor management strategy has been developed.
5) Implementation of CITES rules and regulations on elephants.
6) Improvement of funding. The Government of Zambia now pays DNPW staff salaries while allowing DNPW to retain all of its revenue, as outlined in the approved annual budget. This increases the amount of resources available for anti-poaching activities.

7. According to DNPW (*in litt.* 2017), although the 2005 National Strategy for Elephant Management in Zambia (Strategy) expired in 2012, the government still implements most of the strategies identified in the plan. However, the Strategy is scheduled for review this year (i.e. 2017). A consultant has since been engaged to facilitate this process, with support from the World Wide Fund for Nature (WWF; known as "World Wildlife Fund" in the United States) and The Nature Conservancy (TNC) (DNPW *in litt.* 2017).

8. In Zambia, the management and sport hunting of elephants is currently regulated by the Zambia Wildlife (Elephant Sport Hunting) Regulations, 2010 (Statutory Instrument No. 107 of 2010); the Zambia Wildlife (International Trade in Endangered Species of Wild Fauna and Flora) Regulations, 2007 (Statutory Instrument No. 61 of 2007), and the relevant provisions of Zambia Wildlife Act No. 14 of 2015 (DNPW *in litt.* 2017). These regulations prescribe rules for sport hunting of elephants; establish the hunting season, minimum trophy size, annual quota, post-hunt reporting, trophy registration, marking, export, and revenue sharing; place restrictions on international trade in endangered species; and provide the mechanism for Zambia's implementation of CITES (Government of Zambia 2007; Government of Zambia 2010; Parliament 2015). However, the Department of National Parks and Wildlife has submitted a revised Statutory Instrument on Elephant Sport Hunting to the Ministry of Justice for finalization, in light of the transformation of wildlife management in Zambia (i.e. the disbanding of ZAWA and creation of DNPW). According to DNPW (*in litt.* 2017), once the draft Statutory Instrument is finalized, the document will be made available to the Service.

9. A Fund is operational in Zambia whereby income from elephant trophy hunting is deposited and then distributed as follows (DNPW *in litt.* 2017):

Animal fees are shared
- 5% of the funds go to the Community Resource Board (CRB) patron (traditional leader or Chief);
- 45% of the funds go to the CRB in the form of community funds; and
- 50% of the funds go to DNPW in the form of conservation funds.

Concession fees are shared

- 5% of the funds go to the CRB patron (traditional leader or Chief);
- 15% of the funds go to the CRB in the form of community funds; and
- 80% of the funds go to DNPW in the form of conservation funds.

According to Zambia's "Guideline on the Use of Community Funds Accrued from Wildlife Management," the community funds are utilized as follows (DNPW *in litt.* 2017):

- 45% of the funds go to wildlife management, including resource protection and escort services;
- 35% of the funds go to community projects such as construction of clinics, roads, schools, and wells; and
- 20% of the funds go to administration of the CRBs.

10. In 2013 and 2014, Zambia decided to close its elephant hunting season because the Zambian government was interested in ascertaining the status of wildlife populations in the Game Management Areas where hunting occurs (ZAWA *pers. comm.* 2015). The government wanted empirical evidence on the population of Zambian animal species, particularly elephants and cats, before awarding the new ten-year hunting concessions to safari operators in the 23 hunting blocks where concessions had expired. To that effect, the government partnered with cooperating partners to undertake a survey in key elephant range areas. According to the Zambian government, results of the survey indicated that it was "safe for Zambia to continue elephant hunting" (ZAWA *in litt.* 2015). As a result, the Government of Zambia decided to reopen elephant sport hunting in 2015 and thus, issued a quota for the 2015 elephant hunting season.

Population Status and Trends

11. The first country-wide population survey of elephants in Zambia was conducted in 2008. In this survey, both stratified sample and total counts (Norton-Griffiths 1978, as cited in CoP15 Doc. 68 Annex 6b) estimated that the elephant population comprised 26,382 ± 4,405 (95% Confidence Limit (CL)) individuals over 166,713 km^2, which is approximately 70% of the protected area network (Simukonda 2009, as cited in CoP15 Doc. 68 Annex 6b). Due to time and funding constraints, the survey did not cover West Lunga (CoP15 Doc. 68 Annex 6b).

12. In 2010, the Panel of Experts noted that according to the African Elephant Database in 1995, 1998, 2002 and 2007 (Said et al. 1995, Barnes et al. 1998, and Blanc et al. 2002, as cited in CoP15 Doc. 68 Annex 6b; Blanc et al. 2007), total population estimates for elephants in Zambia indicated a population that was between a minimum of 16,562 definite elephants and a maximum of 29,229 elephants (the sum of probable, possible and speculative estimates) and did not indicate a clear overall population trend. The Panel pointed out, however, that the 2008 estimate of approximately 26,000 elephants was the highest figure reported to date over this period. Based on this information, the Panel of Experts concluded, at that time, that the African elephant population in Zambia could be considered stable and viable (especially the Luangwa and Kafue subpopulations),

and possibly increasing (CoP15 Doc. 68 Annex 6b).

13. In 2013, a countrywide survey was carried out, but the results were not released (Thouless et al. 2016).

14. In September 2015, an aerial survey of African elephants and other wildlife took place over the core elephant range, constituting four ecosystems in Zambia, as part of the continent-wide Great Elephant Census (GEC). A total area of 84,859 km^2 was sampled at an average intensity of 8% (DNPW 2016b). The four ecosystems where the survey took place were:

- Luangwa Ecosystem (32,819 km^2), comprising the North and South Luangwa, Luambe and Lukusuzi National Parks (NPs); and the Mukungule, Musalangu, Munyamadzi, Lumimba, Lupande and Sandwe Game Management Areas (GMAs);
- Kafue Ecosystem (45,030 km^2), comprising the Kafue NP and the 9 surrounding GMAs except Bbilili;
- Sioma Ngwezi Ecosystem (4,482 km^2), comprising the Sioma Ngwezi NP and the lower West Zambezi GMA; and
- Lower Zambezi Ecosystem (2,528 km^2), which is made up of Lower Zambezi NP, and Chiawa GMA.

Elephant range areas such as Nsumbu and West Lunga NPs, and surrounding GMAs were not included in the survey due to budgetary limitations (DNPW 2016b).

15. The following table summarizes the population estimates derived from the 2015 survey of these four ecosystems in Zambia.

Table 1: Summary of elephant population estimates in Zambia (From: DNPW 2016b)

Area	Population Estimate	95% Range
Kafue National Park	4,813	2,548 – 7,078
Kafue GMAs	1,876	262 – 3,490
Sub-total Kafue Ecosystem	*6,688*	*3,945 – 9,432*
South Luangwa National Park	3,302	2,108 – 4,496
North Luangwa National Park	4,673	2,885 – 6,461
Luambe National Park	54	6 – 131
Lukusuzi National Park	0	-
Luangwa Game Management Areas	5,869	2,761 – 8,976
Sub-total Luangwa Ecosystem	*13,898*	*10,343 – 17,454*
Sioma Ngwezi National Park	*48*	*6 - 126*
Lower Zambezi National Park	973	384 -1,562
Lower Zambezi Game Management Areas	153	16 – 325
Sub-total Lower Zambezi Valley	*1,125*	*512 – 1,739*
Total (Overall Zambia Elephant Range)	**21,760**	**17,237 – 26,283**

Therefore, according to DNPW (2016b), the total African elephant population in Zambia is estimated at 21,760 ± 4,523 individuals. This number is very similar to the total population estimate given by Chase et al. (2016) of 21,759 ± 2,310 individuals, with a 95% Confidence Interval (CI) of 17,232 – 26,286 individuals, as well as the total population estimate provided in the 2016 IUCN African Elephant Status Report (Thouless et al. 2016):

> *The estimated number of elephants in areas surveyed in the last ten years in Zambia is 21,967 ± 4,703 at the time of the last survey for each area. There may be an additional 214 to 314 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 105,461 km^2, which is 62% of the estimated known and possible elephant range.*

According to DNPW (2016b), the current overall population estimate is "similar to the estimate of 26,382 ± 4,405 individuals obtained in the 2008 country-wide survey which statistically was not significantly different (t=2.4, p=0.015)." Thouless et al. (2016) agree that elephant numbers in Zambia "have changed little since the last [African Elephant Status Report] update [in 2006]." The main changes have been a reduction in guesses from isolated small populations such as West Lunga and Bangweulu, and a substantial reduction in the population number in Sioma Ngwezi National Park; however, this makes up a small proportion of the national population (Thouless et al. 2016).

16. Regarding population trends within specific ecosystems, DNPW (2016b) states that it is difficult to obtain strictly comparable data over the years, since not all of the reports indicate the details of the survey area (thus, there may be differences in coverage areas between various surveys). In addition, surveys were conducted in different seasons and the survey methods may vary. However, Table 2 below shows the elephant population estimates where DNPW considered the data to be "comparable."

Table 2. Estimates of Elephant Populations since 2003 (From: DNPW 2016b)

Year	Luangwa Ecosystem	Lower Zambezi NP	Kafue Ecosystem	Sioma Ngwezi NP
2003		1,347		
2004				899
2005		3,417		385
2006			4,273	
2008	12,352		3,455	
2009	18,211			
2011	11,095		3,715	
2013		1,795		133
2015	13,898	973	6,688	48

According to DNPW (2016b) and based on the data indicated above, the 2015 survey results indicate the following:

- Kafue Ecosystem – current estimates for the Kafue ecosystem as a whole are greater than previous estimates (since 2006).
- Luangwa Ecosystem – current estimates for the Luangwa ecosystem as a whole are greater than the previous estimate (in 2011), but comparable to the 2008 population estimate.
- Lower Zambezi NP – current estimate for the Lower Zambezi National Park is less than previous estimates (since 2005), but similar to the 2003 population estimate. DNPW (2016b) states that the system is open to elephant movement across the river from Zimbabwe, so population numbers could potentially change markedly from year to year.
- Sioma Ngwezi NP – current estimate for the Sioma Ngwezi National Park is less than previous estimates (since 2004). DNPW (2016b) states that the trend since 2004 has been "significantly ($p=0.015$) downwards with an exponential decline rate of -0.22."

17. Carcass ratios (the percentage of dead elephants observed during a survey count) are often used as an index of population growth rates, as ratios <8% are typical of stable or growing populations over the previous four years, while higher carcass ratios may indicate mortality in excess of births in the previous four years (Douglas-Hamilton and Burrill 1991). During the 2015 survey, a total of 1,029 elephant carcasses were recorded in Zambia, out of which only 8 were fresh (<1 month old) and 19 were recent carcasses (<1 year old) in the entire combined survey area (DNPW 2016b). The majority of the carcasses observed were older than 1 year. Specifically:

- In the Luangwa Valley Ecosystem overall, a carcass ratio of 1.2% was estimated, which is indicative of an increasing population (DNPW 2016b).
- The Kafue and Lower Zambezi Ecosystems had carcass ratios of 7.02% and 6.33% respectively, which indicate stable elephant populations which are on the "tipping point between population increase and decline" (DNPW 2016b). Most of the elephant carcasses observed in the Kafue and Lower Zambezi Ecosystems were older than one year and no fresh carcasses were seen during the survey, which indicate that the level of poaching or deaths of elephants occurring in these ecosystems prior to the survey was low (DNPW 2016b). However, there may be cause for some concern, given that the carcass ratio for Kafue National Park was 1% in 2008 and increased to 7% in 2015, despite the apparent stability of the population in that area (Thouless et al. 2016).
- A very high carcass ratio was calculated for the Sioma Ngwezi Ecosystem, which increased dramatically from 3% in 2008 to 85.5% in 2015 (DNPW 2016b; Thouless et al. 2016). The survey counted more carcasses than live elephants in both the National Park and GMA, and it was the only place where fresh carcasses were recorded. This ratio indicates either high levels of poaching and/or a seasonally varying population (Thouless et al. 2016), as elephants in Sioma Ngwezi regularly migrate into the neighboring countries of Namibia and Botswana during the dry season (Chase et al. 2013, as cited in Thouless et al. 2016; DNPW 2016b). Most of the carcasses were older than 1 year and the number of total carcasses counted was similar to that estimated in 2013 (DNPW 2016b). Nevertheless, according to DNPW (2016b), the results "suggest a recent or ongoing problem of illegal hunting which has led to a loss of the original population." The survey results conclude

that the population of elephants in Sioma Ngwezi National Park is very unstable and rapidly declining (DNPW 2016b).

- An overall, countrywide carcass ratio of 4.52% observed during the 2015 GEC survey (Chase et al. 2016).
- The fresh-carcass ratio (carcasses <1 month old) observed during the 2015 GEC was 0.1% for Zambia overall (Chase et al. 2016).

18. Therefore, although it is unclear how comparable the data from previous surveys (since 2003) or the methods used in the previous countrywide survey, carried out in 2008, are to the 2015 survey (Thouless et al. 2016), the results show that, overall, the African elephant population in Zambia appears to be stable, but with large differences between different parts of the country (Great Elephant Census 2016). With regards to live elephants, the data suggests that elephant numbers are stable (and may even be increasing) in the two largest elephant ecosystems in Zambia – Luangwa and Kafue, while the population of elephants in the Lower Zambezi appear to be declining. However, in Sioma Ngwezi National Park, on the border with Angola and Namibia, the elephant numbers are declining catastrophically.
The countrywide carcass ratio of 4.52% indicates that the observed deaths are within sustainable levels and that Zambia's overall elephant population appears to be stable, corroborating the live elephant counts. However, with an ecosystem carcass ratio of a staggering 85.5%, more efforts are needed to address the poaching crisis occurring in Sioma Ngwezi.

Sustainability of Offtake

19. In Zambia, African elephant deaths occur as a result of several factors, including: 1) natural mortality; 2) sport hunting; 3) problem animal control (defense of human life and property); and 4) poaching. In order to evaluate whether offtake from sport (trophy) hunting is sustainable, all losses to the African elephant population must be considered.

20. In 2010, the Panel of Experts (CoP15 Doc. 68 Annex 6b) evaluated the sustainability of the total levels of offtake from the elephant population in Zambia. At the time of the Panel's analysis, the overall level of elephant offtake from all legal and illegal causes was estimated to have been a minimum of 208 annually (66 problem animal control (PAC) operations + 47 natural mortalities + 16 unknown + 20 sport-hunting quota + 59 poached), which is equivalent to 0.8% of the 2008 elephant population estimate (26,382 individuals). The Panel noted that even if this value were substantially increased, allowing for undetected natural mortalities and poached elephants, it would still fall within the expected rate of increase of the elephant population (approximately 3 - 5% annually). Therefore, the Panel concluded, at that time, that the overall elephant offtake could be considered as sustainable at the national level, especially given the seemingly stable and possibly increasing overall elephant population since 2002. The Panel of Experts noted that on a regional level, the offtake data indicate a likely decline in the Lower Zambezi, where the 2008 census confirmed both a population decline since 2005 and the highest carcass ratio in the country. The Panel of Experts further noted that levels of illegal activity in the Lower Zambezi needed to be reduced as a first priority (CoP15 Doc. 68 Annex 6b).

21. The Panel of Experts also evaluated the sustainability of legal sport-hunting. An annual CITES national export quota of 20 animals was maintained from 2005, when elephant sport-hunting began in Zambia, through 2010. The CITES export quota was increased to 80 animals for the 2011 and 2012 hunting seasons. The Panel of experts' analysis took into account a potential increase in the sport-hunting quota to 120 animals, as proposed in Zambia's CoP15 proposal. By examining data from the ivory management database, the Panel's analysis also took into account the number of trophy-quality males removed from the population by other causes. In total, the Panel considered a potential total offtake of 131 trophy-quality animals a year, which is equivalent to 0.5% of the 2008 total elephant population estimate. The Panel concluded that this level falls within the range 0.5 - 1% that is widely considered to be the limit to sustainable hunting of trophy-quality males in a healthy elephant population (Martin 1986).

22. The Panel of Experts also assessed whether the hunting of trophy quality males in Zambia was sustainable. The Panel's analysis of ZAWA records showed a steady decline in average tusk weight from 23.1 kilograms (kg) in 2005 to 19.6 kg in 2009. As such, the Panel raised some concern that 2009 trophies are the smallest on record in terms of maximum weight, average weight and length, despite being above (on average) the minimum legal requirements. While the Panel concluded that the legal hunting of trophy quality males is sustainable, it underscored the importance of ongoing monitoring of trophy quality, especially in locations where illegal offtake is relatively high. The Panel also noted that the accumulation of 112 trophy-quality tusks from natural mortality, PAC, and confiscations from 2005 to 2009 represented a large increase from 68 during the years 2000 - 2004 and that this highlights why such offtake should be factored into quota setting (CoP15 Doc. 68 Annex 6b).

Legal Offtake

23. In Zambia, elephant sport hunting begins on May 1st and ends on December 31st (Government of Zambia 2010).

24. In 2015 and 2016, Zambia's annual CITES export quota was set at 160 tusks (80 individuals), which was the same export quota that was set by Zambia for 2011 and 2012. There was no export quota declared to CITES by Zambia for "tusks and other trophies" of African elephants for 2013 and 2014 (CITES 2017), since Zambia decided to temporarily close its elephant hunting season during this time. Each year, the Government of Zambia (2010) also issues a "quota of elephants allocated for sport [hunting that] shall not exceed the [export] quota of elephants notified to the Secretariat of the Convention [on International Trade in Endangered Species of Wild Fauna and Flora] in any one year." This is not an additional quota, it is simply a subset of the annual export quota Zambia declares to CITES each year.

25. Information about the annual quotas, as well as the results of the 2015 and 2016 African elephant hunting seasons in Zambia are shown in Table 3. A total of 15 elephants were harvested between 2015 and 2016, and only male elephants were harvested from these hunts (DNPW *in litt.*

2017).

Table 3. Summary of Elephant Harvest in Zambia 2015-2016 (From: ZAWA *in litt.* 2015; ZAWA *pers. comm.* 2015; DNPW 2016a; DNPW *in litt.* 2017)

Year	Annual Export Quota (individuals)	Government Allocated Hunting Quota (individuals)	Elephants Harvested (individuals)	Location of Harvest (quantity)
2015	80 (160 tusks)	36	3	Lower Lupande (2); Munyamadzi (1)
2016	80 (160 tusks)	30	12	Chiawa (2); Luawata (2); Chikwa (2); Chifunda (1); Nyaminga (1); Nyampala (1); Nyakolwe (1); Nyamvu (1); Mwanya (1)

For 2017, Zambia's export quota has remained at 80 individuals (160 tusks), with the 2017 sport hunting quota set at 30 individuals (DNPW *in litt.* 2017).

26. In Zambia, wildlife is conserved in National Parks, Game Management Areas (GMAs), Open Areas, and Private Wildlife Estates such as ranches. National Parks are exclusively for wildlife habitation, with the exception of tourist lodges and camps, and is exclusively for non-consumptive use. Game Management Areas are multiple use areas buffering the National Parks where humans and wildlife co-exist, while Open Areas are areas for human habitation but wildlife can also exist there. Safari hunting is popular in hunting blocks falling within GMAs, since no consumptive wildlife use is permitted in the National Parks that border GMAs. Resident hunting takes place in both GMAs and Open Areas. Hunting activities also take place in private wildlife estates such as game ranches (ZAWA *in litt.* 2015).

27. According to DNPW (*in litt.* 2017), the open game ranches that participate in elephant sport hunting are located in the Luangwa Valley east of West Petauke GMA. Only hunting blocks located in the Luangwa and Zambezi Valleys are allocated elephants to hunt (DNPW *in litt.* 2017; DNPW 2016a; Protected Planet 2017; Steyn 2014; Kafue River Trust 2017; Anderson et al. 2013; Hunting Report 2013; Wes Hixon's Outdoor Adventures 2016). Each hunting block is allocated only one sport-hunted elephant per year, but may be allowed to hunt a second one if another hunting block within the same ecosystem voluntarily forfeits its elephant quota (this ensures that the total quota is not exceeded) (DNPW *in litt.* 2017). There are no hunting blocks or game ranches located around Siomi Ngwezi NP (where the population has severely declined) that are open to elephant sport hunting.

28. The Government of Zambia sets the sport hunting quota based on the population size, distribution, trophy quality, occurrence of human-elephant conflict, and demand from the community or outfitter. According to DNPW (*in litt.* 2017), the quota "does not exceed 1% of the total elephant population and is always far below the export limit of 80 [individuals]."

29. As mentioned above, trophy quality measurements are used as part of the data set to determine quotas. According to DNPW (*in litt.* 2017), this has been made strict by insisting that hunters only harvest individuals with tusks weighing above 15 kg. Hunters who harvest underweight ivory are penalized (DNPW *in litt.* 2017). ZAWA reported a slight improvement in trophy quality from 17 kg in 2011 to 17.2 kg in 2012 (ZAWA 2015). An analysis performed by DNPW (*in litt.* 2017) of trophy quality of sport-hunted elephants taken in Zambia between 2015 and 2016 showed that the average trophy weight during this period was 19.2 kg. According to DNPW (*in litt.* 2017), "there has not been much change [in trophy weight] in the past 10 years (i.e. 2005 to 2013), which had an average [trophy weight] of 19.21 kg."

30. Elephants killed as a result of conflict between humans and elephants (HEC) are not included in the sport hunting quota allocated by the Government of Zambia each year (ZAWA *in litt.* 2015), because the occurrence of HEC, by and large, does not coincide with hunting by potential clients (DNPW *in litt.* 2017). A summary of human-elephant conflicts in Zambia between 2012 and 2016 is shown in Table 4.

Table 4. Summary of Human-Elephant Conflicts in Zambia (From: ZAWA *in litt.* 2015; DNPW *in litt.* 2017)

Year	Reports of Problem Elephants	Problem Elephants Killed
2012	1,780	25
2013	2,405	20
2014	1,269	27
2015	-	10
2016	-	16

- No information on "Reports of Problem Elephants" was provided by DNPW for 2015 and 2016

Therefore, based on data recorded for the most recent five-year period (2012-2016), it is estimated that an average of 20 elephants are killed annually as a result of conflict with humans.

31. Current records of natural mortalities in Zambia are not available. However, in 2010, based on the accumulation rate of ivory from natural mortalities and breakages known from the ivory management database, the Panel of Experts estimated that on average, the tusks from at least 47 elephants were recovered annually between 2005 and 2009 (plus an additional 16 of unknown origin) (CoP15 Doc. 68 Annex 6b). This figure for annual natural mortality may be outdated; however, given that the current African elephant population estimate is similar to the estimate obtained in 2008 and that, overall, the African elephant population in Zambia appears to be stable, it is the best estimate we have available for Zambia at this time.

32. Based on a sport hunting quota of 30 African elephants, as well as the estimates cited earlier for natural mortality and problem animal control in Zambia, the overall legal offtake of African elephants in Zambia is estimated to be about 113 elephants annually. Considering the current population estimate to be 21,760 elephants, the legal annual offtake would be estimated at about

0.5% of the population. Even if the sport hunting quota allocated by the Government of Zambia matched the export quota of 80 (individuals) declared to CITES, the overall legal offtake of African elephants in Zambia would be estimated to be about 163 elephants annually. Given the current population estimate, the legal annual offtake would then be estimated at about 0.8% of the population. In both scenarios, the figure is less than the annual population growth rate of 3 - 5% and this, in itself would be considered sustainable; however, sustainability is measured against total offtake, including illegal offtake, discussed below.

Illegal Offtake

33. Updates concerning the CITES programs known as Monitoring the Illegal Killing of Elephants (MIKE) and the Elephant Trade Information System (ETIS) were presented at the 17th Meeting of the Conference of the Parties to CITES (CoP17; Johannesburg, September-October 2016).

The ETIS Report presented at CoP17, stated the following (CoP17 Doc. 57.6 (Rev. 1)), with regard to the group of countries of which Zambia was included:

- Falling in the middle in terms of the mean number of seizures, and showing a low mean weight value, this grouping is not particularly noteworthy. Further, none of the seizures have involved large ivory consignments of 800 kg or more so there is little to suggest active organized criminal activity. Assessing governance, the mean rule of law measure shows a negative value which could signal corruption problems, but the very high law enforcement effort ratio seems to indicate generally good performance where ivory trade is concerned. Finally, with a very low market score, this group of countries does not appear to play an obvious problematic role at the retail level.
- In 2014, Zambia was one of only twelve Parties that submitted ivory stock reports with inventory figures. Further, only Germany and Zambia provided information on privately-owned stocks.

34. The CITES MIKE Programme is a site-based system to monitor elephant population trends and the illegal killing of elephants. The MIKE Programme operates in some 60 sites in 30 range states of the African elephant and in 27 sites in 13 range states of the Asian elephant. In Zambia, there is one MIKE site – South Luangwa National Park.

Below is a summary of the carcasses reported to the MIKE Programme between 2002 and 2015 from the one MIKE site (South Luangwa) in Zambia, as well as the Proportion of Illegally Killed Elephants (PIKE) values calculated for each year. A PIKE level of 0.5 or higher translates to a level of illegal annual offtake that is likely to be higher than the annual natural birth rate, indicating that the elephant populations are very likely to be in net decline (CoP16 Doc. 53.1).

Table 5: Carcasses reported to the MIKE Programme from South Luangwa MIKE Site (Zambia): 2002 - 2015 (From: CITES MIKE Programme 2017)

Year	Total number of elephant carcasses	Number of illegally killed elephant carcasses encountered	PIKE Value
2002	4	1	0.25
2003	8	5	0.63
2004	23	15	0.65
2005	4	1	0.25
2006	35	27	0.77
2007	11	0	0
2008	8	7	0.88
2009	14	6	0.43
2010	49	26	0.53
2011	22	14	0.64
2012	34	14	0.41
2013	21	15	0.71
2014	77	41	0.53
2015	83	46	0.55

35. Overall, between 2012 and 2014, 381 elephants were killed illegally across the country (110, 135 and 136 elephants were poached in the years 2012, 2013 and 2014 respectively) (ZAWA *in litt.* 2015). In 2015, 168 elephants were reported to have been poached, with 155 elephants illegally killed in 2016 (DNPW *in litt.* 2017). Therefore, based on data recorded for the most recent five-year period (2012-2016), it is estimated that an average of 141 elephants are illegally killed (poached) each year. Moreover, according to DNPW (*in litt.* 2017), a total of 50 fresh and 22 recent carcasses were recorded in National Parks and GMAs across the country in recent patrols.

36. DNPW (*in litt.* 2017) has reported that poaching of elephants has been recorded in Lower Zambezi, Sioma, South Luangwa, Lukusuzi and Kafue National Parks, and in Game Management Areas such as Rufunsa, Chiawa, West Petauke and Mulobezi.

37. To address the declines in elephant numbers and the ongoing poaching crisis in some areas, especially in Sioma Ngwezi, DNPW is working with partners that include the Security agencies and NGOs to improve anti-poaching efforts, especially in Lower Zambezi and Sioma Ngwezi National Parks. For example, with assistance from WWF and the Peace Parks Foundation (PPF), the Government of Zambia has built new housing for rangers and recruited an additional 30 rangers in Sioma Ngwezi National Park. The Government of Zambia has also approved projects by WWF and PPF under the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA) that will see increased funding to support law enforcement activities in Sioma Ngwezi National Park (DNPW *in litt.* 2017).

38. According to DNPW (*in litt.* 2017), the Government of Zambia is committed to combating poaching and to ensure that positive population growth is recorded in all wildlife protected areas. The Government of Zambia, through DNPW, is in the process of starting to revise its elephant conservation strategy with a special focus on those areas that recorded declines in elephant numbers, as well as combating elephant poaching and illegal ivory trade (DNPW *in litt.* 2017). The plan will also look at how to galvanize private sector and NGO participation in elephant protection, especially in Lower Zambezi and Sioma Ngwezi National Parks (DNPW *in litt.* 2017). The elephant conservation strategy is being revised with technical assistance from WWF and TNC in a participatory manner with input from stakeholders that include photographic operators, outfitters, conservation NGOs, the African Elephant Specialist Group, experts, academia, community and other government departments (DNPW *in litt.* 2017).

39. In addition, the Government of Zambia is addressing issues of poaching through other mechanisms. For example, a presidential order was given to all government security agencies to participate in combating wildlife crimes in Zambia (DNPW *in litt.* 2017). To this effect a taskforce was formed which includes the Zambia Army, Air Force, National Service, Police, Intelligence, and the Department of National Parks and Wildlife. DNPW (*in litt.* 2017) states that the level of effort from the Government of Zambia to curb poaching has increased with the issuance of the presidential order, which has contributed to an increase in the number of man-days spent on patrol and the number of arrests of offenders.

40. In 2013 and 2014, law enforcement efforts resulted in the encounter and subsequent arrests of 1,671 and 1,912 suspects from the field respectively (ZAWA 2015). The increase in the number of arrests thus resulted in increased forfeitures and recoveries of items used for illegal purposes. In 2014, 580 firearms were recovered; this is the main weapon used against elephants by poachers in Zambia (ZAWA 2015). In addition, 135 pieces of ivory were recovered in 2013, while 226 pieces of ivory were recovered in 2014 (ZAWA 2015). Table 6 summarizes the prosecution data reported for 2013 and 2014.

Table 6: Prosecution of Offenders for 2013 and 2014 (From: ZAWA 2015)

Description	2013	2014
Number of persons indicted	1,323	1,607
Number convicted	1,338	1,316
Number of individuals fined	465	749
Amount realized from fines imposed on convicts in Zambia (K=Kwacha)	K766,207	K1,053,826

41. According to DNPW (*in litt.* 2017), the Government of Zambia currently allocates about K40million (approximately USD4.4 million) to DNPW annually, of which 75% is used for anti-poaching.

Sustainability of All Offtake

42. In order to evaluate whether offtake from trophy hunting is sustainable, all losses to the African elephant population, including illegal offtake, must be considered. Given the data presented above, the overall level of elephant offtake from all legal and illegal causes is currently estimated to be about 254 elephants annually (20 problem animal control operations + 47 natural mortalities + 16 unknown + 30 sport hunting quota + 141 illegally killed (poached)), which is equivalent to 1% of the current elephant population estimate (21,760 individuals). Just as the Panel of Experts noted in 2010, even if this value were substantially increased, allowing for undetected natural mortalities and poached elephants, or an increase in the sport hunting quota, it would still fall within the expected rate of increase of the elephant population (approximately 3 - 5% annually). Therefore, at this time, the overall elephant offtake can be considered as sustainable at the national level, especially given that the overall African elephant population in Zambia appears to have been stable since at least 2008.

Conclusion

43. Based on the information currently available and data the presented above, we believe that the status of the African elephant population in Zambia and the management efforts of the Government of Zambia are adequate to ensure that the sport hunting of African elephants does not adversely affect the status of the species in Zambia.

44. Overall, the current African elephant population in Zambia appears to be stable, with little change in elephant numbers in Zambia since 2006. However, the 2015 census highlighted some large differences between different parts of the country. Although the data suggests that elephant numbers are stable (and may even be increasing) in the two largest elephant ecosystems in Zambia – Luangwa and Kafue, the elephant numbers in Sioma Ngwezi National Park, which is a small portion (2%) of the national population, are declining catastrophically. The countrywide carcass ratio of 4.52% indicates that the observed deaths are within sustainable levels and that Zambia's overall elephant population appears to be stable, corroborating the live elephant counts. However, with an ecosystem carcass ratio of a staggering 85.5%, more efforts are needed to address the poaching crisis occurring in Sioma Ngwezi.

45. Since the formulation of the National Strategy for Elephant Management in Zambia in 2005, the Government of Zambia has implemented many of the actions identified in the Strategy in order to achieve effective management of the African elephant. Although the Strategy officially expired in 2012, the government still implements most of the strategies identified in the plan. The Strategy is scheduled for review this year (i.e. 2017).

46. We commend Zambia for the transformation of the wildlife sector (with the creation of DNPW) due to the operational and financial challenges that ZAWA was facing, and for stabilizing and improving funding to the wildlife program. The Government of Zambia now pays DNPW staff salaries while allowing DNPW to retain all of its revenue, as outlined in the approved annual

budget. This increases the amount of resources available for anti-poaching activities.

47. Furthermore, we applaud Zambia for taking the step to temporarily suspend the elephant hunting season in 2013 and 2014, on their own, in order to ascertain the status of wildlife populations in the Game Management Areas where hunting occurs. The government wanted empirical evidence on the population of Zambian animal species, particularly elephants and cats, before awarding the new ten-year hunting concessions to safari operators in the 23 hunting blocks where concessions had expired. The Government of Zambia wanted to ensure that it was safe for the country to continue the sport hunting of elephants.

48. We have evaluated whether offtake from trophy hunting is sustainable, given all losses to the African elephant population in Zambia, including illegal offtake. Given the data presented above, the overall level of elephant offtake from all legal and illegal causes is currently estimated to be about 254 elephants annually, which is equivalent to 1% of the current elephant population estimate. Just as the Panel of Experts noted in 2010, even if this value were substantially increased, allowing for undetected natural mortalities and poached elephants, or an increase in the sport hunting quota, it would still fall within the expected annual population growth rate of 3 – 5 %. Therefore, at this time, the overall elephant offtake can be considered as sustainable at the national level, especially given that the overall African elephant population in Zambia appears to have been stable since at least 2008.

49. While poaching has had less of an impact on the overall elephant population in Zambia (Thouless et al. 2016), southwest Zambian elephant populations (i.e. Sioma Ngwezi) continue to experience losses due to poaching. Thus, we are encouraged by the Government of Zambia's continued work and commitment to combating poaching and to ensure that positive population growth is recorded in all wildlife protected areas. The Government of Zambia, through DNPW, is in the process of starting to revise its elephant conservation strategy with a special focus on those areas that recorded declines in elephant numbers, as well as combating elephant poaching and illegal ivory trade.

50. Therefore, we are able, at this time, to find that the importation of sport-hunted trophies of African elephants taken in Zambia in the calendar years 2016 and 2017 will be for purposes that are not detrimental to the survival of the species. However, we do have some concerns, noted below, that we would like to see Zambia address before we make our finding for the 2018 hunting season:

CONCERNS:

1) The Department of National Parks and Wildlife have notified us that they have submitted a revised Statutory Instrument on Elephant Sport Hunting to the Ministry of Justice for finalization, in light of the transformation of wildlife management in Zambia. DNPW has indicated that once the draft Statutory Instrument is finalized, the document will be made available to the Service. We await receipt of this revised Statutory Instrument on Elephant Sport Hunting from Zambia.

2) The 2005 National Strategy for Elephant Management in Zambia officially expired in 2012. Although the Government of Zambia still implements most of the strategies identified in the plan, the Strategy is scheduled for review this year. We strongly encourage Zambia to complete the review process and develop a new or revised Strategy. We would also like to request that Zambia provide us with a copy of the new or revised National Strategy for Elephant Management or Elephant Management Plan, once it is developed and finalized.

3) Given the possible decline in the Lower Zambezi elephant population and the drastic decline in the Sioma Ngwezi NP population (and an ecosystem carcass ratio of 85.5%), as well as a carcass ratio for Kafue National Park that increased from 1% in 2008 to 7% in 2015, we believe more effort is needed in these areas to address poaching, particularly in Sioma Ngwezi. Although we recognize that Zambia has greatly improved its anti-poaching activities, the levels of illegal activity need to be reduced as a first priority, and we will continue to monitor this situation.

4) In 2010, the Panel of Experts' analysis showed a steady decline in average tusk weight from 23.1 kg in 2005 to 19.6 kg in 2009. As such, the Panel raised some concern that the 2009 trophies were the smallest on record in terms of maximum weight, average weight and length, despite being above (on average) the minimum legal requirements. Then, in 2011 and 2012, the average trophy weight declined even further to 17 kg and 17.2 kg respectively. However, an analysis of trophy quality showed that the average trophy weight increased to 19.2 kg between 2015 and 2016. Although the further decline in trophy quality in 2011 and 2012 was very concerning, the increase in trophy quality in 2015 and 2016 is very promising and brings the current trophy quality level close to that of 2009. We would like to see the average tusk weight continue to increase and remain at a high level, and therefore, we encourage Zambia to continue to monitor trophy quality, especially in locations where illegal offtake is relatively high.

References

Anderson, Neil E., Joseph Mubanga, Eric M. Fèvre, Kim Picozzi, Mark C. Eisler, Robert Thomas, and Susan C. Welburn. 2013. Study area showing the national parks and game management areas. *Figshare*. Available online at: https://doi.org/10.1371/journal.pntd.0001211.g001.

Blanc, J.J., R.F.W. Barnes, G.C. Craig, H.T. Dublin, C.R. Thouless, I. Douglas-Hamilton, and J.A. Hart. 2007. *African Elephant Status Report 2007: An Update from the African Elephant Database*. Occasional Paper Series of the IUCN Species Survival Commission, No. 33. IUCN//SSC African Elephant Specialist Group. IUCN, Gland, Switzerland. Available online at: https://portals.iucn.org/library/efiles/documents/SSC-OP-033.pdf.

Chase, Michael J., Scott Schlossberg, Curtice R. Griffin, Philippe J.C. Bouché, Sintayehu W. Djene, Paul W. Elkan, Sam Ferreira, Falk Grossman, Edward Mtarima Kohi, Kelly Landedn, Patrick Omondi, Alexis Peltier, S.A. Jeanetta Selier, and Robert Sutcliffe. 2016. Continent-

wide survey reveals massive decline in African savannah elephants. *PeerJ* 4:e2354. Available online at: https://peerj.com/articles/2354/.

CITES. 2017. The CITES Export Quotas. Available online at: https://www.cites.org/eng/resources/quotas/index.php.

CITES MIKE Programme. 2017. Carcasses reported to MIKE by site and year. Available online at: https://www.cites.org/eng/prog/mike/data_and_reports.

CoP15 Doc. 68 Annex 6b. 2010. Report of the Panel of Experts regarding the Implications of the Adoption of the proposal submitted by Zambia. Available online at: https://www.cites.org/sites/default/files/eng/cop/15/doc/E15-68A06b_.pdf

CoP15 Prop. 5. 2010. Transfer the population of African elephant (*Loxodonta africana*) of Zambia from Appendix I to Appendix II with an annotation. Available online at: http://www.cites.org/eng/cop/15/prop/E-15-Prop-05.pdf.

CoP16 Doc. 53.1. 2012. Monitoring the Illegal Killing of Elephants (MIKE). Sixteenth meeting of the Conference of the Parties, Bangkok (Thailand), 3-14 March 2013, 15 pp. Available online at: http://www.cites.org/sites/default/files/eng/cop/16/doc/E-CoP16-53-01.pdf.

CoP17 Doc 57.6 (Rev. 1). 2016. Report on the Elephant Trade Information System (ETIS). Seventeenth meeting of the Conference of the Parties, Johannesburg (South Africa), 24 September 0 5 October 2016, 118 pp. Available online at: https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-57-06-R1.pdf.

DNPW. 2016a. 2016 Non Resident Hunting Quota.

DNPW. 2016b. Report on the 2015 Aerial Survey in Zambia. Volume 1: Population Estimates of African Elephants (*Loxodonta africana*) in Zambia. Chilanga, Zambia. Available online at: https://www.nature.org/ourinitiatives/regions/africa/zambia-great-elephant-census-report.pdf.

DNPW. 2017. *in litt*. Questions from USFWS on Elephant NDF.

Douglas-Hamilton, I. and A. Burrill. 1991. Using elephant carcass ratios to determine population trends. *African Wildlife: Research and Management*: 98-105. Available online at: https://cmsdata.iucn.org/downloads/laebra1991_005_1.pdf.

Government of Zambia. 2007. The Zambia Wildlife (International trade in Endangered Species of Wild Fauna and Flora) Regulations, 2007. Available online at: http://extwprlegs1.fao.org/docs/pdf/zam133726.pdf.

Government of Zambia. 2010. The Zambia Wildlife (Elephant Sport Hunting) Regulations, 2010.

Available online at: http://extwprlegs1.fao.org/docs/pdf/zam133717.pdf.

Great Elephant Census. 2016. Zambia Census Results Announced: Luangwa and Kafue Stable, Lower Zambezi Declines and Sioma Ngwezi Declines Catastrophically. Available online at: http://www.greatelephantcensus.com/blog/2016/3/2/zambia-census-announced-luangwa-and-kafue-stable-lower-zambezi-and-sioma-ngwezi-see-decline.

Hunting Report. 2013. Hunting on Unfenced Private Reserves Opens in Zambia. Available online at: http://www.huntingreport.com/hunting_article_details.cfm?id=3118.

Kafue River Trust. 2017. Protected Areas. Available online at: http://www.kafuerivertrust.org/protected-areas/.

Martin, R.B. 1986. *Establishment of African ivory export quotas and associated control procedures*. Report to the CITES Secretariat.

Ministry of Tourism and Arts. 2017. About the Ministry. Available online at: http://www.mota.gov.zm/index.php/features.

Parliament. 2015. The Zambia Wildlife Act, 2015. Available online at: http://www.parliament.gov.zm/sites/default/files/documents/acts/The%20%20Zambia%20Wildlife%20Act,%202015.pdf.

Protected Planet. 2017. Protected Areas: Zambia. Available online at : https://www.protectedplanet.net/search?country=Zambia&iucn_category=VI&main=country.

Steyn, Paul. 2014. Zambia's Greatest Wilderness: The Lower Zambezi National Park. *National Geographic*. February 11, 2014. Available online at: https://voices.nationalgeographic.org/2014/02/11/zambias-great-wilderness-the-lower-zambezi-national-park/.

Thouless, C.R., H.T. Dublin, J.J. Blanc, D.P.Skinner, T.E. Daniel, R.D. Taylor, F. Maisels, H.L. Frederick, and P. Bouché. 2016. *African Elephant Status Report 2016: An update from the African Elephant Database*. IUCN/SSC African Elephant Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK. Available online at: https://www.iucn.org/ssc-groups/mammals/african-elephant-specialist-group.

Wes Hixon's Outdoor Adventures. 2016. Zambia, Africa. Available online at: http://weshixon.com/trip/zambia-africa/.

Zambia Tourism. 2017. National Parks in Zambia. Available online at: http://www.zambiatourism.com/destinations/national-parks.

ZAWA. 2015. Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia. Version 1.1. July 2015.

ZAWA. 2015. *in litt*. Response to USFWS/EU Questions on Zambian Elephant Hunting 2015.

ZAWA. 2015. *pers. com.* Letter to United States Department of Interior, Fish and Wildlife Service regarding Sport Hunting of African Elephant in Zambia. April 28, 2015.

FORM 3-201A (1/97)

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

IMPORT PERMIT

1. Original Permit/Certificate No.
17US03370C/9

2. Valid
11/12/2018

3. Permittee (name and address, country)
ROBER(b) IXSO(b)
(b) (6)
CARROLLTON, TX(b) (6)
U.S.A.

4. Consignor (name and address, country)
MICHAEL W. BORMAN
BANGWEULU TAXIDERMY LTD
41421K CHIFWEMA ROAD
NEW KASAMA, LUSAKA PROVINCE
LUSAKA
ZAMBIA

5. Special Conditions

ALL APPLICABLE FOREIGN, LOCAL, STATE, OR OTHER FEDERAL LAWS, INCLUDING THOSE REQUIRING PERMITS, MUST BE OBSERVED.

SPECIMEN MAY NOT BE SOLD OR TRANSFERRED FOR ANY FINANCIAL REMUNERATION.

MUST IMPORT THROUGH A DESIGNATED PORT LISTED IN CONDITION 10.

U.S. THREATENED SPECIES: TUSKS MUST BE MARKED AS PER [50 CFR 17.40(e)]. IN ACCORDANCE WITH THE AFRICAN ELEPHANT CONSERVATION ACT, RAW IVORY, INCLUDING SPORT-HUNTED TROPHIES THAT ARE WHOLLY OR PARTIALLY IVORY, MAY NOT BE RE-EXPORTED FROM THE U.S.

TROPHY MUST HAVE BEEN TAKEN DURING 2016 HUNTING SEASON.

5a. Purpose of Transaction
H

6. U.S. Management Authority
Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

U.S. CITES Management Authority

-May not be used for commercial purposes. For live animals, only valid if the transport conditions comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport, with IATA Live Animals Regulations.

11/13/2017
Issuing Date

United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

7/8. Common Name and Scientific name (genus and species) of Animal or Plant	9. Description of Part or Derivative, including identifying marks or numbers (age/sex if live)	10. Appendix No. and Source
A. Common Name AFRICAN ELEPHANT Scientific Name LOXODONTA AFRICANA	9. IMPORT PERSONAL SPORT HUNTED TROPHY (shipment may contain bones, hair, hide, tusks, teeth, or any taxidermied part, as well as worked, manufactured, or handicraft items such as curios, jewelry, or other utilitarian items.)	10. 1 W 11. Quantity (including units) 1 NO 12. Country of Origin ZAMBIA
B. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
C. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
D. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
E. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin

574680

AUG 19 2016

David (b) (6) Smith

(b) (6)

To whom it may concern:

Attached is a permit application for a tuskless elephant I harvested in Zimbabwe on 08/05/2013. My trophies where in the process to be shipped, when I became aware of the application form 3-200-19 was required to import elephant. Could you assist or how I can help in expediting the permitting processing time. Please contact me by the above e-mail or phone. All help would be greatly appreciated and thanks for your time efforts in this matter.

Best Regards,

(b) (6)

David (b) Smith

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

AUG 19 2016 LB

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Smith	David	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
cell (b) (6)	Home		(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Anchorage	Alaska	(b) (6)		United States

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country
Anchorage	Alaska	(b) (6)		United States

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee.** Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief, and that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

(b) (6) Smith — 08-11-2016

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit**. If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: 0 (Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity: 1 (Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: 0 (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild: N/A

   b. Date wildlife is to be hunted:
   N/A

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks). N/A

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: Zimbabwe - Sengwa hunting concession on the edge of the Zambezi Valley.
   b. Date wildlife was hunted:
      08/05/2013
   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks): (1) Trunk - (2) outer ears - (6) panels, leather tan. 4 Feet/Leg shape only - tail, wall hanging brass trim.

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:
      Maple Freight 4 Josiah Chinamano Road, Belmont Bulawayo, Zimbabwe
4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

   Name: Business Maple Freight
   Name: Address: Maple Freight
   Address: 4 Josiah Chinamano Road, Belmont
   City: Bulawayo
   State/Province: Bulawayo
   Country, Postal Code: Zimbabwe

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.
   Tuskless elephant

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature: N/A Date: _____

7. **If you are the hunter applying to import your own trophy,** please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: David (b)(6) Smith Date: 08-11-2016

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

Anchorage, Alaska
(b) (6)
Anchorage, Alaska 99502

9. Name and address where you wish the permit to be mailed, **if** different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

David (b)(6) Smith
(b) (6)
Anchorage, Alaska (b) (6)

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

David F. Smith (b) (6)
(b) (6)

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

Zimbabwe Parks and Wildlife Management Authority

CITES PERMIT/CERTIFICATE ZW/4781/2016
NP CITES FORM 2

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Permit/Certificate No ZW/4781/2016

- [X] Export
- [ ] Re-Export
- [ ] Import
- [ ] Other

Original

2. Valid Until: 13-12-2016

3. Importer (name and address):
MR DAVID (b) (6) SMITH
(b) (6)
ANCHORAGE
ALASKA (b) (6)
USA

4. Exporter (name, address and country Zimbabwe
TROPHY CONSULTANTS INTERNATIONAL
4 JOSIAH CHINAMANO ROAD
BELMONT, BULAWAYO
ZIMBABWE

3a. Country Of Import: United States Of America

5. Special Conditions
For live animals this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations

5a. Purpose of transaction (see reverse): H

5b. Security stamp no. 1794878

6. Name, address, stamp and country of Management Authority

Zimbabwe Parks and Wildlife
Management Authority
P.O. Box CY 140
Causeway
Harare, Zimbabwe

6a. Declaration by Exporter or Agent
I hereby declare that I am aware of the provision of the Convention contained in the *Statutory Instrument 76 of 1998*, for the purpose of Exporting / Re- exporting / Importing the Wildlife listed below.
The total value of this consignment is:
$US .....Signature of applicant.....

7. Scientific Name	8. Common Name	9. Description of specimens including no. (age/sex if live)	10. Appendix and Source (see reverse)	11. Quantity (Including unit)	11a. Total exported quota	11b. Tag Number	11c. Mark
Taurotragus oryx	*Eland*	*skulls :*	*NE W*	*1 no*	*n/a*	*n a*	*n/a*
Loxodonta africana	*Elephant*	*Trunk : leather tan*	*II W*	*1 no*	*n/a*	*LOXAFRZW 005380 2014*	*n/a*
Loxodonta africana	*Elephant*	*tails : wallhanging brass trim*	*II W*	*1 no*	*n/a*	*LOXAFRZW 005375 2014*	*n/a*
Loxodonta africana	*Elephant*	*panels : leather tan*	*II W*	*6 no*	*n/a*	*LOXAFRZW 005383-005388 2014*	*n/a*
Loxodonta africana	*Elephant*	*foot : shape only*	*II W*	*4 no*	*n/a*	*LOXAFRZW 005376-005379 2014*	*n/a*
Loxodonta africana	*Elephant*	*outer ears : leather tan*	*II W*	*2 no*	*n/a*	*LOXAFRZW 005381-005382 2014*	*n/a*
Phacochoerus aethiopicus	*Warthog*	*backskin : leather tan*	*NE W*	*2 no*	*n/a*	*n a*	*n/a*

12. Country of origin:	Permit No	Date of Issue	12a. Country of last re-export	Certificate No	Date:

13. This permit is issued by

Place: Bulawayo Date: 13-06-2016 Security stamp, signature and official seal:

PERMITS DIVISION ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY CITES REGION BULAWAYO TEL FAX 09 - 883386

14. Exchange Control Information
CD1 number...../or
CD1 not applicable to export (delete)

(Date stamp and signature of authorized official):.....
Note: Permit/certificate invalid unless this section is completed.

15. Date Stamp of Zimbabwe Revenue Authority Inspector

16. Export endorsement:

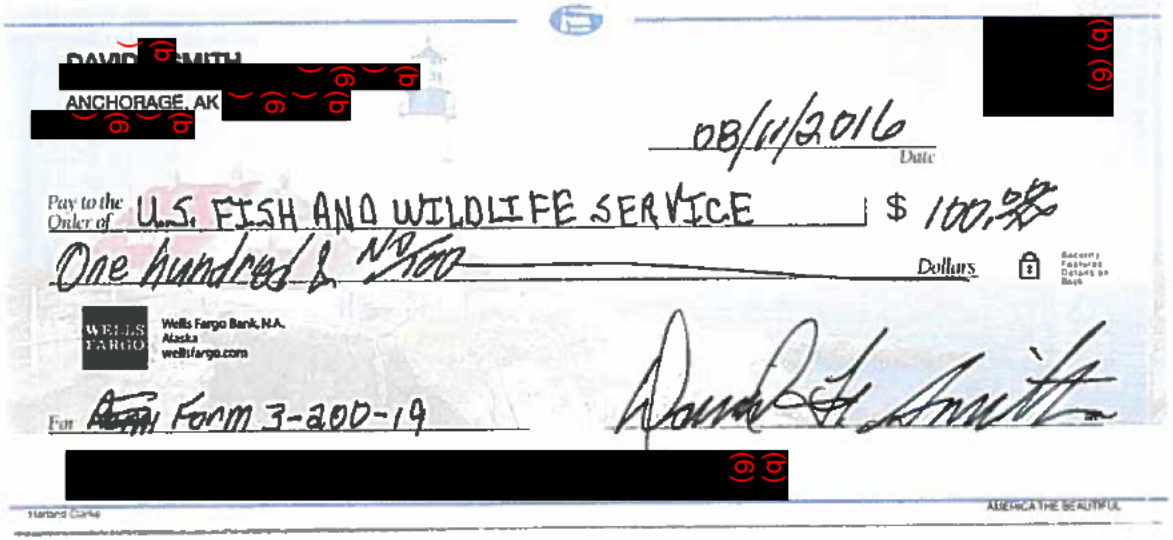
Specimens	Quantity	Specimens	Quantity

17. Bill of landing/Air waybill number:

Port of export Date Signature

RCVD AUG 19 2016

[redacted]



[redacted]

ANCHORAGE, AK [redacted]

[redacted]

08/11/2016
Date

Pay to the Order of U.S. FISH AND WILDLIFE SERVICE $ 100.00

One hundred & NO/100 Dollars

Security Features Details on Back

WELLS FARGO
Wells Fargo Bank, N.A.
Alaska
wellsfargo.com

For Form 3-200-19

[redacted]

Harland Clarke

AMERICA THE BEAUTIFUL

OMB Control #1018-0093 Expires: 05/31/2017

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA04658C-0

Effective: 10/31/2016 Expires: 10/30/2017

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
DAVID (b) (6) **SMITH**
(b) (6)
ANCHORAGE, AK (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one tuskless African elephant (Loxodonta africana), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. Trophy must have been taken during the 2013 hunting season.

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export issued by the Management Authority of Zimbabwe.

RCVD AUG 22 2016

LB

NOTICE OF REPRESENTATION

This is a notice to the U.S. Fish and Wildlife Service that I have named, constituted and appointed John J. Jackson, III, Conservation Force, 3240 S. I-10 Service Rd. W., Suite 200, Metairie, Louisiana, 70001, telephone (504) 837-1233, FAX (504) 837-1145, jjw-no@att.net as my attorney and legal representative for all matters concerning my elephant import permit application.

This authority is all inclusive, including, but not limited to permit filing, permit supplementation, reconsideration, administrative appeal and request for time delays or extensions.

I also request that John J. Jackson, III be copied with all correspondence, acknowledgements, notices and decisions concerning my permit during its processing and during any and all steps in its administrative reconsideration or appeal.

(b) (6)

THOMAS (b) (6) WHALEY (b) (6)

6/9/2016

DATE

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

RCVD AUG 22 2016 LB

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
WHALEY	THOMAS	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)	
(b) (6)			

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)		
2. Tax identification no.	3. Description of business, agency, Tribe, or institution		
4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix
5. Principal officer title	6. Primary contact name		
7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
MARSHALL	TX	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country
MARSHALL	TX	(b) (6)		USA

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Thom(b)(6) Whaley (b) (6) 07/21/2016

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
  (i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
  (ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
  (iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: AMANDUNUMELA-LUPANE AREA-MATABELELAND NORTH-ZIMBABWE-AFRICA APRIL 3, 2014

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

      SKIN, TUSKS, FEET, EARS, TAIL

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

      8 RIVONIA DRIVE, MOUNT PLEASANT HARARE-ZIMBABWE

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business	CHIPITANI SAFARI COMPANY
Name: Address:	8 RIVONIA DRIVE
Address:	MOUNT PLEASANT
City:	HARARE
State/Province:	ZIMBABWE
Country, Postal Code:	

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

* PLEASE SEE THE INFORMATION SUBMITTED BY CONSERVATION FORCE, the ZIMBABWE PARKS AND Wildlife MANAGEMENT Authority, AND OTHERS.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: [redacted] Date: 07/22/2016

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

[redacted] MARSHALL, TX [redacted]

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☑ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

THOMAS [redacted] WHALEY [redacted]
CONSERVATION FORCE 504-837-1233 CF@conservationforce.org

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

RCVD AUG 22 2016

Vargas, Darcy <darcy_vargas@fws.gov>

PRT 04847C -- elephant import permit application

Vargas, Darcy <darcy_vargas@fws.gov> Tue, Dec 20, 2016 at 2:47 PM
To: "Regina A. Lennox" <regina.lennox@conservationforce.org>

Good afternoon,

Ref: 04847C

The referenced was transferred to my attention for an additional review on October 24, 2016. Based on the circumstances explained in your referenced application, additional reviews are required. I hope to have a status update sometime in January, but unfortunately, I can not guarantee any time frames.

Respectfully,

Darcy Vargas
Biologist
US Fish and Wildlife Service
MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
www.fws.gov
www.cites.org

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[Quoted text hidden]

Vargas, Darcy <darcy_vargas@fws.gov>

PRT 04847C -- elephant import permit application

Regina A. Lennox <regina.lennox@conservationforce.org> Tue, Dec 20, 2016 at 11:14 AM
To: darcy_vargas@fws.gov

Dear Darcy,
Happy Holidays! I am writing to ask about the status of the import permit application for Thomas Whaley, PRT 04847C. He hunted an elephant in Zimbabwe on April 3, 2014, so just before the import suspension. His application was received by the FWS on 08/22/2016. We were told it has been assigned to you. Since there was a positive enhancement finding in place for Zim at that time, we are hoping the permit will issue soon, but if you need more information, please let me know.
Thanks very much,
Regina

Regina A. Lennox
Conservation Force
3240 S I-10 Service Road W, Suite 200
Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

Vargas, Darcy <darcy_vargas@fws.gov>

PRT 04847C -- elephant import permit application

Vargas, Darcy <darcy_vargas@fws.gov> Tue, Jan 31, 2017 at 11:11 AM
To: "Regina A. Lennox" <regina.lennox@conservationforce.org>
Cc: "Vannorman, Tim" <tim_vannorman@fws.gov>

Good morning,

Ref: 04847C

Your referenced application has been reviewed in detail. However, the final stages of review and determination have not been completed yet. Although I can not guarantee a time frame, I anticipate that we may have a status update within a month or less.

Respectfully,

Darcy Vargas
Biologist
US Fish and Wildlife Service
MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
www.fws.gov
www.cites.org

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If you'd like to personalize your own sentence w/ hyperlink, here's the full link: http://visitor.r20.constantcontact.com/manage/optin?v=0016mDWXmIC-eCNJ4wf_4IA3WaTa8IjzcuPb8jWWJtQIDE8kRHO2RaQ17v2A6OUJgeCSOjzrh7ruV2Nz76Ues6ALGcio28DZ6UAnX5e55gpAO4%3D

[Quoted text hidden]

Vargas, Darcy <darcy_vargas@fws.gov>

PRT 04847C -- elephant import permit application

Regina A. Lennox <regina.lennox@conservationforce.org> Tue, Jan 31, 2017 at 10:17 AM
To: "Vargas, Darcy" <darcy_vargas@fws.gov>
Cc: "Vannorman, Tim" <tim_vannorman@fws.gov>

Dear Darcy,
I am following up about this elephant application. Could you provide a status update? I would again note that the elephant was taken the day before the import suspension was announced, and now by court order the suspension doesn't even become effective until the Federal Register publication. So this isn't a controversial application. There was a positive enhancement finding and the permit should issue. We are aware of at least one other permit, issued in 2016 but for an elephant taken pre-suspension, so the FWS is doing this (as it should be).
Thanks,
Regina

Regina A. Lennox
Conservation Force
3240 S I-10 Service Road W, Suite 200
Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

On Tue, Dec 20, 2016 at 1:47 PM, Vargas, Darcy <darcy_vargas@fws.gov> wrote:
[Quoted text hidden]

Vargas, Darcy <darcy_vargas@fws.gov>

PRT 04847C -- elephant import permit application

Regina A. Lennox <regina.lennox@conservationforce.org> Tue, Jan 31, 2017 at 12:13 PM
To: "Vargas, Darcy" <darcy_vargas@fws.gov>
Cc: "Vannorman, Tim" <tim_vannorman@fws.gov>

Dear Darcy,
Thank you, but I would note you told me a month the last time I asked, and the application has been pending since August. Again, this should not be a controversial permit to issue. Permits for Namibia and RSA, for which there are positive enhancement findings (as there was for Zim on April 3) are being processed in fewer than 90 days.
Sincerely,
Regina

Regina A. Lennox
Conservation Force
3240 S I-10 Service Road W, Suite 200
Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

[Quoted text hidden]

Vargas, Darcy <darcy_vargas@fws.gov>

PRT 04847C -- elephant import permit application

Regina A. Lennox <regina.lennox@conservationforce.org> Thu, Mar 2, 2017 at 10:23 AM
To: "Vargas, Darcy" <darcy_vargas@fws.gov>
Cc: "Vannorman, Tim" <tim_vannorman@fws.gov>

Dear Darcy,
I am following up on this application once again. Please note that this was an elephant hunted while there was a positive enhancement finding in place, so this permit should be processed just as permits are processed for countries with currently positive enhancement findings. I am aware a Zim permit was issued in 2016 for an elephant hunted pre-suspension, and I request that this permit application be treated the same way. I would appreciate another status update at your earliest convenience.
Thank you,
Regina

Regina A. Lennox
Conservation Force
3240 S I-10 Service Road W, Suite 200
Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

[Quoted text hidden]

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA04847C-0

Effective: 02/27/2017 Expires: 02/26/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

Mary Coghlan
FOR CHIEF, BRANCH OF PERMITS, DMA

Permittee:
THOMAS (b) (6) WHALEY (b) (6)
(b) (6)
MARSHALL, TX (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

B. **Trophy must have been taken prior to May 12, 2014, during the 2014 hunting season.**

C. **Permittee must provide documentation demonstrating that this African elephant was taken on April 3, 2014.**

D. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

E. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

F. Valid for use by permittee named above.

G. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

H. Specimen may not be sold or transferred for any financial remuneration.

I. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

J. Based on enhancement finding of 1997. The 1997 enhancement finding is valid until May 12, 2014.

K. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

RCVD AUG 26 2016 LB

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
DEAN	ROGER	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
CONCORD	NC	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☐

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit**. If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
  (i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
  (ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
  (iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

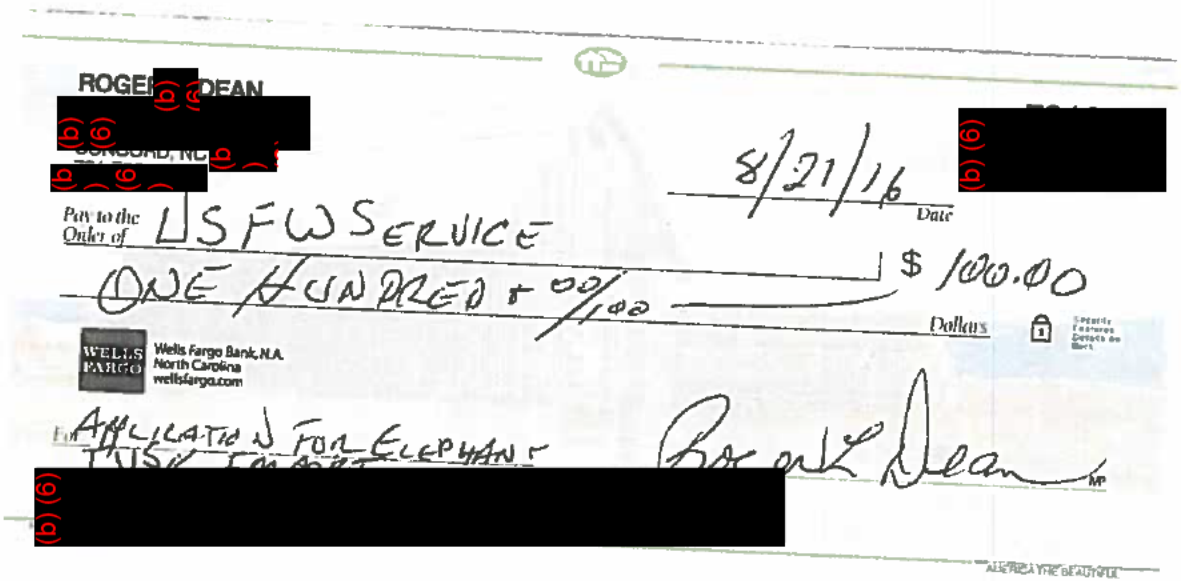
Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:_____(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:



ROGER [redacted] DEAN
[redacted]
[redacted]

8/21/16 [redacted]
Date

Pay to the Order of USFWS ERVICE $ 100.00

ONE HUNDRED + 00/100 Dollars

WELLS FARGO
Wells Fargo Bank, N.A.
North Carolina
wellsfargo.com

For APPLICATION FOR ELEPHANT TUSK IMPORT

Roger L Dean MP

[redacted]

AMERICA THE BEAUTIFUL

RCVD AUG 26 2016

United States Department of the Interior

FISH AND WILDLIFE SERVICE

International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA/PRT– 05934C

Mr. Roger (b) Dean
(b) (6)
Concord, North Carolina (b) (6)

JUL 27 2017

Dear Mr. Dean:

This letter responds to your August 21, 2016, application to import under the U.S. Endangered Species Act (Act), a personal sport-hunted African elephant (*Loxodonta africana*) trophy taken in Zimbabwe in June 2014 during the 2014 hunting season. After careful review of your request for a permit, and after reviewing all available data and information on activities and circumstances occurring in Zimbabwe at the time you conducted your hunt, your application is being denied for the reasons outlined below.

The African elephant is listed as threatened under the Act with a special rule under Section 4(d) of the Act[1], which is set forth in regulations found at 50 CFR 17.40 (e)[2]. Under the special rule, issuance of an import permit can only occur if the U.S. Fish and Wildlife Service (Service) finds that the killing of the trophy animal will enhance the survival of the species [50 CFR 17.40(e)(6)(i)(B)], and the trophy is accompanied by a threatened species permit issued under 50 CFR 17.32[3]. To enhance the survival of the species, the importation must be associated with activities that provide a direct or indirect benefit to the species in the wild. In evaluating whether the killing of the trophy animal will enhance the survival of the species, the Service looks at a number of factors. Such factors include: current elephant population estimates in a given country, whether said country has a valid national and/or regional management plan, is the plan currently being implemented and does it contain achievable and measurable objectives, does the plan take an adaptive management approach and how often is it reviewed and/or updated, the designated authorities responsible for overseeing elephant management and how they are funded, the level of human-wildlife conflict taking place and how it is being addressed, any anti-poaching efforts undertaken, habitat conservation measures currently in place, as well as the amount of revenue generated by elephant hunting and how it is utilized in supporting conservation projects and/or managing the species.

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1 The text of this Act can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6dd.

2 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6m3.

3 Ibid

The best available scientific and management data, as well as information provided to the Service by Zimbabwe Parks & Wildlife Management Authority (ZPWMA), Conservation Force, and Safari Club International, was used in our evaluation. In evaluating the available data and information on elephant hunting in Zimbabwe at the time your hunt occurred, the Service was unable to determine that the killing of African elephants in Zimbabwe occurring after April 4, 2014, would enhance the survival of the species. Because your hunt took place after the effective date of the finding, the import of your sport-hunted elephant trophy taken in Zimbabwe in June 2014, cannot be authorized. A copy of the Division of Management Authority's finding for the 2014 hunting season is enclosed for your reference.

As provided in 50 CFR 13.29(a)[4], you may request reconsideration of our decision to deny your application. Such a request must be in writing with the original signature of the person requesting reconsideration or by that person's legal representative, must contain a certification statement as provided at 50 CFR 13.12(a)(5)[5], should refer to your file number, PRT–05934C, and must be received in this office within 45 days of the date of this letter. The reconsideration of the decision to deny your request will be based on the information you provided in your original application. As such, your letter requesting reconsideration must address how our decision to deny your application was based on a misinterpretation of the information provided in your application or information available to the Service when making the original denial or it must present clarification of this information. **Should you supply new information that changes the scope of your original application, a new application will need to be submitted to this office before such information can be considered.**

If you have any questions, please contact Supervisory Policy Specialist Jorge D. Villavicencio of this office: Division of Management Authority, Branch or Permits, MS:IA, 5275 Leesburg Pike, Falls Church, VA 22041-3803 (703-358-2104, ext. 2483).

Sincerely,

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority

Enclosure

4 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xYDUk
5 Ibid

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

FEB -4

MEMORANDUM

To: Chief, Division of Management Authority
From: Chief, Division of Scientific Authority
Subject: General advice for permit renewals and amendments

This general advice supersedes the memorandum on "Scientific Authority review of permit amendments and renewals" issued by our office (then Office of Scientific Authority) on February 14, 1983.

The Division of Management Authority (DMA) receives a large number of requests for renewals and amendments of CITES import and export permits, as well as Certificates of Scientific Exchange (COSE), for which the Division of Scientific Authority (DSA) has previously issued non-detriment findings.

In the case of permits for which DMA has used a general advice from DSA, we have determined that no additional advice from DSA will be necessary provided that the renewal or amendment request still meets the conditions contained in the general advice.

In the case of permits for which DSA has issued permit-specific non-detriment findings, no additional advice from DSA will be needed provided that the renewal or amendment request involves activities affecting the species in question in a way that was contemplated in our original advice. However, additional DSA advice will be needed when:

1) there is a change in sender or recipient;

2) there is a change in purpose of the activity (e.g., from display to captive breeding purposes in the case of live animals; from research to commercial purposes in the case of tissue

RCVD FEB 16 2017 LS

TO WHOM IT CONCERNS:

My permit # MA09327C-0 WAS LOST IN THE US POSTAL MAIL ON ROUTE TO COPPERSMITH SEATLE, WA. RCVD FEB 16 2017

SHIPPMENT IS READY TO BE SHIPPED

I WOULD PLEASE REQUEST A REPLACEMENT CITES PERMIT

SHOULD THE ORIGINAL PERMIT BE FOUND I WILL RETURN IT TO THE DIVISION OF MANAGEMENT AUTHORITY.

SIGNED JOHN TUBBS:

02-15-2017

SUSAN M KLOMPIEN
Notary Public
for the State of Montana
Residing at:
Bozeman, Montana
My Commission Expires:
March 06, 2018

SUSAN M KLOMPIEN NOTARIAL SEAL STATE OF MONTANA

(406) 582-0044 2/15/2017

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0093
Expires 05/31/2017

Federal Fish and Wildlife Permit Application Form

RCVD FEB 16 2017 LB

Return to: U.S. Fish and Wildlife Service
(Enter address from Page 4 and 5 of application)

Type of Activity:
REPLACEMENT DOCUMENT
(CITES/ESA/MMPA/WBCA/LACEY ACT)

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
TUBBS	JOHN	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6)			(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
BELGRADE	MT	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country
BOZEMAN	MT	(b) (6)		USA

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $50 nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☑ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: ~~MB-715906-2~~ MA093271C-C No ☐

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature (in blue ink) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 02/15/2017

E. REPLACEMENT DOCUMENT (CITES/ESA/MMPA/WBCA/LACEY ACT)

NOTE 1: Use this application to request a replacement document if your currently valid permit has been lost or misplaced (for this application, all permits, registrations, and certificates are referred to as a permit).

NOTE 2: The application **must** be submitted to the office that issued the initial permit.

Provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If needed, use a separate sheet of paper. On all attachments or separate sheets you submit, indicate the application question number you are addressing.

1. Identify the permit number (found in the upper right corner) of the permit needing replacement, if known:

   MA09327C-0

2. Current location of specimen (include address and country):

   COLLETTS WILDLIFE ARTISTRY
   15 JOSIAH CHINAMANO RD
   BELMONT
   BULAWAYO, ZIMBABWE

3. If the shipment has already occurred (i.e., the document was lost or damaged in transit), provide copies of:
   a. Cancelled CITES export or re-export document validated by OLE;
   b. For wildlife, cleared Declaration for Importation or Exportation of Fish or Wildlife (Form 3-177); **AND**
   c. Any correspondence you had with the shipper or importing country's Management Authority concerning the shipment.

   *Please be aware that if the permit was lost in transit, the issued permit will be forwarded to the Management Authority of the foreign country.

4. If the shipment has **not** occurred and the original permit no longer exists, submit a signed, dated, and notarized statement that:
   a. Refers to the permit number and describes the circumstances that resulted in the loss or destruction of the original permit;
   b. Includes a statement that affirms the shipment did not occur;
   c. You are requesting a replacement U.S. CITES permit;
   d. If found, the original permit will be returned to the Division of Management Authority.

5. If the shipment has **not** occurred and the original permit exists but has been damaged, submit the original damaged permit and a signed, dated, and notarized statement that:
   a. Describes the circumstances that resulted in the permit being damaged;
   b. Includes a statement that affirms the shipment did not occur;
   c. You are requesting a replacement U.S. CITES permit.

6. Address where you wish permit mailed (if different from page 1):

7. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☑ If a permit is issued, please send it via a courier service to the address on page 1 or question 6. I understand that you will contact me for my credit card information once the application has been processed.

8. Who should we contact if we have questions about the application? (Include name, phone number, and email):

JOHN TUBBS

9. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. [50 CFR 13.21(c)]. Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

OMB Control #1018-0093 Expires 05/31/2017

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA09327C-0

Effective: 01/06/2017 Expires: 01/05/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
JOHN (b) (6) TUBBS (b) (6)
(b) (6)
BELGRADE, M (b) (6)
U.S.A.

Authority, Statutes and Regulations: 16 USC 1539 (a), 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. This permit can be photocopied.

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. Trophy must have been taken during the 2013 hunting season.

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

Zimbabwe Parks and Wildlife Management Authority

CITES PERMIT/CERTIFICATE ZW/4013/2017
CITES FORM 2

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Permit/Certificate No ZW/4013/2017

[X] Export
[ ] Re-Export
[ ] Import
[ ] Other

Original

2. Valid Until: 10-07-2017

3. Importer (name and address): JOHN [redacted] TUBBS [redacted]
[redacted]
MT [redacted]
USA

4. Exporter (name, address and country Zimbabwe
COLLETTS WILDLIFE ARTISTRY
15 JOSIAH CHINAMANO ROAD
BELMONT
BULAWAYO
ZIMBABWE

3a. Country Of Import United States Of America

5. Special Conditions
For live animals this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations

5a. Purpose of transaction (see reverse) H

5b. Security stamp no. 1295647

6. Name, address, stamp and country of Management Authority

Zimbabwe Parks and Wildlife Management Authority
P.O. Box CY 140
Causeway
Harare, Zimbabwe

6a. Declaration by Exporter or Agent
I hereby declare that I am aware of the provision of the Convention contained in the *Statutory Instrument 76 of 1998*, for the purpose of Exporting / Re- exporting / Importing the Wildlife listed below.
The total value of this consignment is:
SUS .....Signature of applicant.....

7. Scientific Name	8. Common Name	9. Description of specimens including no. (age/sex if live)	10. Appendix and Source (see reverse)	11. Quantity (including unit)	11a. Total exported quota	11b. Tag Number	11c. Mark
Hippotragus niger	*Sable*	*large leather products : BASE WITH 2X ELAND FUR SKIN INLAYS&2 SABLE FUR*	NE W	1 no	N/A	N/A	N/A
Hippotragus niger	*Sable*	*trophies : PEDESTAL MOUNT*	NE W	1 no	N/A	N/A	N/A
Crocuta crocuta	*Spotted hyaena*	*skulls :*	NE W	2 no	N/A	N/A	N/A
Crocuta crocuta	*Spotted hyaena*	*trophies (rug mount) :*	NE W	2 no	N/A	N/A	N/A

12. Country of origin:	Permit No	Date of issue	12a. Country of last re-export	Certificate No	Date:

13. This permit is issued by

Place: Bulawayo Date: 10-01-2017 Security stamp, signature and official seal:

PERMITS DIVISION
ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY
23 JAN 2017
WESTERN REGION
BULAWAYO
P.O. BOX 2283
BULAWAYO
TEL: (09) 8833881

14. Exchange Control Information
CD1 number...../or
CD1 not applicable to export (delete)
(Date stamp and signature of authorized official):.....
Note: Permit/certificate invalid unless this section is completed.

STANBIC BANK ZIMBABWE LIMITED
EXCHANGE CONTROL DEPARTMENT
15 7643
- 8 FEB 2017
BELMONT BULAWAYO

15. Date Stamp of Zimbabwe Revenue Authority Inspector

ZIMBABWE REVENUE AUTHORITY
REVENUE OFFICER
BW 88 14 FEB 2017 99 BW
BULAWAYO
P.O. BOX 599 BULAWAYO

16. Export endorsement:

Specimens	Quantity	Specimens	Quantity
Sable LLP	1		
" Trophies	1		
Hyeana skulls	2		
Hyeana Trophies	2		
	7		

17. Bill of landing/Air waybill number: 085 3313 5495

BEIT BRIDGE
Port of export

Date

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY
INSPECTORATE
07 FEB 2017
BULAWAYO, ZIMBABWE
TEL: (09) 63645-7/74000

Signature

Zimbabwe Parks and Wildlife Management Authority

CITES PERMIT/CERTIFICATE ZW/4011/2017
NP CITES FORM 2

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Permit/Certificate No ZW/4011/2017

[X] Export
[ ] Re-Export
[ ] Import
[ ] Other

Original

2. Valid Until: 10-07-2017

3. Importer (name and address): JOHN [redacted] TUBBS [redacted]
[redacted]
MT 5 [redacted]
USA

4. Exporter (name, address and country Zimbabwe
COLLETTS WILDLIFE ARTISTRY
15 JOSIAH CHINAMANO ROAD
BELMONT
BULAWAYO
ZIMBABWE

3a. Country Of Import United States Of America

5. Special Conditions
For live animals this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations

5a. Purpose of transaction (see reverse) H

5b. Security stamp no. 1295733

6. Name, address, stamp and country of Management Authority

Zimbabwe Parks and Wildlife Management Authority
P.O. Box CY 140
Causeway
Harare, Zimbabwe

6a. Declaration by Exporter or Agent
I hereby declare that I am aware of the provision of the Convention contained in the *Statutory Instrument 76 of 1998*, for the purpose of Exporting / Re- exporting / Importing the Wildlife listed below.
The total value of this consignment is:
$US .....27,607.00.....Signature of applicant.....

7. Scientific Name	8. Common Name	9. Description of specimens including no. (age/sex if live)	10. Appendix and Source (see reverse)	11. Quantity (including unit)	11a. Total exported quota	11b. Tag Number	11c. Mark
Taurotragus oryx	*Eland*	*skulls :*	*NE W*	*1 no*	*N/A*	*N/A*	*N/A*
Loxodonta africana	*Elephant*	*bag : SECRETARY BAGS*	*II W*	*2 no*	*17-500-2017*	*ZW157/500/2013-LOX*	*N/A*
Loxodonta africana	*Elephant*	*bag : COMPUTER BAGS*	*II W*	*2 no*	*17-500-2017*	*ZW157/500/2013-LOX*	*N/A*
Loxodonta africana	*Elephant*	*brief case :*	*II W*	*1 no*	*17-500-2017*	*ZW157/500/2013-LOX*	*N/A*
Loxodonta africana	*Elephant*	*gun bag :*	*II W*	*3 no*	*17-500-2017*	*ZW157/500/2013-LOX*	*N/A*
Loxodonta africana	*Elephant*	*small leather products : TRAVEL POUCHES*	*II W*	*2 no*	*17-500-2017*	*ZW157/500/2013-LOX*	*N/A*
Loxodonta africana	*Elephant*	*bag : BIRD HUNTER BAGS*	*II W*	*2 no*	*17-500-2017*	*ZW157/500/2013-LOX*	*N/A*

12. Country of origin:	Permit No	Date of issue	12a. Country of last re-export	Certificate No	Date:

13. This permit is issued by

Place: Bulawayo Date: 10-01-2017 Security stamp, signature and official seal:

PERMITS DIVISION
ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY
CITES
WESTERN REGION
BULAWAYO
TEL 09-74000 FAX: 09-883386

STANBIC BANK ZIMBABWE LIMITED
EXCHANGE CONTROL DEPARTMENT
759143
8 FEB 2017
BELMONT

14. Exchange Control Information
CD1 number.....
CD1 not applicable to export (delete) /or
(Date stamp and signature of authorized official):.....
Note: Permit/certificate invalid unless this section is completed.

15. Date Stamp of Zimbabwe Revenue Authority Inspector

ZIMBABWE REVENUE AUTHORITY
REVENUE OFFICER
BW 89 14 FEB 2017
BULAWAYO
P.O. BOX 599, BULAWAYO

16. Export endorsement:

Specimens	Quantity	Specimens	Quantity
Eland Zula			
Elephant Skull	1	Elephant SILP	2
Elephant bag	2	" " bag	2
" " bag	2		
" " briefcase	1		
" " gunbag	3		

17. Bill of landing/Air waybill number: 083 3393 5495

BEIT BRIDGE
Port of export

Date

Signature

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY
INSPECTORATE
P.O. BOX 2283
BULAWAYO, ZIMBABWE
TEL (09) 63646-7

Zimbabwe Parks and Wildlife Management Authority

CITES PERMIT/CERTIFICATE ZW/4012/2017

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

CITES FORM 2

Permit/Certificate No ZW/4012/2017

- [X] Export
- [ ] Re-Export
- [ ] Import
- [ ] Other

Original

2. Valid Until: 10-07-2017

3. Importer (name and address):
JOHN (b) (6) TUBBS (b)
(b) (6)
MT (b) (6)
USA

4. Exporter (name, address and country Zimbabwe
COLLETTS WILDLIFE ARTISTRY
15 JOSIAH CHINAMANO ROAD
BELMONT
BULAWAYO
ZIMBABWE

3a. Country Of Import: United States Of America

5. Special Conditions
For live animals this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations

5a. Purpose of transaction (see reverse): H

5b. Security stamp no. 1295696

6. Name, address, stamp and country of Management Authority

Zimbabwe Parks and Wildlife
Management Authority
P.O. Box CY 140
Causeway
Harare, Zimbabwe

6a. Declaration by Exporter or Agent
I hereby declare that I am aware of the provision of the Convention contained in the *Statutory Instrument 76 of 1998*, for the purpose of Exporting / Re- exporting / Importing the Wildlife listed below.
The total value of this consignment is:
SUS .....Signature of applicant.....

7. Scientific Name	8. Common Name	9. Description of specimens including no. (age/sex if live)	10. Appendix and Source (see reverse)	11. Quantity (including unit)	11a. Total exported quota	11b. Tag Number	11c. Mark
Loxodonta africana	*Elephant*	*small leather products : SHELL CARRIER BAGS*	II W	3 no	17-500-2017	ZW157 500 2013-LOX	N/A
Loxodonta africana	*Elephant*	*skin scraps : LEATHER OFF CUTS*	II W	3 no	17-500-2017	ZW157 500 2013-LOX	N/A
Loxodonta africana	*Elephant*	*tusks : BRASS CAPPED*	II W	21 kg	17-500-2017	ZW157 500 2013-LOX	ZW2013-25075 21
Loxodonta africana	*Elephant*	*wallet :*	II W	4 no	17-500-2017	ZW157 500 2013-LOX	N/A
Loxodonta africana	*Elephant*	*tusks : BRASS CAPPED*	II W	20 kg	17-500-2017	ZW157 500 2013-LOX	ZW2013-25076 20
Canis mesomelas	*Jackal(black backed)*	*skulls :*	NE W	1 no	N/A	N/A	N/A
Panthera leo	*Lion*	*claws :*	II W	18 no	N/A	N/A	N/A

12. Country of origin:	Permit No	Date of issue	12a. Country of last re-exp	Certificate No	Date:

PERMITS DIVISION
ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY
23 JAN 2017
WESTERN REGION
P.O. BOX 2283
BULAWAYO
09 - 883388

13. This permit is issued by

Place: Bulawayo Date: 8 FEB 2017 Security stamp, signature and official seal:

STANBIC BANK ZIMBABWE LIMITED
EXCHANGE CONTROL DEPARTMENT
8 FEB 2017
BULAWAYO

14. Exchange Control Information
CD1 number 7596'7 .....or
CD1 not applicable to export (delete)

(Date stamp and signature of authorized official):.....
Note: Permit/certificate invalid unless this section is completed.

15. Date Stamp of Zimbabwe Revenue Authority Inspector

ZIMBABWE REVENUE AUTHORITY
REVENUE OFFICER
14 FEB 2017
BULAWAYO
P.O. BOX 599, BULAWAYO

16. Export endorsement:

17. Bill of landing/Air waybill number 176 83393 9495

Specimens	Quantity	Specimens	Quantity
Ele SLP Bag	3	Jackal Skulls	1
" Skin Scraps	3	Lion Claws	18
" Tusks	21 kg		
" Wallet	4		
" Tusks	20 kg		

BEIT BRIDGE
Port of export

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY
INSPECTORATE
07 FEB 2017
P.O. BOX 2283
ZIMBABWE

Date Signature

Collett's Wildlife Artistry

TAXIDERMIST

15 Josiah Chinamano Road, Belmont
PO Box 9067 Hillside
Bulawayo
Zimbabwe, Africa

Cell: +263 712 220 966
Phone: +263 9 885 868/ +263 9 885 349
Email: office@collettswildlifeartistry.com
www.collettswildlifeartistry.com

T5013

Client: John Tubbs

Address: (b) (6)
Belgrade
Montana (b) (6)
U.S.A

Email: (b) (6)

Invoice#929

Date: 10.5.2016

STANBIC BANK ZIMBABWE LIMITED
EXCHANGE CONTROL DEPARTMENT
13 OCT 2016
BELMONT, BULAWAYO

Invoice

TROPHY	ITEMS	INSTRUCTIONS	COST
Eland	Skull	Euro with plaque	340.00
Eland	Backskin	Tan - use for inlays on sable base	295.00
Sable	Cape/Skul	Pedestal	1,050.00
		Base - 2 x eland fur skin inlays and 2 x sable fur skin inlays	380.00
Jackal	Skull	Bleach and polish	75.00
Elephant	Panels x 6	To tan to leather - Make items below	1,600.00
	Gun bags x 3		510.00
	Secretary bag x 2		344.00
	Computer bags x 2		344.00
	Wallets x 4	off-cuts	100.00
	Travel pouch		232.00
	Bird hunter bags x2		390.00
	Shell carrier bags x 3		276.00
	Brief case x 1		320.00
	Tusks x 2	Brass capped - round bases	750.00
		3 x offcuts	278.00
Hyena	Fullmountskin	Rug with head	800.00
	Skull	Bleach and polish	160.00
Hyena	Fullmountskin	Rug with head	800.00
	Skull	Bleach and polish	160.00
Lion	18 x claws	cleaned	25.00
	Paperwork		200.00
	Crating		650.00
		Less commission	(922.00)
		Deposit 8.10.14	(2,329.00)
		Deposit 26.05.15	(2,000.00)
TOTAL			**US$ 4,828.00**

ZIMBABWE REVENUE AUTHORITY
REVENUE OFFICER
BW 89 14 FEB 2017
BULAWAYO
P.O. BOX 599, BULAWAYO

Govt levy 2% paid $583

TROPHY INVOICE

TR2 NOS 067209/ 072766/ 075342

INVOICE NUMBER	T14/ 16
DATE	27 May 2016
NAME	JOHN (b) (6) TUBBS (b) (6)
ADDRESS	(b) (6) BELGRADE MT (b) (6) USA

TROPHY FEES		TOTAL
ELAND		USD 1 200
ELEPHANT		USD 13 500
HYENA x 2		USD 600
JACKAL		USD 150
SABLE		USD 3 000
TOTAL FEES		USD 18 450

STANBIC BANK ZIMBABWE LIMITED
EXCHANGE CONTROL DEPARTMENT
13 OCT 2016
BELMONT BULAWAYO

ZIMBABWE REVENUE AUTHORITY
REVENUE OFFICER
14 FEB 2017
BULAWAYO
P.O. BOX 599, BULAWAYO

COLLETT'S WILDLIFE ARTISTRY
P O BOX 9067
HILLSIDE
BULAWAYO

CASE: TBB/ A

PACKING LIST/ SHIPPING INSTRUCTIONS

CLIENT: JOHN (b) (6) TUBBS (b) (6)
(b) (6)
BELGRADE
MT (b) (6)
USA

TEL:
FAX:
EMAIL: (b) (6)

SHIPPING ADDRESS: JOHN (b) (6) TUBBS (b) (6)
C/O COPPERSMITH INC
3100 S 176TH ST, SUITE 120
SEATAC
WA 98188
USA

TEL:
FAX:
EMAIL: clampman@coppersmith.com

STANBIC BANK ZIMBABWE LIMITED
EXCHANGE CONTROL DEPARTMENT
13 OCT 2016
BELMONT BULAWAYO

ELAND (TAUROTRAGUS ORYX) 1 X SKULL

ELEPHANT (LOXODONTA AFRICANA) 3 X GUN BAGS/ 2 X SECRETARY BAGS/ 2 X COMPUTER BAGS/ 4 X WALLETS/ 2 X TRAVEL POUCHES/ 3 X BIRD HUNTER BAGS/ 3 X SHELL CARRIER BAGS/ 1 X BRIEFCASE/ 3 X LEATHER OFF CUTS/ 2 X TUSKS – ZW2013-25075 (21 KGS)/ ZW2013-25076 (20 KGS) TAG NO ZW157/ 500/ 2013 – LOX

HYENA (CROCUTA CROCUTTA) 2 X SKULLS/ 2 X RUG MOUNTS

JACKAL (CANIS MESOMELAS) 1 X SKULL

LION (PANTHERA LEO) 18 X CLAWS

SABLE (HIPPOTRAGUS NIGER NIGER) 1 X PEDESTAL MOUNT/ 1 X BASE WITH 2 X SABLE FUR SKIN INLAYS & 2 X ELAND FUR SKIN INLAYS

ZIMBABWE REVENUE AUTHORITY
BW 89 14 FEB 2017 59 BW
P.O. BOX 599, BULAWAYO

To be submitted in duplicate

ZIMBABWE

PERMIT NUMBER T14/ 2016

Provincial Veterinary Office
P.O. Box RY41
Bulawayo
ZIMBABWE
Telephone: 68061/ 3

Date: 27/1/17

VETERINARY CERTIFICATE

The game trophies listed below have been:-

a. Tanned in a process using Formic Acid, Salt & Basyntan, or
b. Sprayed with a 4% solution of washing soda (Sodium Carbonate), or
c. Skulls have been boiled & bleached in a 4% solution of washing soda & are free from flesh & grease, or
d. The trophies, other than those from carnivores & zebra, destined for processing in the Republic of South Africa have been soaked for 24 hours
e. ~~Have been soaked for 21 hours in a solution of 1:5000 Sodium Fluoride under veterinary supervision & are contained in seal polythene bags.~~
f. ~~Disinfected with Hydrogen Peroxide (H^2O) – Skull/ Bone Only~~ (delete inapplicable section/s)

These products originate from an area where Anthrax is not prevalent & which is free of Foot & Mouth Disease for more than 6 months & in my opinion present no risk of spreading diseases.

DESCRIPTION OF GOODS: ----------

ELAND (TAUROTRAGUS ORYX) 1 X SKULL

ELEPHANT (LOXODONTA AFRICANA) 3 X GUN BAGS/ 2 X SECRETARY BAGS/ 2 X COMPUTER BAGS/ 4 X WALLETS/ 2 X TRAVEL POUCHES/ 2 X BIRD HUNTER BAGS/ 3 X SHELL CARRIER BAGS/ 1 X BRIEFCASE/ 3 X LEATHER OFF CUTS/ 2 X TUSKS – ZW2013-25075 (21 KGS)/ ZW2013-25076 (20 KGS) TAG NO ZW157/ 500/ 2013 – LOX

HYENA (CROCUTA CROCUTTA) 2 X SKULLS/ 2 X RUG MOUNTS

JACKAL (CANIS MESOMELAS) 1 X SKULL

LION (PANTHERA LEO) 18 X CLAWS

SABLE (HIPPOTRAGUS NIGER NIGER) 1 X PEDESTAL MOUNT/ 1 X BASE WITH 2 X SABLE FUR SKIN INLAYS & 2 X ELAND FUR SKIN INLAYS

THE SKINS HAVE BEEN SPRAYED WITH A 4% SOLUTION OF WASHING SODA (SODIUM CARBONATE) THEY HAVE THEN BEEN DIPPED IN A SOLUTION OF FORMIC ACID, SALT & WATER WITH A PH OF BETWEEN 2.8 & 3. THE SKULLS HAVE BEEN BOILED IN A 4% SOLUTION OF WASHING SODA & ARE FREE OF FLESH & GREASE

DISTRICT OF ORIGIN: KAZUMA/ PANDAMASURE – MAT NORTH (2013 & 2014)

CONSIGNOR: COLLETTS WILDLIFE ARTISTRY/ P O BOX 9067/ HILLSIDE/ BULAWAYO

CONSIGNEE: JOHN TOWNSEND TUBBS JR/ 405 SKYVIEW DRIVE/ BELGRADE/ MT 597 USA

AUTHORITY:

DATE:

PROVINCIAL VETERINARY OFFICE
DEPT. OF VETERINARY SERVICES
27 JAN 2017
P.O. BOX RY 41 RAYLTON
TEL

ZIMBABWE REVENUE AUTHORITY
REVENUE OFFICER
1 FEB 2017
59 BW
P.O. BOX 599, BULAWAYO

DEPARTMENT OF VETERINARY SERVICES – ZIMBABWE

NOTE AN EXPORT PERMIT from the Department of National Parks and Wild Life Management is also required.

CERTIFICATE OF OWNERSHIP OF IVORY AND RHINOCEROS HORN

(Issued in terms of section 77 of the Parks and Wildlife (General) Regulations, 1990)

TR2 072766

25 AUG 2013

P. BAG 5926
VICTORIA FALLS

Specified officer's signature and date-stamp

Cert. № 110301

Name John Tubbs

(b) (6) [redacted]

Address Bozeman MT (b) (6) [redacted]

U.S.A

Tusk serial number	2012-25075
Tusk mass (kg)	21kg
Tusk length (metric)	17.3cm
Sex	M

Authority Area Manager Matetsi Safari Area

Signature of holder .....

STANDARD BANK ZIMBABWE LIMITED
EXCHANGE CONTROL DEPARTMENT
BELMONT BULAWAYO
13 OCT 2016

Notes

1. This certificate must be returned to the *Director, Department of National Parks and Wildlife Management, P.O. Box CY 140, Causeway*, in the event of the tusk being cut up for manufacturing purposes, lost, stolen or exported.
2. Transfer/sale of ivory or horn is to be done at National Parks offices.

ZIMBABWE REVENUE AUTHORITY
599, BULAWAYO
24 FEB 2017

CERTIFICATE OF OWNERSHIP OF IVORY AND RHINOCEROS HORN

(Issued in terms of section 77 of the Parks and Wildlife (General) Regulations, 1990)

TR2 072766

23 AUG 2013

P. BAG 5926
VICTORIA FALLS

Specified officer's signature and date-stamp

Cert. № 110302

Name John Tubbs

(b) (6) [redacted]

Address Bozeman MT (b) (6) [redacted]

U.S.A

Tusk serial number	2012-25076
Tusk mass (kg)	21kg
Tusk length (metric)	17.1cm
Sex	M

Authority Area Manager Matetsi Safari Area

Signature of holder .....

Notes

1. This certificate must be returned to the *Director, Department of National Parks and Wildlife Management, P.O. Box CY 140, Causeway*, in the event of the tusk being cut up for manufacturing purposes, lost, stolen or exported.
2. Transfer/sale of ivory or horn is to be done at National Parks offices.

ZW 157/500 /2013-LOX

ZW 157/500 /2013-LOX

ELEPHANT

TROPHY EXPORT TAG

ZW /2013-LOX

RCVD FEB 15 2017

THIS DOCUMENT HAS A VOID SECURITY PANTOGRAPH AND MICROPRINTING IN THE BORDER

(b) (6)

(b) (6)

(b) (6)

93-213/929

DATE 2/15/2017

Y TO THE
IDER OF U.S. FISH&WILDLIFE SERVICE

$ **50.00

Fifty and 00/100********** DOLLARS

U.S. FISH&WILDLIFE SERVICE
DMA BRANCH OF PERMITS, MS:IA
5275 LEESBURG PIKE
FALLS CHURCH, VA 22041-3803
USA

EMO

(b) (6)

ELEPHANT IMPORT FROM ZIMBABW

Permit Number: MA09327C-

Effective: 02/16/2017 Expires: 01/05/201

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
JOHN (b) (6) TUBBS (b) (6)
(b) (6)
BELGRADE, MT (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. **This permit can be photocopied.**

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. **Trophy must have been taken during the 2013 hunting season.**

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

J. **DUPLICATE PERMIT: REPLACES MA09327C-0 ISSUED 01/06/2017 REPORTED AS LOST.**

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0163
Expires 11/30/2016

RCVD OCT 05 2016

Federal Fish and Wildlife Permit Application Form

RCVD OCT 05 2016

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
TUBBS	JOHN	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)	
(b) (6)			

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)		N/A	(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)		

2. Tax identification no.	3. Description of business, agency, Tribe, or institution		

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address, Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
BELGRADE	M.T.	(b) (6)		U.S.A.

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country
BOZEMAN	M.T.	(b) (6)		U.S.A.

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☑ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: MB715906-2 No ☐

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 09/07/2016

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted:

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

      IVORY, LEATHER PRODUCTS FROM THE SKIN

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business Collett's Wildlife ~~Tak~~ Artistry
Name: Address: 15 JOSIAH CHINAMANO ROAD
Address: BELMONT
City: BULAWAYO
State/Province:
Country, Postal Code: ZIMBABWE

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 9-29-16

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, **if** different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

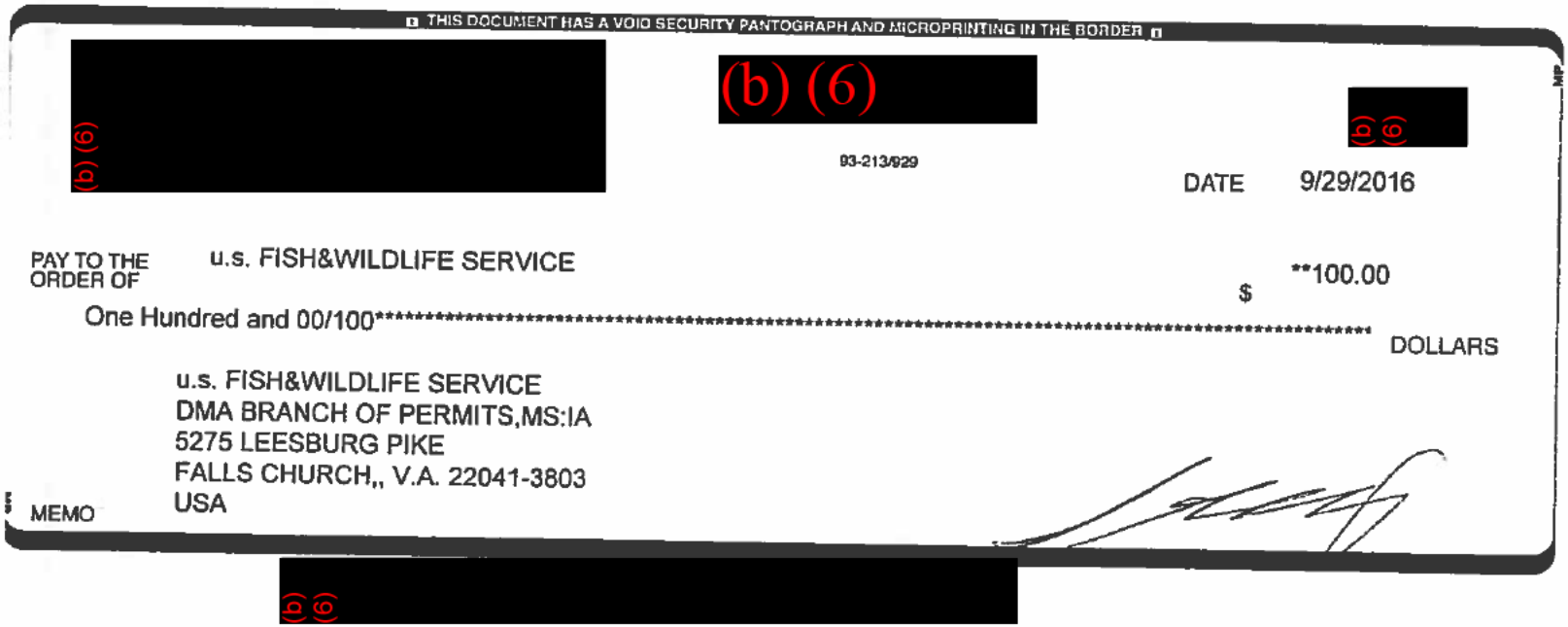
10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.


THIS DOCUMENT HAS A VOID SECURITY PANTOGRAPH AND MICROPRINTING IN THE BORDER

(b) (6)

(b) (6)

93-213/929

(b) (6)

DATE 9/29/2016

PAY TO THE ORDER OF u.s. FISH&WILDLIFE SERVICE

$ **100.00

One Hundred and 00/100********** DOLLARS

u.s. FISH&WILDLIFE SERVICE
DMA BRANCH OF PERMITS,MS:IA
5275 LEESBURG PIKE
FALLS CHURCH,, V.A. 22041-3803
USA

MEMO

(b) (6)

OMB Control #1018-0093 Expires: 05/31/2017

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA09327C-0

Effective: 01/06/2017 Expires: 01/05/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
JOHN (b) (6) TUBBS (b) (6)
(b) (6)
BELGRADE, MT (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. **This permit can be photocopied.**

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. **Trophy must have been taken during the 2013 hunting season.**

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

In Reply Refer To:
FWS/AIA/OMA

JUL - 2 1997

Memorandum

To: The File

From: Chief, Branch of Permits

Subject: Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe.

The African Elephant (Loxodonta africana) is listed as threatened under the U.S. Endangered Species Act with a special rule at 50 CFR 17.40(e). The special rule sets forth requirements for the import of sport-hunted trophies, including marking requirements for ivory. Under paragraph 17.40(e)(3)(iii)(C),the Service must make a finding that the killing of the elephant whose trophy is intended for import would enhance the survival of the species.

Based on available information, the OMA believes that Zimbabwe is effectively conserving and managing the elephant population throughout the country and finds that the import of sport-hunted elephant trophies from Zimbabwe enhances the survival of the species. This finding applies to all African elephant trophies lawfully taken in Zimbabwe, provided they are imported by the person who hunted them for personal use.

Basis for Enhancement Finding:

Population Status: Aerial surveys of elephant populations have been undertaken by the Department of National Parks & Wild Life Management (DNPWLM) since 1980 using standard sample count techniques. As a result, Zimbabwe has one of the best sets of elephant population data in Africa. There were no surveys conducted in 1996 presumably due to the loss of DNPWLM's survey craft. There were previous concerns raised about the accuracy of these surveys due to the possibility of double-counting of elephants that may move between Zimbabwe and adjoining countries, and differing population estimates. These concerns were addressed by conducting simultaneous surveys of the Matebeleland north elephant population in Zimbabwe, and those in the north of Botswana and the Caprivi Strip in Namibia. These surveys were conducted under the coordination of the European Union funded ELESMAP project. In addition, an independent survey was conducted by Price Waterhouse in 1996 which also confirmed Zimbabwe's elephant population estimates.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

In Reply Refer To:
FWS/AIA/DMA

DEC 19 2012

Memorandum

To: The File

From: Chief, Branch of Permits

Subject: Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zambia during the 2012 hunting season

The African Elephant (Loxodonta africana) is listed as threatened under the U.S. Endangered Species Act with a special rule [50 CFR 17.40(e)]. The special rule gives the requirements for the import of sport-hunted trophies, including marking requirements for ivory. Under paragraph 17.40(e)(3)(iii)(C), the U.S. Fish and Wildlife Service (Service) must make a finding that the sport hunting of elephants will enhance the survival of the species in the wild. Information received from the Zambia Wildlife Authority (ZAWA) confirmed that the sport hunting of elephants, banned in Zambia since 1982, was re-opened under the Zambia Wildlife Act (Act No. 12 of 1998/Statutory Instrument No. 40 of 2005), enacted May 13, 2005, authorizing the sport-hunting of elephants for non-commercial purposes. A National Policy and Action Plan on Elephant Management in Zambia from the Ministry of Tourism, Environment and Natural Resources, as well as documentation provided at the 15th Meeting of the Conference of the Parties (Doha 2010 – CoP15 Prop. 5), was also provided to the Service. This document outlined the Government's goal to conserve elephants at population levels that would promote conservation of biodiversity while providing for sustainable utilization. This information provided overall guidelines on the management of elephants to ensure long-term survival. While the Service continues to have some concerns about how the financial resources and infrastructure within ZAWA are being utilized to adequately manage and effectively protect elephants in national parks and game management areas during this period, we believe that Zambia and ZAWA continue to make significant improvements. Based on the available information and continuing assurances made by ZAWA on providing documentation on the use of moneys derived from elephant hunting programs, the Service is ***able to find*** that the importation of sport-hunted elephant trophies taken in Zambia in 2012 enhanced the survival of the species.

TAKE PRIDE IN AMERICA

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

OCT 12 2016

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Graham	Cliff	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
South Ogden	UT	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☒

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 10/11/2016

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
  (i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
  (ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
  (iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:____1_(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:
   N/A
   b. Date wildlife is to be hunted:
   N/A

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

N/A

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: Zimbabwe West Nicholson
   b. Date wildlife was hunted: Sept. 2012
   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks): Skin and skin products
   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

Bulawayo, Zimbabwe

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business Outbound Cargo and Trophy Exporting
Name: Address: 5 Grantham Road
Address: Belmont
City: Bulawayo,
State/Province:
Country, Postal Code: Zimbabwe

Phone # +2639-881531
Email: michelle@outboundexports.com

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy,** please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 10-10-16

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

Houston, TX

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

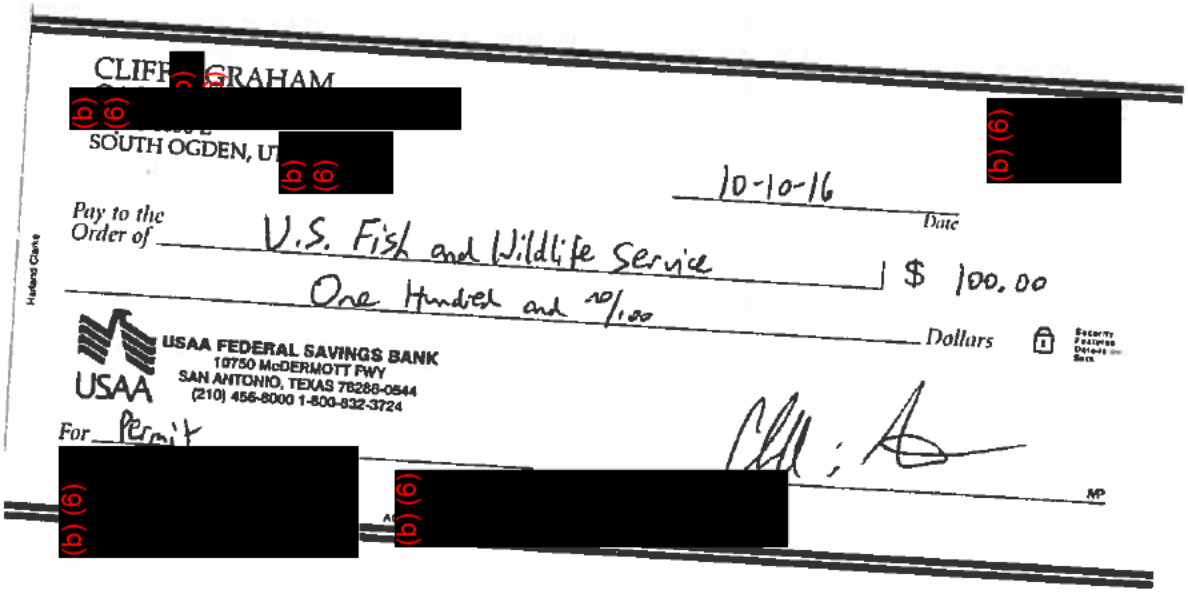
☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Cliff Graham (b) (6) [redacted]

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☒ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.



CLIFF [redacted] GRAHAM
[redacted]
SOUTH OGDEN, UT [redacted]

[redacted]

10-10-16
Date

Pay to the Order of V.S. Fish and Wildlife Service $ 100.00

One Hundred and 00/100 Dollars

USAA FEDERAL SAVINGS BANK
10750 McDERMOTT FWY
SAN ANTONIO, TEXAS 78288-0544
(210) 456-8000 1-800-832-3724

For Permit

[redacted]

[redacted]

OMB Control #1018-0093 Expires: 05/31/2017

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA09877C-0

Effective: 01/25/2017 Expires: 01/24/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
CLIFF (b) (6) GRAHAM
(b) (6)
SOUTH OGDEN, UT (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. Trophy must have been taken during the 2012 hunting season.

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0093
Expires 05/31/2017

Federal Fish and Wildlife Permit Application Form

RCVD OCT 14 2016 LB

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
VANMETER	KENNETH	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)
	/

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address, Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
BOWLING GREEN	KY	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

_____ 10-13-16
Signature (**in blue ink**) of applicant/person responsible for permit (No photocopied or stamped signatures) Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: The U.S. FWS has determined that a trophy consists of raw or tanned parts of a specimen taken by a hunter during a sport hunt for personal use. It may include the bones, claws, hair, head, hide, hooves, horns, meat, skull, teeth, tusks, or any taxidermied part, including, but not limited to, a rug or taxidermied head, shoulder, or full mount. It does not include articles made from a trophy, such as worked, manufactured, or handicraft items for use as clothing, curios, ornamentation, jewelry, or other utilitarian items. If you wish to import such products, please contact the Division of Management Authority for the proper application form.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy. If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: N/A (Limited to the import of two per calendar year)

African elephant (*Loxodonta africana*) Quantity: 1 (Import permit is not required for trophies harvested in Botswana, Namibia, South Africa, or Zimbabwe). **Note: once imported, ivory cannot be re-exported.**

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: N/A (An import permit is not required for trophies harvested in South Africa or Swaziland. If you are looking to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild: N/A

   b. Date wildlife is to be hunted:
      N/A

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).
      N/A

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: Zimbabwe, Chiredzi

   b. Date wildlife was hunted:
      2013

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

2x Elephant tusks on bases, 1x Elephant Foot Waste Basket, 5x Elephant Leather Gunbag

d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

Highveld Taxidermists, Farm 354 Vlakplaats, Hennopsriver, Gauteng, 0023 South Africa

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name:	
Business Name:	HIGHVELD TAXIDERMISTS
Address:	FARM 354
Address:	VLAKPLAATS
City:	HENNOPSRIVER
State/Province:	GAUTENG
Country, Postal Code:	0023 SOUTH AFRICA

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year (if applicable). In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: _____ Date: _____

7. **If you are the hunter applying to import your own trophy,** please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year (if applicable). In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 10-13-16

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

FEDEX - ENVELOPE WITH BILLED INFORMATION COMPLETED AND ENCLOSED.
VANMETER CONTRACTING INC
237 N GRAHAM STREET
BOWLING GREEN KY 42101

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):
KENNETH (b) (6) VANMETER
(b) (6)

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name. b) date of charge. c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

OCT 14 2016

KENNETH [redacted] VANMETER 12/04

[redacted]

BOWLING GREEN, KY [redacted]

[redacted]

10-13-16
DATE

PAY TO THE ORDER OF US Fish + Wildlife Svc $ 100.00

One hundred dollars ∇ 00/100 DOLLARS

American Bank&Trust
Traditional Banking at Its Best.
Bowling Green, Kentucky 42102

FOR Application for Import Permit

[redacted]

Rivera, Luis <luis_rivera@fws.gov>

PRT# 10211C

1 message

Rivera, Luis <luis_rivera@fws.gov> Mon, Nov 14, 2016 at 1:30 PM
To (b) (6) [redacted]

Good afternoon.

I have been assigned your application to import a sport-hunted elephant from Zimbabwe. Upon reviewing your application, I found that you stated that the elephant was hunted in Zimbabwe but it will be shipped from South Africa. Please explain this and confirm what country the elephant was taken from.

Thank you

Please be aware that if the requested information is not received by this office within 45 days, your application will be abandoned and administratively closed. Once a file is closed, you will need to submit a new application and all required fees for the Service to consider your proposed activity.

--
Sincerely,

Luis Rivera
Legal Instrument Examiner
USFWS/Division of Management Authority
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
703-358-2604
Fax:703-358-2881
Email: Luis_Rivera@fws.gov

Mark VanMeter (b) (6) 1:33 PM (21 hours ago)

to me

It was killed in Zimbabwe and then exported to my taxidermist, whom I have used previously. Thanks, any other questions, please don't hesitate to call. Mark VanMeter

Sent from my iPhone

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA10211C-0
Effective: 11/18/2016 Expires: 11/17/2017

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

Mary Gogliano
FOR
CHIEF, BRANCH OF PERMITS, DMA

Permittee:
KENNETH (b) (6) VANMETER
(b) (6)
BOWLING GREEN, KY (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. **This permit can be photocopied.**

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. **Trophy must have been taken during the 2013 hunting season.**

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II Re-export certificate issued by the Management Authority of South Africa.

Department of the Interior
U.S. Fish and Wildlife Service

Federal Fish and Wildlife Permit Application Form

OMB No. 1018-0164
Expires 11/30/2016

RCVD OCT 20th 2016

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
THISSE	PETER	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address, Apartment #, Suite #, or Room #, no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
MILLIS	MA	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes [X] If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue 10451425A/9 No [ ]

3. Certification. I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 10/10/2016

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity: 1 (Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following: N/A
a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: ZIMBABWE MSAISE, SAVE VALLEY
   b. Date wildlife was hunted: 07/16/2012 MSAISE, Save Valley
   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks): Trunk, Ears, TUSKS, SKIN, FEET, LEG BONES, TAIL, Jaw Bone
   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]: 15 Josiah Chinamano Rd. Belmont, BYO

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit]. Zimbabwe

Name: Business: Collett's Wildlife Artistry
Name: Address: Steve Collett, Director/Taxidermist
Address: 15 Josiah Chinamano Rd., Belmont
City: Bulawayo
State/Province: Zimbabwe, Africa
Country, Postal Code:
Telefax +263 9 885 868
Email thebos5@collett'swildlife artist

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 10/10/2016

Peter (b) (6) Thisse

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Peter (b) (6) Thisse (b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☒ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

PETER [redacted] THISSE

[redacted]

5-7017/2110

[redacted]

DATE 10/10/16

PAY TO THE ORDER OF U.S. Fish + Wildlife Service $ 100.00

One hundred + 00/100 DOLLARS

Citizens Bank

MEMO

[redacted]

OCT 20 2016

OMB Control #1018-0093 Expires: 05/31/2017

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA10745C-0

Effective: 11/08/2016 Expires: 11/07/2017

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
PETER (b) (6) THISSE
(b) (6)
MILLIS, MA (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. **Trophy must have been taken during the 2012 hunting season.**

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Vick	Martin	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)	
(b) (6)			

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)		

2. Tax identification no.	3. Description of business, agency, Tribe, or institution		

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address, Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Mansfield	SD	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 10/30/2016

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:one(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: Zimbabwe, hunted April 26, 2014, TR2permit number 072950
   Dande Safari area, Mbire Guruve District, Mushimbi Pools , Grid ref TT080310

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

   Single tusk, skin panels

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

   TROPHY CONSULTANTS INTERNATIONAL, 4 JOSIAH CHINAMANO ROD, BELMONT, BULAWAYO, ZIMBABWE

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business	TROPHY CONSULTANTS INTERNATIONAL
Name: Address:	4 JOSIAH CHINAMANO ROAD
Address:	BELMONT
City:	BULAWAYO
State/Province:	ZIMBABWE
Country, Postal Code:	

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 10/30/2016

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, **if** different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

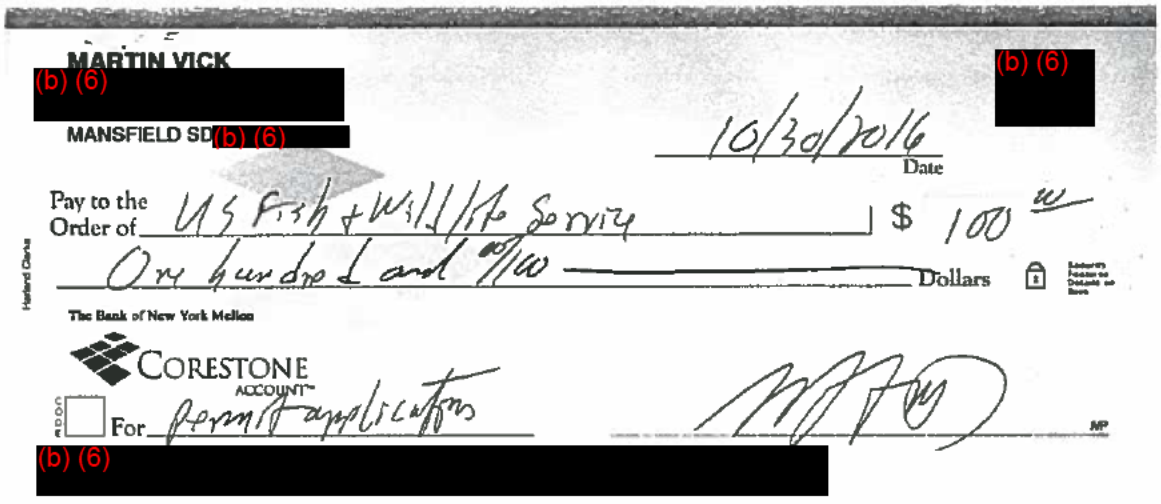
11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Martin Vick (b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

RCVD NOV 3 2016



MARTIN VICK
(b) (6)
MANSFIELD SD (b) (6)

(b) (6)

10/30/2016
Date

Pay to the Order of US Fish + Wildlife Service $ 100 00

One hundred and 00/100 Dollars

The Bank of New York Mellon

CORESTONE ACCOUNT

For permit applications

(b) (6)

OMB Control #1018-0093 Expires: 05/31/2017

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA11810C-0

Effective: 01/09/2017 Expires: 01/08/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
MARTI(b) VICK
(b) (6)
MANSFIELD, SI(b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General Conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. **This permit can be photocopied.**

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe on April 26, 2014,for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. **Trophy must have been taken during the 2014 hunting season.**

I. **Permittee must provide documentation to the US FWS wildlife inspector supporting the date of take (April 26, 2014) at the time of importation.**

J. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0093
Expires 05/31/2017

Federal Fish and Wildlife Permit Application Form

RCVD NOV 04 2016

LB

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
IMPORT OF SPORT-HUNTED TROPHIES
(Appendix I of CITES and/or ESA)

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Stevenson	JOHN		

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Scottsdale	AZ	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☒

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

John Stevenson — 10-18-16

Signature (in blue ink) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES *(Appendix I of CITES* and/or *ESA)*

Note 1: If you hold an import permit for trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but are unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: Applications for species listed as endangered under the U.S. Endangered Species Act are published in the Federal Register for a 30-day public comment period. Please allow at least **90 days** for the application to be processed.

Note 3: USFWS has determined that a trophy consists of raw or tanned parts of a specimen taken by a hunter during sport hunt for personal use. It may include the bones, claws, hair, head, hide, hooves, horns, meat, skull, teeth, tusks, or any taxidermied part, including, but not limited to, a rug or taxidermied head, shoulder, or full mount. It does not include articles made from a trophy, such as worked, manufactured, or handicraft items for use as clothing, curios, ornamentation, jewelry, or other utilitarian items. If you wish to import such products, please contact the Division of Management Authority for the proper application form.

Note 4: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If needed, use a separate sheet of paper. On all attachments or separate sheets you are submitting; please indicate the application question number you are addressing. If applying for more than one trophy, be sure to answer questions 1-5 for each trophy addressed in this application. If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. For each trophy to be imported, provide:
   a. Scientific name (genus, species, and, if applicable, subspecies) and common name.
   Loxodonta Africana African Elephant
   b. Sex (if known).
   Male
2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
   a. Country and PLACE (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:
   b. Date wildlife is to be hunted:
   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks).
3. **IF THE ANIMAL IS DEAD,** please enter the following:
   a. Country and PLACE (area, region, GIS coordinates, ranch AND nearest city) where wildlife was removed from the wild (provide a map if possible):
   Matetsi North in NW Zimbabwe
   b. Date wildlife was hunted:
   May 2013

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks).

Elephant Tusks (2) skin panel see attached veterinary certificate for tag and tusk numbers

d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export documents]:

Zimbabwe @ TCI in Bulawayo Zimbabwe see attached shipping invoice

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you must provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will also appear on your Namibian export permit and must match the U.S. import permit].

Name:
Business Name: Trophy Consultants International
Address: No. 41 Jossiah Chinamano Rd Belmont
Address:
City: Bulawayo
State/Province: Zimbabwe
Country, Postal Code:

5. Please be aware that the U.S. Fish and Wildlife Service must make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., population status or trend data; how the funds from license/trophy fees will be spent; what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year (if applicable). In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: NA Date: _____

7. **If you are the hunter applying to import your own trophy,** please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year (if applicable). In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: [signature] Date: 10/18/16

Be aware that there may be additional permitting or approval requirements by your local or state government, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist you, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).
SAN FRANCISCO VIA Coppersmith

9. Name and address where you wish permit mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

SAME

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

MYSELF CONTACT ON PAGE 1

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

(5.)

The Hunting licences fee is paid to the Zimbabwe Game Department and the funds are used to provide all levels of modern wildlife management for the species, same as the process used in the USA.

Please note the shipping was delay to comply with new export import conditions. A CITES permit was issued (included) but at this writing Oct 18 2017 it is about to expire. I have request they reissue a new CITES certificate valid well into 2017. Please advise if you will need any addition data

Laserline Trophy Services Pvt (Ltd) t/a (Taxidermy Enterprises)

T.C.I
TROPHY CONSULTANTS INTERNATIONAL

John STEVENSON
(b) (6)
Scottsdale
AZ (b)
U.S.A.
(b) (6)

COPPERSMITH
434 Rozzi Place
San Francisco
CA 94080
U.S.A.
JDeLacruze@coppersmith.com

ANIMAL ARTISTRY INC
1190 Terminal Way
Reno
NV 89502
U.S.A.

8 April 2016-04-08

EXPORT INV: 201/14

EXPORT INVOICE

USD

GIRAFFE	SKULL	STERILIZED
	FLAT SKIN	-
KUDU	SKULL	-
	CAPE	-
	BACK SKIN	-
WATERBUCK	SKULL	-
	CAPE	-
	BACK SKIN	-
KUDU	SKULL	-
	CAPE	-
	BACK SKIN	-
IMPALA	SKULL	-
	CAPE	-
	BACK SKIN	-
WARTHOG	SKULL	-
	CAPE	-
BABOON	SKULL	-
	FULL MOUNT SKIN	-
BABOON	SKULL	-
BABOON	SKULL	-
ZEBRA	FLAT SKIN	-
ELEPHANT	PANELS X 2	-
ZW2013 25047 19kg	TUSKS	-
ZW2013 25048 18kg		

DIPPING AND PACKING	700.00
LESS COMMISSION	-140.00
PAID	560.00

No. 4 JOSIAH CHINAMANO RD, BELMONT, BULAWAYO, ZIMBABWE
Tel: +263 9 73593; +263 9 73983
Fax: +263 9 75513
EMAIL: clientliaison@tcl.co.zw
WEB: www.tcl.co.zw
Directors: C.D.A. Meredith; C.P. Meredith

CASE NO: SJW/A

PACKING LIST / SHIPPING INSTRUCTIONS:

CLIENT:

MR JOHN STEVENSON
(b) (6) [redacted]
SCOTTSDALE
AZ (b) (6) [redacted]
USA
E-MAIL: (b) (6) [redacted]

SHIPPING INSTRUCTIONS:

MR JOHN STEVENSON
C/O COPPERSMITH INC
434 ROZZI PLACE
SOUTH SAN FRANCISCO
CA 94080
USA
E-MAIL: JDelacruz@coppersmith.com

GIRAFFE SKULL X 1	STERILISED	GIRAFFA CAMELOPARDALIS
KUDU SKULLS X 2	"	TRAGELAPHUS STREPSICEROS
KUDU CAPES X 2	"	"
KUDU BACKSKINS X 2	"	"
WATERBUCK SKULL X 1	"	KOBUS ELLIPSIPRYMNUS
WATERBUCK CAPE X 1	"	"
WATERBUCK BACKSKIN X 1	"	"
IMPALA SKULL X 1	"	AEPYCEROS MELAMPUS
IMPALA CAPE X 1	"	"
IMPALA BACKSKIN X 1	"	"
WARTHOG SKULL X 1 WITH 4 TUSHES	"	PHACOCHOERUS AETHIOPICUS
WARTHOG CAPE X 1	"	"
BABOON SKULLS X 3	"	PAPIO URSINUS
BABOON FULLMOUNT SKIN X 1	"	"
ZEBRA FULLSKIN X 1	"	EQUUS BURCHELLI

TROPHIES OBTAINED:

MAT.NORTH
MAY 2013

CASE NO: SJW/B

PACKING LIST / SHIPPING INSTRUCTIONS:

CLIENT:

MR JOHN STEVENSON
(b) (6)
SCOTTSDALE
AZ (b) (6)
USA
E-MAIL: (b) (6)

SHIPPING INSTRUCTIONS:

MR JOHN STEVENSON
C/O COPPERSMITH INC
434 ROZZI PLACE
SOUTH SAN FRANCISCO
CA 94080
USA
E-MAIL: JDelacruz@coppersmith.com

ELEPHANT TUSKS X 2 STERILISED LOXODONTA AFRICANA
TUSK NO'S: ZW2013 25047W (19KG) & ZW2013 25048W (18KG)
ELE TAG NO: ZW434/500/2013-LOX

TROPHIES OBTAINED:

MAT.NORTH
MAY 2013

CASE NO: SJW/C

PACKING LIST / SHIPPING INSTRUCTIONS:

CLIENT:

MR JOHN STEVENSON
(b) (6) [redacted]
SCOTTSDALE
AZ (b) (6) [redacted]
USA
E-MAIL: (b) (6) [redacted]

SHIPPING INSTRUCTIONS:

MR JOHN STEVENSON
C/O COPPERSMITH INC
434 ROZZI PLACE
SOUTH SAN FRANCISCO
CA 94080
USA
E-MAIL: JDelacruz@coppersmith.com

GIRAFFE FULLSKIN X 1	STERILISED	GIRAFFA CAMELOPARDALIS
ELEPHANT PANELS X 2	"	LOXODONTA AFRICANA

TROPHIES OBTAINED:

MAT.NORTH
MAY 2013

ZIMBABWE

Provincial Veterinary Office
P O Box RY41
Bulawayo
ZIMBABWE
TELE: 68061/3

Date: .....

VETERINARY CERTIFICATE

The game trophies listed below have been:-

a. tanned in a process using formic acid, salt and Basyntan, or
b. sprayed with a 4% solution of washing soda (sodium carbonate), or
c. skulls have been boiled and bleached in a 4% solution of washing soda and are free from flesh and grease, or
d. ~~the trophies, other than those from carnivores and zebra, destined for processing in the Republic of South Africa have been soaked for 24 hours in a solution of 1:5000 sodium fluoride under veterinary supervision and are contained in seal polythene bags.~~
e. ~~Have been soaked for 21 hours in a solution of 1:5000 Sodium Fluoride under veterinary supervision & are contained in seal polythene bags~~
f. disinfected with Hydrogen Peroxide (H_2O_2) - Skull/bone only (*delete inapplicable section(s))

DESCRIPTION OF GOODS:

GIRAFFE (GIRAFFA CAMELOPARDALIS) SKULL X 1/ FULLSKIN X 1
KUDU (TRAGELPAHUS STREPSICEROS) SKULLS X 2/ CAPES X 2/ BACKSKINS X 2
WATERBUCK (KOBUS ELLIPSIPRYMNUS) SKULL X 1/ CAPE X 1/ BACKSKIN X 1
IMPALA (AEPYCEROS MELAMPUS) SKULL X 1/ CAPE X 1/ BACKSKIN X 1
WARTHOG (PHACOCHOERUS AETHIOPICUS) SKULL X 1 WITH 4 TUSHES/ CAPE X 1
BABOON (PAPIO URSINUS) SKULLS X 3/ FULLMOUNT SKIN X 1
ZEBRA (EQUUS BURCHELLI) FULLSKIN X 1
ELEPHANT (LOXODONTA AFRICANA) PANELS X 2/ TUSKS X 2 TUSK NO'S: ZW2013 25047W (19KG) & ZW2013 25048W (18KG)
ELE TAG NO: ZW434/500/2013-LOX

THE SKINS HAVE BEEN SPRAYED WITH A 4% SOLUTION OF WASHING SODA (SODIUM CARBONATE). THEY HAVE THEN BEEN DIPPED IN A SOLUTION OF FORMIC ACID, SALT & WATER, WITH A PH OF BETWEEN 2.8 & 3. THE SKULLS HAVE BEEN BOILED IN A 4% SOLUTION OF WASHING SODA & ARE FREE OF FLESH & GREASE.

DISTRICT OF ORIGIN: MAT.NORTH - MAY 2013

CONSIGNOR: TROPHY CONSULTANTS INTERNATIONAL/ 4 JOSIAH CHINAMANO RD/BELMONT/ BULAWAYO/ ZIMBABWE

CONSIGNEE: MR JOHN STEVENSON/ 10151 E FOOTHILLS DRIVE/ SCOTTSDALE/ AZ 85255/ USA

AUTHORITY:
DATE:

.....
DEPARTMENT OF VETERINARY SERVICES
ZIMBABWE

NOTE: AN EXPORT PERMIT from the Department of National Parks and Wild Life Management is also required.

Zimbabwe Parks and Wildlife Management Authority

CITES PERMIT/CERTIFICATE ZW/4703/2016
NP CITES FORM 2

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Permit/Certificate No ZW/4703/2016

[X] Export
[ ] Re-Export
[ ] Import
[ ] Other

Original

2. Valid Until: 24-11-2016

3. Importer (name and address): MR JOHN STEVENSON
(b) (6) [redacted]
SCOTTSDALE A[redacted] (b) (6)
USA

3a. Country Of Import United States Of America

4. Exporter (name, address and country Zimbabwe
TROPHY CONSULTANTS INTERNATIONAL
4 JOSIAH CHINAMANO ROAD
BELMONT, BULAWAYO
ZIMBABWE

5. Special Conditions
For live animals this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations

5a. Purpose of transaction (see reverse) H

5b. Security stamp no. 1294871

6. Name, address, stamp and country of Management Authority

Zimbabwe Parks and Wildlife Management Authority
P.O. Box CY 140
Causeway
Harare, Zimbabwe

6a. Declaration by Exporter or Agent
I hereby declare that I am aware of the provision of the Convention contained in the *Statutory Instrument 76 of 1998*, for the purpose of Exporting / Re- exporting / Importing the Wildlife listed below.
The total value of this consignment is:
SUS .....20,035.00.....Signature of applicant.....

7. Scientific Name	8. Common Name	9. Description of specimens including no. (age/sex if live)	10. Appendix and Source (see reverse)	11. Quantity (including unit)	11a. Total exported quota	11b. Tag Number	11c. Mark
Papio ursinus	*Chacma baboon*	*ski (full mount skin) :*	*II W*	*1 no*	*N/A*	*N/A*	*N/A*
Papio ursinus	*Chacma baboon*	*skulls :*	*II W*	*3 no*	*N/A*	*N/A*	*N/A*
Loxodonta africana	*Elephant*	*tusks :*	*II W*	*18 kg*	*114-500-2016*	*ZW434/500/2013-LOX*	*ZW2013 25048 18*
Loxodonta africana	*Elephant*	*tusks :*	*II W*	*19 kg*	*114-500-2016*	*ZW434/500/2013-LOX*	*ZW2013 25047 19*
Loxodonta africana	*Elephant*	*panels :*	*II W*	*2 no*	*114-500-2016*	*ZW434/500/2013-LOX*	*n/a*
Giraffa camelopardalis	*Giraffe*	*skulls :*	*NE W*	*1 no*	*N/A*	*N/A*	*N/A*
Giraffa camelopardalis	*Giraffe*	*skins : full*	*NE W*	*1 no*	*N/A*	*N/A*	*N/A*

12. Country of origin:	Permit No	Date of issue	12a. Country of last re-export	Certificate No.	Date:

13. This permit is issued by

Place: Bulawayo Date: 24-05-2016 Security stamp, signature and official seal:

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY
CITES
WESTERN REGION
P.O. BOX 2283 BULAWAYO
TEL 09 - 74000 FAX 09 - 383386

14. Exchange Control Information
CD1 number...../or
CD1 not applicable to export (delete)

(Date stamp and signature of authorized official):.....
Note: Permit/certificate invalid unless this section is completed.

15. Date Stamp of Zimbabwe Revenue Authority Inspector

16. Export endorsement:

Specimens	Quantity	Specimens	Quantity

17. Bill of landing/Air waybill number:

Port of export Date Signature

Zimbabwe Parks and Wildlife Management Authority

CITES PERMIT/CERTIFICATE ZW/4705/2016
NP CITES FORM 2

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Permit/Certificate No ZW/4705/2016

[X] Export
[ ] Re-Export
[ ] Import
[ ] Other

Original

2. Valid Until: 24-11-2016

3. Importer (name and address):
MR JOHN STEVENSON
(b) (6)
SCOTTSDALE AZ (b)
USA

4. Exporter (name, address and country Zimbabwe
TROPHY CONSULTANTS INTERNATIONAL
4 JOSIAH CHINAMANO ROAD
BELMONT, BULAWAYO
ZIMBABWE

3a. Country Of Import United States Of America

5. Special Conditions
For live animals this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations

5a. Purpose of transaction (see reverse) H

5b. Security stamp no. 1294573

6. Name, address, stamp and country of Management Authority

Zimbabwe Parks and Wildlife
Management Authority
P.O. Box CY 140
Causeway
Harare, Zimbabwe

6a. Declaration by Exporter or Agent
I hereby declare that I am aware of the provision of the Convention contained in the *Statutory Instrument 76 of 1998*, for the purpose of Exporting / Re- exporting / Importing the Wildlife listed below.
The total value of this consignment is:
SUS .....Signature of applicant.....

7. Scientific Name	8. Common Name	9. Description of specimens including no. (age/sex if live)	10. Appendix and Source (see reverse)	11. Quantity (including unit)	11a. Total exported quota	11b. Tag Number	11c. Mark
Phacochoerus aethiopicus	Warthog	skulls : 6TUSHES	NE W	1 no	N/A	N/A	N/A
Kobus ellipsiprymnus	Waterbuck	skulls :	NE W	1 no	N/A	N/A	N/A
Kobus ellipsiprymnus	Waterbuck	skin pieces :	NE W	1 no	N/A	N/A	N/A
Kobus ellipsiprymnus	Waterbuck	backskin :	NE W	1 no	N/A	N/A	N/A
Equus burchelli	Zebra	skins : FULLSKIN	NE W	1 no	N/A	N/A	N/A

12. Country of origin:	Permit No	Date of issue	12a. Country of last re-export	Certificate No	Date

PERMITS DIVISION
ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY
13 JUL 2016
CITES

13. This permit is issued by

Place: Bulawayo Date: 24-05-2016 Security stamp, signature and official seal:

14. Exchange Control Information
CD1 number...../or
CD1 not applicable to export (delete)

(Date stamp and signature of authorized official):.....
Note: Permit/certificate invalid unless this section is completed.

15. Date Stamp of Zimbabwe Revenue Authority Inspector

16. Export endorsement:

Specimens	Quantity	Specimens	Quantity

17. Bill of landing/Air waybill number:

Port of export Date Signature

Zimbabwe Parks and Wildlife Management Authority

CITES PERMIT/CERTIFICATE ZW/4704/2016
NP CITES FORM 2

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Permit/Certificate No ZW/4704/2016

[X] Export
[ ] Re-Export
[ ] Import
[ ] Other

Original

2. Valid Until: 24-11-2016

3. Importer (name and address): MR JOHN STEVENSON
(b) (6)
SCOTTSDALE AZ (b) (6)
USA

4. Exporter (name, address and country Zimbabwe
TROPHY CONSULTANTS INTERNATIONAL
4 JOSIAH CHINAMANO ROAD
BELMONT, BULAWAYO
ZIMBABWE

3a. Country Of Import United States Of America

5. Special Conditions
For live animals this permit or certificate is only valid if the transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations

5a. Purpose of transaction (see reverse) H

5b. Security stamp no. 1294872

6. Name, address, stamp and country of Management Authority

Zimbabwe Parks and Wildlife
Management Authority
P.O. Box CY 140
Causeway
Harare, Zimbabwe

6a. Declaration by Exporter or Agent
I hereby declare that I am aware of the provision of the Convention contained in the *Statutory Instrument 76 of 1998*, for the purpose of Exporting / Re- exporting / Importing the Wildlife listed below.
The total value of this consignment is:
$US .....Signature of applicant.....

7. Scientific Name	8. Common Name	9. Description of specimens including no. (age/sex if live)	10. Appendix and Source (see reverse)	11. Quantity (including unit)	11a. Total exported quota	11b. Tag Number	11c. Mark
Aepyceros melampus	*Impala*	*skulls :*	*NE W*	*1 no*	*N/A*	*N/A*	*N/A*
Aepyceros melampus	*Impala*	*skin pieces :*	*NE W*	*1 no*	*N/A*	*N/A*	*N/A*
Aepyceros melampus	*Impala*	*backskin :*	*NE W*	*1 no*	*N/A*	*N/A*	*N/A*
Tragelaphus strepsiceros	*Kudu*	*skulls :*	*NE W*	*2 no*	*N/A*	*N/A*	*N/A*
Tragelaphus strepsiceros	*Kudu*	*skin pieces :*	*NE W*	*2 no*	*N/A*	*N/A*	*N/A*
Tragelaphus strepsiceros	*Kudu*	*backskin :*	*NE W*	*2 no*	*N/A*	*N/A*	*N/A*
Phacochoerus aethiopicus	*Warthog*	*skin pieces :*	*NE W*	*1 no*	*N/A*	*N/A*	*N/A*

12. Country of origin:	Permit No	Date of Issue	12a. Country of last re-export	Certificate No	Date

13. This permit is issued by

Place: Bulawayo Date: 24-05-2016 Security stamp, signature and official seal: 3

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY CITES PERMITS DIVISION BULAWAYO TEL 09 - 74000 FAX: 09 - 883388

14. Exchange Control Information
CD1 number...../or
CD1 not applicable to export (delete)

(Date stamp and signature of authorized official):.....
Note: Permit/certificate invalid unless this section is completed.

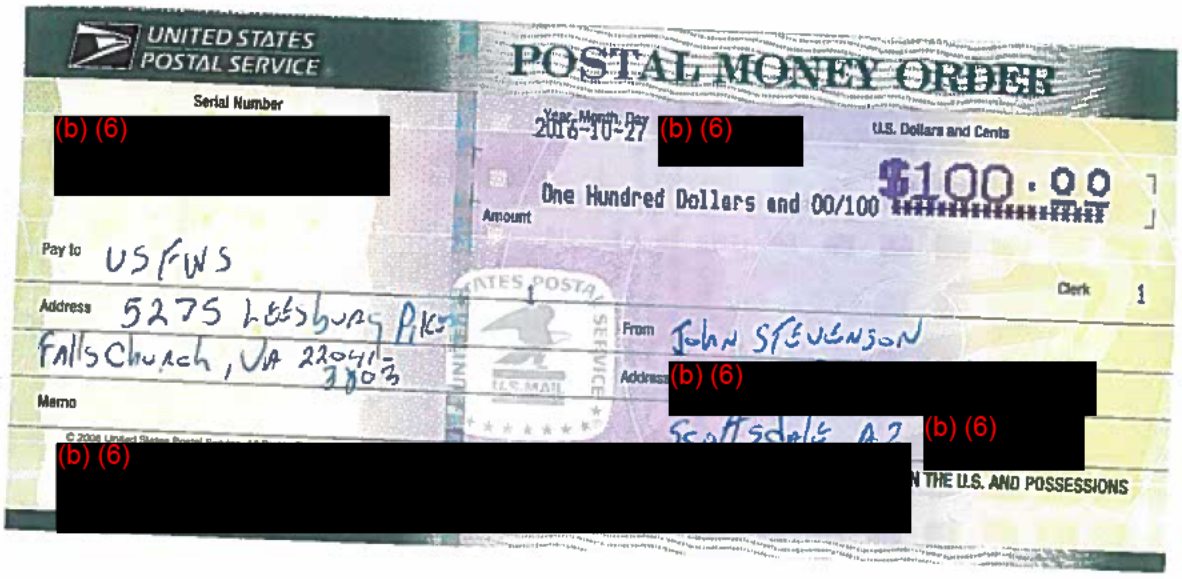
15. Date Stamp of Zimbabwe Revenue Authority inspector

16. Export endorsement:

Specimens	Quantity	Specimens	Quantity

17. Bill of landing/Air waybill number:

Port of export Date Signature



UNITED STATES POSTAL SERVICE

POSTAL MONEY ORDER

Serial Number

(b) (6)

Year, Month, Day 2016-10-27 (b) (6)

U.S. Dollars and Cents

Amount One Hundred Dollars and 00/100 $100.00

Pay to USFWS

Address 5275 Leesburg Pike Falls Church, VA 22041-3803

Clerk 1

From John Stevenson

Address (b) (6)

Scottsdale AZ (b) (6)

Memo

(b) (6)

THE U.S. AND POSSESSIONS

RCVD NOV 04 2015

Braxton, Ailteas <ailteas_braxton@fws.gov>

Sport hunted trophy permit re-issuance application.....11872C

1 message

Braxton, Ailteas <ailteas_braxton@fws.gov> Thu, Jun 29, 2017 at 12:23 PM
To: (b) (6)

Good afternoon,

Please forward, via postal service, the original permit issued 6/1/2015. I will need it before I can move forward with your re-issuance. Pleas make to my attention.
Thank you for your patience

Ailteas Braxton
Legal Examiner
U.S. Fish and Wildlife Services
Division of Management Authority
ailteas_braxton@fws.gov
703 358-1978 direct dial
703 358-2281 fax

If the information requested above is not received within 45 days, your application will be considered incomplete and will be administratively closed.

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA11872C-0

Effective: 12/01/2016 Expires: 11/30/2017

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:

JOHN STEVENSON
(b) (6)
SCOTTSDALE, AZ (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. **This permit can be photocopied.**

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen[s] may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. **Trophy must have been taken during the 2013 hunting season.**

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

Braxton, Ailteas <ailteas_braxton@fws.gov>

Re: John W. Stevenson Elephant Import 2013

10 messages

Villavicencio, Jorge <jorge_villavicencio@fws.gov> Thu, Jul 20, 2017 at 8:21 AM
To: "Jack Atcheson (b) (6)
Cc: Ailteas Braxton <ailteas_braxton@fws.gov>

Dear Mr. Atcheson:

This permit was issued, signed and mailed out. It was mailed first class mail vis the U.S. Postal Service on July 6, 2017.

Respectfully,

Jorge (George) D. Villavicencio

_____
Jorge D. Villavicencio, J. D.
Supervisory Policy Specialist
U.S. Fish & Wildlife Service - Headquarters
Attn Division of Management Authority - Branch Of Permits
MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
703-358-2483 (Telephone)
703-358-2280 (Facsimile)
Jorge_Villavicencio@fws.gov

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On Thu, Jul 20, 2017 at 8:05 AM, Jack Atcheson (b) (6) > wrote:

> Hi George
>
> Could you let me know if this application was processed and sent on to Mr Stevenson. He has not seen the permit.
>
> Thanks for news.
>
> Jack
>
> Sent from my Verizon, Samsung Galaxy smartphone
>
> -------- Original message --------
> From: "Villavicencio, Jorge" <jorge_villavicencio@fws.gov>
> Date: 6/23/17 5:50 AM (GMT-07:00)
> To: "Jack Atcheson (b) (6)
> Subject: Re: John W. Stevenson Elephant Import 2013
>
> Dear Mr. Atcheson:
>
> Thank you for your inquiry. We received Ms. Stevenson's application to reissue his import permit on June 6, 2017. Unfortunately, we have been inundated with a large volume of applications. Applications are up by 1/3 so far this year.

I only received the application in my mailbox yesterday, Thursday June 22, 2017. Yesterday, I assigned it to a legal instruments examiner for re-issuance. These are relatively easy and should be turned around quickly. If you have any additional questions, please feel free to contact me.

Respectfully,

Jorge (George) D. Villavicencio
_____
Jorge D. Villavicencio, J. D.
Supervisory Policy Specialist
U.S. Fish & Wildlife Service - Headquarters
Attn Division of Management Authority - Branch Of Permits
MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
703-358-2483 (Telephone)
703-358-2280 (Facsimile)
Jorge_Villavicencio@fws.gov

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On Fri, Jun 23, 2017 at 7:37 AM, Jack Atcheson (b) (6) wrote:

Dear George,

I am presently in Namibia and touring MET wildlife Conservacys, I am seeing allot of game. There was a serious drought for three years but very good rains came this season. I am seeing many ungulate young of the year. Poaching hotline phone signs are everywhere, they offer $5000 rewards for information on poaching of rhino. We found tracks of a black rhino out side the Bushman reserve near Omaruru, Namibia. The reserve was searching with a small helicopter and planned to haze it back into the reserve property.

I some information, John (b) (6) Stevenson had sent an application for renewal of a import license that was sent to him last, your instructions for renewal were followed and the application was sent to you. Could you confirm the status of that application, John has had to renew export docs and has warehouse storage fees that continue to compound. That is in advance for news.

Regards

Jack Atcheson(b
)

Sent from my Verizon, Samsung Galaxy smartphone

-------- Original message --------
From: "Villavicencio, Jorge" <jorge_villavicencio@fws.gov>
Date: 5/22/17 11:36 AM (GMT+01:00)
To: "Jack Atcheson, (b) (6)
Subject: Re: John Stevenson Elephant Import 2013

Dear Mr. Atcheson:

In order to issue the replacement permit, the permittee must complete application form 3-200-66, http://www.fws.gov/forms/3-200-66.pdf, and the $50.00 non-refundable processing fee.

Additionally, pursuant to 50 CFR 23.52, the permittee must provide a signed, dated and notarized statement that:

A) Provides the CITES document number and describes the circumstances that resulted in the loss or destruction of the original CITES document,

B) States whether the shipment has already occurred,

C) Requests a replacement document, and

D) Promises to return the original document to this office should it ever reappear.

Respectfully,

Jorge (George) D. Villavicencio
_____
Jorge D. Villavicencio, J. D.
Supervisory Policy Specialist
U.S. Fish & Wildlife Service - Headquarters
Attn Division of Management Authority - Branch Of Permits
MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
703-358-2483 (Telephone)
703-358-2280 (Facsimile)
Jorge_Villavicencio@fws.gov

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On Fri, May 12, 2017 at 8:50 PM, Jack Atcheson (b) (6) wrote:

> Hi George,
>
> I got this email from John Stevenson and he had moved from the time of the application and sending of the permit. It appears the permit is lost, what is the process for a duplicate permit to be issued. I have cod John and his new address is attached,
>
> Regards
>
> Jack Atcheson(b
>)
>
> Sent from my Verizon, Samsung Galaxy smartphone
>
> -------- Original message --------
> From: John Wiggins (b) (6)
> Date: 5/12/17 4:09 PM (GMT-07:00)
> To: "Jack Atcheson, (b) (6)
> Subject: Re: John Stevenson Elephant Import 2013
>
> I moved to a new address

Lots of mail got lost

(b) (6)

Paradise Valley AZ (b) (6)

From: Jack Atcheson, (b) (6)
Sent: Friday, May 12, 2017 1:56 PM
To: John Wiggins
Subject: FW: John Stevenson Elephant Import 2013

John,

It looks like there was a permit issued and sent in Dec. It may have looked like junk mail or did not arrive. So I have asked about a duplicate. Stand by, what a tough critter to get imported!

Jack

From: Villavicencio, Jorge [mailto:jorge_villavicencio@fws.gov]
Sent: Friday, May 12, 2017 1:31 PM
To: Jack Atcheson, (b
Subject: Re: John Stevenson Elephant Import 2013

Dear Mr. Atcheson:

This looks like it might be file number 11872C. Our system shows that the permit was issued and sent out USPS, First Class mail on December 1, 2016.

Respectfully,

Jorge (George) D. Villavicencio

Jorge D. Villavicencio, J. D.

Supervisory Policy Specialist
U.S. Fish & Wildlife Service - Headquarters

Attn Division of Management Authority - Branch Of Permits
MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803

703-358-2483 (Telephone)

703-358-2280 (Facsimile)

Jorge_Villavicencio@fws.gov

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On Fri, May 12, 2017 at 1:54 PM, Jack Atcheson, (b) (6) > wrote:

George,

I have gotten the Zimbabwe Hunting License showing the harvest of the elephant as May, 13 2013. I trust this will work as proof of harvest date. Could you advise when the permit could be sent?

Thank you for you attention to this matter.

Jack Atcheson (b)

Sent from my Verizon, Samsung Galaxy smartphone

From: Villavicencio, Jorge [mailto:jorge_villavicencio@fws.gov]
Sent: Thursday, May 11, 2017 4:36 AM
To: (b) (6)
Subject: Re: John Stevenson Elephant Import 2013

Dear Mr. Atcheson:

What was the date of the take (MM/DD/YYYY)?

Respectfully,

Jorge (George) D. Villavicencio

Jorge D. Villavicencio, J. D.

Supervisory Policy Specialist
U.S. Fish & Wildlife Service - Headquarters

Attn Division of Management Authority - Branch Of Permits
MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803

703-358-2483 (Telephone)

703-358-2280 (Facsimile)

Jorge_Villavicencio@fws.gov

WARNING: The contents of this e-mail (including attachments) might be protected under the Privacy Act and intended only for the use of the individual(s) and/or entity(ies) named above. It may contain information that is priviledged, confidential, or otherwise protected by applicable law. If the recipient or reader of this e-mail is not the intended recipient, you are hereby notified that any dissemination, disclosure, copying or distribution of the contents of this e-mail message is strictly prohibited. If you have received this e-mail in error, please immediately notify the sender and destroy all copies without reading or disclosing their contents. Thank you.

On Wed, May 10, 2017 at 1:11 PM, (b) (6) > wrote:

George Villavicencio

Jorge_Villavicencio@fws.gov

Dear George,

I have a question regarding an import permit that John Stevenson sent last October. The import permit was for an elephant that he took in May of 2013 in the country of Zimbabwe. For unknown reasons, it took some time for the Zimbabwe Parks and Wildlife to release the trophy for export. CITES permits were issued for the export. Then the elephant export status changed for Zimbabwe. John filed an appendix I CITES and/or ESA application form in late October 2016. We need to understand what the status of his application is and what course of action needs to be taken. I am copying the letter to John Stevenson. Your guidance on this would be greatly appreciated.

Yours truly,

Jack Atcheson (b)

JA/mlg

(b) (6)

(b) (6)

Virus-free. www.avast.com

Jack Atcheson, (b) (6) Thu, Jul 20, 2017 at 8:55 AM
To: "Villavicencio, Jorge" <jorge_villavicencio@fws.gov>, John Stevenson (b) (6)
Cc: Ailteas Braxton <ailteas_braxton@fws.gov>

Hi John

It look like your permit was sent to you on July 6.

Jack Atcheson (b)
(b) (6)

From: Villavicencio, Jorge <jorge_villavicencio@fws.gov>
Sent: Thursday, July 20, 2017 6:21 AM
To: Jack Atcheson, (b)
Cc: Ailteas Braxton
[Quoted text hidden]

[Quoted text hidden]

Jack Atcheson, (b) (6) Thu, Jul 20, 2017 at 9:10 AM
To: "Villavicencio, Jorge" <jorge_villavicencio@fws.gov>, John Stevenson (b) (6)
Cc: Ailteas Braxton <ailteas_braxton@fws.gov>

George,

Can you confirm the address this permit was sent too. John Stevenson had changed his address, this replacement permit application listed his new address.

Jack Atcheson [redacted]

From: Jack Atcheson, [redacted]
Sent: Thursday, July 20, 2017 6:55 AM
To: Villavicencio, Jorge; John Stevenson
[Quoted text hidden]

[Quoted text hidden]

Braxton, Ailteas <ailteas_braxton@fws.gov> Thu, Jul 20, 2017 at 9:27 AM
To: "Villavicencio, Jorge" <jorge_villavicencio@fws.gov>

this permit was returned to our office last week. It looks like there is a problem with the address. It's been returned before. I will try and contact the applicant today, again.

Thank you for your patience

Ailteas Braxton
Legal Examiner
U.S. Fish and Wildlife Services
Division of Management Authority
ailteas_braxton@fws.gov
703 358-1978 direct dial
703 358-2281 fax

If the information requested above is not received within 45 days, your application will be considered incomplete and will be administratively closed.

[Quoted text hidden]

John Wiggins [redacted] Thu, Jul 20, 2017 at 1:05 PM
To: "Jack Atcheson [redacted]>, "Villavicencio, Jorge" <jorge_villavicencio@fws.gov>
Cc: Ailteas Braxton <ailteas_braxton@fws.gov>

[redacted]

Paradise Valley AZ [redacted]

is my current address

The (b) (6) address in Scottsdale is Obsolete

If it was sent there it will likely be returned

Thanks

John Stevenson

From: Jack Atcheson, (b) (6)
Sent: Thursday, July 20, 2017 5:55 AM
To: Villavicencio, Jorge; John Wiggins
[Quoted text hidden]

[Quoted text hidden]

Braxton, Ailteas <ailteas_braxton@fws.gov> Thu, Jul 20, 2017 at 2:22 PM
To: John Wiggins (b) (6) >
Cc: "Jack Atcheson, (b) (6) "Villavicencio, Jorge" <jorge_villavicencio@fws.gov>

Thank you. The address in the application, and where our office has been sending it to differs, by 1 digit in the zip code. I will make sure this goes out again in tomorrow's mail. Please alert me upon receipt.

Thank you for your patience

Ailteas Braxton
Legal Examiner
U.S. Fish and Wildlife Services
Division of Management Authority
ailteas_braxton@fws.gov
703 358-1978 direct dial
703 358-2281 fax

If the information requested above is not received within 45 days, your application will be considered incomplete and will be administratively closed.

[Quoted text hidden]

John Wiggins (b) (6) Thu, Jul 20, 2017 at 3:43 PM
To: "Braxton, Ailteas" <ailteas_braxton@fws.gov>
Cc: "Jack Atcheson, (b) (6) >, "Villavicencio, Jorge" <jorge_villavicencio@fws.gov>

Great

TY =)

John

From: Braxton, Ailteas <ailteas_braxton@fws.gov>
Sent: Thursday, July 20, 2017 11:22 AM
To: John Wiggins
Cc: Jack Atcheson, (b) Villavicencio, Jorge
[Quoted text hidden]

[Quoted text hidden]

John Wiggins (b) (6) Thu, Jul 20, 2017 at 8:37 PM
To: "Braxton, Ailteas" <ailteas_braxton@fws.gov>

Your voice mail box was full and I couldn't leave a message

Thanks for calling me though

John

From: Braxton, Ailteas <ailteas_braxton@fws.gov>
Sent: Thursday, July 20, 2017 11:22 AM
To: John Wiggins
Cc: Jack Atcheson, (b) Villavicencio, Jorge
[Quoted text hidden]

[Quoted text hidden]

Braxton, Ailteas <ailteas_braxton@fws.gov> Thu, Jul 20, 2017 at 9:17 PM
To: John Wiggins (b) (6) >

You are welcome

Thank you for your patience

Ailteas Braxton
Legal Examiner
U.S. Fish and Wildlife Services
Division of Management Authority
ailteas_braxton@fws.gov

703 358-1978 direct dial
703 358-2281 fax

If the information requested above is not received within 45 days, your application will be considered incomplete and will be administratively closed.

[Quoted text hidden]

Villavicencio, Jorge <jorge_villavicencio@fws.gov> Fri, Jul 21, 2017 at 9:51 AM
To: Ailteas Braxton <ailteas_braxton@fws.gov>

Ailteas:

I also found this file yesterday when pulling files for the volunteer to scan. SPITS shows that it was issued on 6/29/17. It was mailed 7/6/17, and tracked 7/14/17. I responded to Mr. Atcheson that it had been mailed 7/5/17. The application package still had the original permit that had not yet been mailed. I don't know why it was not mailed. However, the information in SPITS was incorrect that resulted in my giving bad information. I mailed it out yesterday.

You need to start mailing, tracking and scanning as the permits are signed and not mailing only on one day a week.

Respectfully,

Jorge (George) D. Villavicencio
_____
Jorge D. Villavicencio, J. D.
Supervisory Policy Specialist
U.S. Fish & Wildlife Service - Headquarters
Attn Division of Management Authority - Branch Of Permits
MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
703-358-2483 (Telephone)
703-358-2280 (Facsimile)
Jorge_Villavicencio@fws.gov

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---------- Forwarded message ----------
From: **John Wiggins** (b) (6) [redacted] >
Date: Thu, Jul 20, 2017 at 3:43 PM
Subject: Re: John W. Stevenson Elephant Import 2013
[Quoted text hidden]

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

FEB - 4 2002

MEMORANDUM

To: Chief, Division of Management Authority
From: Chief, Division of Scientific Authority
Subject: General advice for permit renewals and amendments

This general advice supersedes the memorandum on "Scientific Authority review of permit amendments and renewals" issued by our office (then Office of Scientific Authority) on February 14, 1983.

The Division of Management Authority (DMA) receives a large number of requests for renewals and amendments of CITES import and export permits, as well as Certificates of Scientific Exchange (COSE), for which the Division of Scientific Authority (DSA) has previously issued non-detriment findings.

In the case of permits for which DMA has used a general advice from DSA, we have determined that no additional advice from DSA will be necessary provided that the renewal or amendment request still meets the conditions contained in the general advice.

In the case of permits for which DSA has issued permit-specific non-detriment findings, no additional advice from DSA will be needed provided that the renewal or amendment request involves activities affecting the species in question in a way that was contemplated in our original advice. However, additional DSA advice will be needed when:

1) there is a change in sender or recipient;
2) there is a change in purpose of the activity (e.g., from display to captive breeding purposes in the case of live animals; from research to commercial purposes in the case of tissue

JUN - 6 2017

OMB No. 1018-0093
Expires 05/31/2017

Department of the Interior
U.S. Fish and Wildlife Service

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
(Enter address from Page 4 and 5 of application)

Type of Activity:
REPLACEMENT DOCUMENT
(CITES/ESA/MMPA/WBCA/LACEY ACT)

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Stevenson	John		

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	
(b) (6)			(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)		

2. Tax identification no.	3. Description of business, agency, Tribe, or institution		

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact		

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Paradise Valley	AZ	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
SAME AS ABOVE

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $50 nonrefundable processing fee.** Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☑ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: 11872C No ☐

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50,*** and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

John Stevenson — MAY 26 2017

Signature (**in blue ink**) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

E. REPLACEMENT DOCUMENT (CITES/ESA/MMPA/WBCA/LACEY ACT)

NOTE 1: Use this application to request a replacement document if your currently valid permit has been lost or misplaced (for this application, all permits, registrations, and certificates are referred to as a permit).

NOTE 2: The application **must** be submitted to the office that issued the initial permit.

Provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If needed, use a separate sheet of paper. On all attachments or separate sheets you submit, indicate the application question number you are addressing.

1. Identify the permit number (found in the upper right corner) of the permit needing replacement, if known:

   11872 C

2. Current location of specimen (include address and country):

   4 JOSIAH Chinamano Road, Belmont
   Bulawayo Zimbabwe

3. If the shipment has already occurred (i.e., the document was lost or damaged in transit), provide copies of:
   a. Cancelled CITES export or re-export document validated by OLE;
   b. For wildlife, cleared Declaration for Importation or Exportation of Fish or Wildlife (Form 3-177); **AND**
   c. Any correspondence you had with the shipper or importing country's Management Authority concerning the shipment.

   *Please be aware that if the permit was lost in transit, the issued permit will be forwarded to the Management Authority of the foreign country.

4. If the shipment has **not** occurred and the original permit no longer exists, submit a signed, dated, and notarized statement that:
   a. Refers to the permit number and describes the circumstances that resulted in the loss or destruction of the original permit;
   b. Includes a statement that affirms the shipment did not occur;
   c. You are requesting a replacement U.S. CITES permit;
   d. If found, the original permit will be returned to the Division of Management Authority.

5. If the shipment has **not** occurred and the original permit exists but has been damaged, submit the original damaged permit and a signed, dated, and notarized statement that:
   a. Describes the circumstances that resulted in the permit being damaged;
   b. Includes a statement that affirms the shipment did not occur;
   c. You are requesting a replacement U.S. CITES permit.

6. Address where you wish permit mailed (if different from page 1):

7. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 6. I understand that you will contact me for my credit card information once the application has been processed.

8. Who should we contact if we have questions about the application? (Include name, phone number, and email):

JOHN STEVENSON (b) (6)
(b) (6)
Paradise Valley AZ (b) (6)

9. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. [50 CFR 13.21(c)]. Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☒ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

Ref: Lost permit 11872C/John Stevenson

I am submitting a notarized statement, application form and fee and I am formally requesting a duplicate import permit for lost 11872C. George D. Villavicencio confirmed the original permit number was 11872C. The original is lost in US mail service. The trophy shipment is being held in Zimbabwe pending my receipt of a duplicate import permit. I guarantee if a original permit is received I will send the permit to the USFWS. Please note my new and address and send the replacement permit to;

John Stevenson 5/26/17

John Stevenson
(b) (6)
Paradise Valley AZ (b) (6)

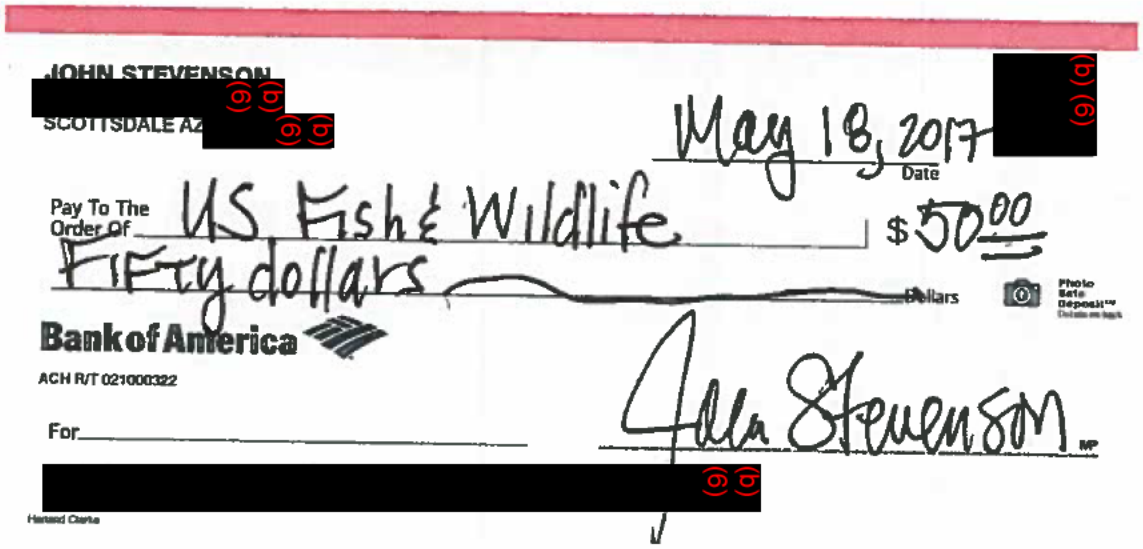
State: Arizona

County: (b) (6)

JONATHON ALFANO
Notary Public - State of Arizona
MARICOPA COUNTY
My Commission Expires
February 7, 2021

EXP: Feb, 7, 2021

5/26/17



JOHN STEVENSON
[redacted] (b) (6)
SCOTTSDALE AZ [redacted] (b) (6)

May 18, 2017
Date

[redacted] (b) (6)

Pay To The Order Of US Fish & Wildlife $ 50.00

Fifty dollars Dollars

Photo Safe Deposit™

Bank of America

ACH R/T 021000322

For

John Stevenson

[redacted] (b) (6)

Herald Clarke

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA11872C-1

Effective: 06/29/2017 Expires: 06/28/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:

JOHN STEVENSON
(b) (6)
PARADISE VALLEY, AZ (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

B. Specimen may not be sold or transferred for any financial remuneration.

C. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports

D. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. **This permit can be photocopied.**

E. Valid for use by permittee named above.

F. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. **Trophy must have been taken during the 2013 hunting season.**

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

RCVD NOV 7 2016

OMB No. 1018-0164
Expires 11/30/2016

Department of the Interior
U.S. Fish and Wildlife Service

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Smith	Michael	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)	
(b) (6)			
5.a. Telephone number	**5.b. Alternate telephone number**	**5.c. Fax number**	**5.d. E-mail address**
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)		
2. Tax identification no.	3. Description of business, agency, Tribe, or institution		
4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix
5. Principal officer title	6. Primary contact name		
7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Carthage	Texas	(b) (6)		U.S.A.

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE in the amount of $100, nonrefundable processing fee. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☒

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Michael Smith — 10-30-16

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: n/a (Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity: 1 (Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: n/a (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

N/A

b. Date wildlife is to be hunted:

N/A

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

N/A

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: (a) DEKA SAFARI AREA (MATABELELAND NORTH) / City - BULAWAYO
   (b) Date Hunted - 05/05/2014

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

   2 x TANNED EARS; 1 x TAIL WALL HANGING; 4 x FEET WASTE PAPER BINS; 6 x TANNED PANELS (USED FOR MAKE UP ITEMS); 2 x TUSKS ZW2014/25015 21Kgs & ZW2014/25016 22Kgs

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

   TROPHY CONSULTANTS INTERNATIONAL, 4 JOSIAH CHINAMANO ROAD, BELMONT, BULAWAYO, ZIMBABWE

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business	TROPHY CONSULTANTS INTERNATIONAL
Name: Address:	4 JOSIAH CHINAMANO ROAD
Address:	BELMONT
City:	BULAWAYO
State/Province:	
Country, Postal Code:	ZIMBABWE

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: Michael E. Smith Date: 10-30-16

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):
Michael (b) (6) Smith (b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

RCVD NOV 7 2016

MICHAEL (b) SMITH (b) (6) [redacted]

(b) (6) [redacted]

CARTHAGE, TX (b) (6) [redacted]

10-30-16
Date

Pay to the Order of U.S. Fish and Wildlife Service $ 100.00

One-hundred & 00/100 Dollars

Security Features Details on Back.

Panola National Bank
1510 West Panola St.
Carthage, Texas 75633

For Permit

Michael E. Smith MP

(b) (6) [redacted]

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA12038C-0

Effective: 02/22/2017 Expires: 02/21/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
MICHAEL (b) (6) **SMITH**
(b) (6)
CARTHAGE, TX (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

B. **Trophy must have been taken prior to May 12, 2014, during the 2014 hunting season.**

C. **Permittee must provide documentation demonstrating that this African elephant was taken on May 5, 2014.**

D. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

E. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

F. Valid for use by permittee named above.

G. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

H. Specimen may not be sold or transferred for any financial remuneration.

I. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

J. Based on enhancement finding of 1997. The 1997 enhancement finding is valid until May 12, 2014.

K. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

RCVD NOV 14 2016

LB

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Lobrano	Thomas	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
Centreville	MS	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country
Centreville	MS	(b) (6)		USA

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☒

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand (b) (6) any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 11/07/2016

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit**. If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: N/A (Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity: 1 (Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: N/A (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild: N/A

b. Date wildlife is to be hunted: N/A

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks). N/A

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: Gokwe Region, Midlands Provine, Zimbabwe
   b. Date wildlife was hunted: killed Tuesday, 06/14/2005
   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks): Tusks
      Feet (that have been made into 2 stools and 2 trashcans)
   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:
      5 Grantham Rd.
      Bulawayo, Zimbabwe

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business	Outbound Cargo and Trophy Exporters
Name: Address:	5 Grantham Rd.
Address:	
City:	Belmont
State/Province:	Bulawayo, Zimbabwe
Country, Postal Code:	tel. 09-881531-3
	FAX 09-881534

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: Thomas (b) (6) Lobrano Date: 11/07/2016

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

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10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

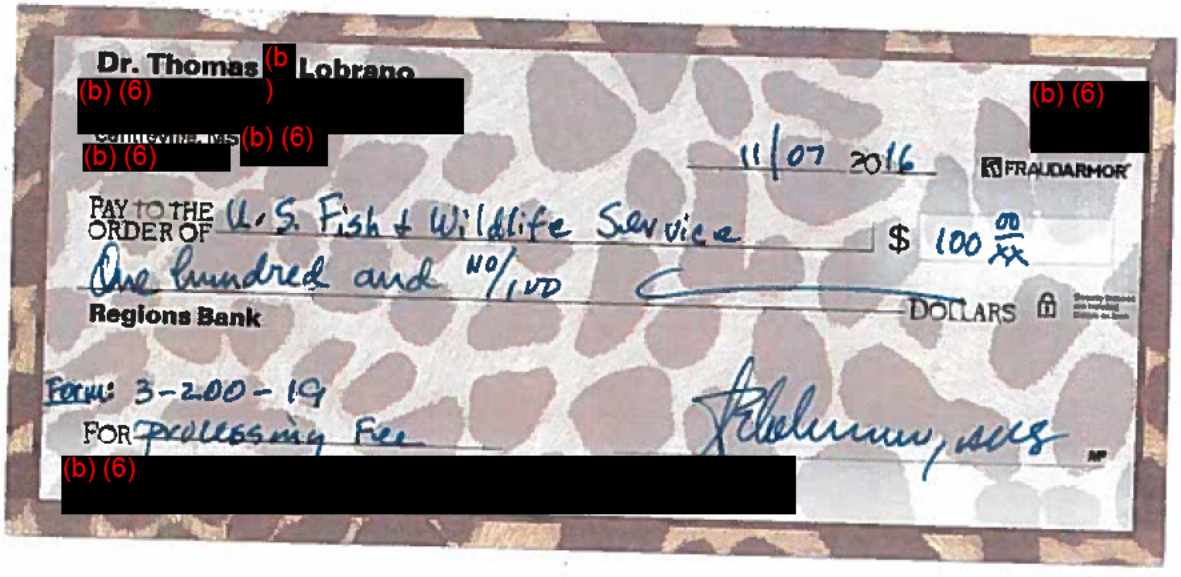
Thomas (b) (6) Lobrano; (b) (6) [redacted]

(b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☒ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

RCVD NOV 14 2016



Dr. Thomas (b) Lobrano
(b) (6)
(b) (6) (b) (6)
(b) (6)
11/07 2016
FRAUDARMOR
PAY TO THE ORDER OF U.S. Fish + Wildlife Service $ 100 00/xx
One hundred and no/100 DOLLARS
Regions Bank
Form: 3-200-19
FOR Processing Fee
(b) (6)

MacDonald, Tim <tim_macdonald@fws.gov>

Prt # 12331C

1 message

MacDonald, Tim <tim_macdonald@fws.gov> Fri, Dec 16, 2016 at 11:27 AM
To: t(b) (6)

Thomas,

Please provide a letter of explanation concerning why it has taken 12 years from the date of your hunt to apply for a import for this trophy. Please sign and date the letter of explanation and return the letter to me.

To help expedite this process you can email me a copy of the letter, and place the original document along with a copy of this email in the mail and send it to my attention using the address below.

Your application indicates you would like this permit to be sent by express delivery. I am unable to utilize charge card numbers. If you would like this service please provide me with a prepaid shipping, or Fedex account # so you can be directly billed.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

Interested in international conservation? Sign up for our e-newsletter! ***Sign up***

MacDonald, Tim <tim_macdonald@fws.gov>

Re: Prt # 12331C

1 message

Thomas Lobrano <(b) (6) [redacted]
To: "MacDonald, Tim" <tim_macdonald@fws.gov>

Mon, Dec 19, 2016 at 9:59 AM

As per your request, please find attached letter of explanation. I will sign the original and mail it today.

Thanks for your help,

Thomas (b) (6) Lobrano

From: MacDonald, Tim
Sent: Friday, December 16, 2016 10:27 AM
To: (b) (6) [redacted]
Subject: Prt # 12331C

Thomas,

Please provide a letter of explanation concerning why it has taken 12 years from the date of your hunt to apply for a import for this trophy. Please sign and date the letter of explanation and return the letter to me.

To help expedite this process you can email me a copy of the letter, and place the original document along with a copy of this email in the mail and send it to my attention using the address below.

Your application indicates you would like this permit to be sent by express delivery. I am unable to utilize charge card numbers. If you would like this service please provide me with a prepaid shipping, or Fedex account # so you can be directly billed.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

Interested in international conservation? Sign up for our e-newsletter! ***Sign up***

Elephant Permit Letter.docx
13K

THOMAS [redacted] LOBRANO
(b) (6) [redacted]
CENTREVILLE, MS (b) (6) [redacted]

Tim MacDonald
Legal Instrument Examiner
Division of Management Authority
Branch of Permits: MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

RE: Prt# 12331C

Dear Sir:

There are multiple reasons that it has taken 12 years from the date of my hunt to apply for a permit to import this trophy. I take responsibility for the bulk of the delay; because at one point in the aforementioned timeframe, I refused to pay what I believed to be exorbitant taxidermy and shipping fees and told them that I no longer wanted the items. Additionally, there were delays because of bickering and arguments between my two professional hunters, delays because of dealing with a third world country where everything moves at a snail's pace and delays because some of the items from the hunt were taken to multiple taxidermists and were either lost or misplaced and one of the taxidermists closed and went out of business.

The hunt of a lifetime that I had been planning for 18 months was nearly cancelled two weeks prior to the start. I received a call from my South African PH, Gordon Mace, that trouble was occurring in Zimbabwe and he had lost his concession. He later rescheduled the hunt by subcontracting through a Zimbabwean outfitter, Dudley Rogers of Tshabezi Safaris.

When the hunt was over, I had paid Gordon Mace nearly $55,000---mostly borrowed money! It was my understanding that all fees of both PHs was satisfied and all the dipping, packing, inspecting fees, etc. had been paid as well. I had expected the delay in shipping because of the taxidermy services and general nature of the way business progresses in Zimbabwe.

After a couple of years, I began asking Mr. Mace for updates on the progress of the shipment, etc. That created a series of arguments between the two PHs. Mr. Rogers claimed that Mr. Mace had not satisfied the bill for the hunt, etc. Once that was worked out, it was determined that some of the trophies were missing and one of the taxidermists had closed.

Eventually, they claimed to have everything ready and wanted me to send them nearly $15,000 for the taxidermy and tanning fees! And this was before the shipping fees were calculated! Simultaneously, I had 3 children in college or private high schools and had lost nearly a million dollars in the stock market! I was also skeptical as to whether all of the trophies were actually mine. That's when I refused to pay them and told them to keep the trophies.

After years of no correspondence regarding the issue I received an email from Tshabezi asking if I was interested in obtaining the trophies. They had put together a packing list including taxidermy fees and replacement items that had been lost or sold. They wanted over $11,000 for this. Apparently, they were "stuck" with my elephant tusks since they were registered in my name and nontransferable.

Finally, I wired Mr. Rogers $4720 in April of this year, 2016. Again, more delays, and I get an email from the shippers in October stating my need for an import permit---that was the first time I had ever heard of an elephant import permit.

I will forward you several emails to substantiate these correspondences and transactions.

In regard to express delivery of the permit, that will not be necessary. You can mail it in the usual and customary manner to my mailing address listed on the permit and at the top of this letter.

Thanks for your help,

Thomas E. Lobrano

MacDonald, Tim <tim_macdonald@fws.gov>

Fw: Elephant Shipment

1 message

Thomas Lobrano (b) (6) Mon, Dec 19, 2016 at 10:14 AM
To: Tim MacDonald <tim_macdonald@fws.gov>

Please read the following email threads.

From: outbound Info
Sent: Tuesday, October 18, 2016 5:58 AM
To: 'Thomas E. Lobrano, DDS'
Cc: 'Dudley Rogers'
Subject: RE: Elephant Shipment

Hello Thomas,

Herewith contact details below, Michael Lewis will be able to assist you

C/O PHARES TAXIDERMY

USA

C/O COPPERSMITH INC

760 BONNIE LANE
ELK GROVE VILLAGE, IL 60007

USA

TEL:

FAX:

EMAIL: **amy@pharestaxidermy.com / MLewis@coppersmith.com / jim@pharestaxidermy.com**

kindest regards,

Noma

MacDonald, Tim <tim_macdonald@fws.gov>

Fw: Trophy Shipment

1 message

Thomas Lobrano (b) (6) Mon, Dec 19, 2016 at 10:16 AM
To: Tim MacDonald <tim_macdonald@fws.gov>

More email threads.

From: Dudley Rogers
Sent: Friday, April 01, 2016 2:46 PM
To: Thomas E. Lobrano, DDS
Subject: Re: Trophy Shipment

Hello Tom,
I am sorry but it seems the shippers cannot open the crate as it was inspected and sealed by national parks inspector and they have to wait till they come back, so Im thinking to send you a photo of similar stands we are getting done and you can see the stunning carving done by the same people who carved yours. Will send it in the next couple days. Yes they are 100% your tusks as it is illegal to change them and the measurements and numbers are all registered in your name. I will get back to you with pics asap. Please send me the items you want so we can work it all out. Thanks.
Cheers Dudley

On 3/31/2016 3:28 PM, Thomas (b) (6) Lobrano, DDS wrote:

> Haven't heard from you since I emailed you last which stated: I have decided which items that I would like to receive, and 2 questions : are the elephant tusks from the elephant I killed?? And, have you been able to obtain digital pictures??
>
> Thanks,
>
> Thomas Lobrano
>
> Sent from my iPad
>
> On Mar 7, 2016, at 1:13 PM, Dudley Rogers mailto:(b) (6) wrote:
>
> HI Tom
> The tusks were mounted on the bases before you decided to take them back, so we have that money tied up in the set of ivory. It is not miscommunication as we never discussed it. I will see if they will allow us to unpack the crate to get the photos for you but we will still need to retain our charge.
> Re replacements... the skins from your elephant etc which were at the taxidermist for tanning were kept by the taxidermist to cover their costs when you gave up your trophies so we have "replaced" all the skins being elephant, zebra and hippo and it is all tanned. You said you did not want replacement skins but we have given you the option of taking them if you want. We do not have your buffalo horns or your croc skin, so we are sending our own over to cover for lost items with other guys.
> Yes you can pay for anything you want according to the prices on the packing list, or deduct it from total. We have not put a charge against the hippo tusks because those are yours from the hunt.
> We have a taxidermist who is licensed to receive it all in Indiana and will ship what you want to you right away and will check the weights of the extra stuff and credit you for that.
> Anyway work out what you want and let me know and we will make it work.
> Cheers Dudley

On 3/7/2016 7:55 PM, Thomas (b) Lobrano, DDS wrote:
Hey Dudley,

Good to here from you. There seems to have been a bit of miscommunication on the mounting of the elephant tusks. I had planned to have them mounted in the US. However, I definitely still want them. Please send me digital pictures of them in order that I can determine if the current mount is acceptable.

Also, in your note, I'm somewhat confused on what you are referring to as "replacements." I don't understand what you're calling "replacements."

And finally, if I understand you correctly, once I decide what I want from the packing list, I can deduct the cost of the items that I don't want from the total mentioned previously.

Looking forward to seeing the pictures of the mounted tusks. In the meantime I'll check with a taxidermist to ship the products to.

Sincerely,

Thomas Lobrano

Sent from my iPad

> On Mar 7, 2016, at 10:13 AM, Dudley Rogers (b) (6) wrote:
>
> Hello Tom,
> Hope this finds you well.
> We need to get this shipment moving as soon as possible as the shippers are getting rather concerned and want it off their floor. We will need to send the crate to a taxidermist that we know in the USA who will reconstitute the crate and send you what you want on the shipping list from the following items....
> Tusks on three tier Ironwood bases ...
> All Elephant skin, feet and tail. and replacement costs.
> Hippo Tusks plus all hippo skin, and feet and replacements
> Zebra Skin replacement and tanning cost.
> Plus storage and admin cost.
> This totals to $11,494.00.
> You did indicate that you only wanted your mounted ivory and no replacements but we are sending it all and you will only need to pay for what hide etc you want and we will use what you do not want.
> Please check the packing list and let me know what you want and I will send you banking details to send the money and then the shippers will contact you re shipping cost. I hope this is in order with you and I know you will be delighted with the mounted ivory.
> I look forward to hearing from you as soon as possible.
> Cheers Dudley
> <THOMAS LOBRANO Invoice for products 2016.xls>

MacDonald, Tim <tim_macdonald@fws.gov>

Fw: Bases

1 message

Thomas Lobrano (b) (6) Mon, Dec 19, 2016 at 10:19 AM
To: Tim MacDonald <tim_macdonald@fws.gov>

More email threads.

From: Tshabezi Safaris (DHR)
Sent: Monday, May 02, 2016 2:54 PM
To: Thomas E. Lobrano DDS
Subject: Re: Bases

Hi Tom, all is in order, there are some inspections by Parks that have to be done and the shippers have instructions to contact you as soon as docs are ready. I will call them and tell them to contact you so you know all is well.
These things take a while sometimes, but I am glad is all ready to go.
Cheers Dudley

On May 2, 2016 9:41 PM, "Thomas (b) Lobrano, (b) (6) wrote:

Hello Dudley,

We're coming up on a month since I transferred the money to you and I've not heard a word from either the shippers or Phares Taxidermy.
Please check into the situation and let me know what is going on.

Thanks,

Thomas

Sent from my iPad

On Apr 6, 2016, at 2:38 AM, Dudley Rogers (b) (6) wrote:

Hello Tom,
Tess confirmed the arrival of the cash with the bank. Thank you very much. Will be in touch.
Cheers Dudley

On 4/5/2016 11:13 PM, Thoma (b) Lobrano (b) wrote:

The money has been transferred as per your instructions. Please acknowledge receipt and advise accordingly.

Thanks,

Thomas

Sent from my iPad

On Apr 5, 2016, at 3:17 AM, Dudley Rogers (b) (6) wrote:

Hi Tom,
All is ok except the croc skin which is not your croc. We can in fact buy another skin for you and send it in the crate but yours was left at the taxidermist which has now closed down and the guy has left. Let me know if you want another croc skin and I will look out for one and let you know, but I need to know urgently so I can see if I can get one and what it will cost.

Re the other items... All is fine and you just have to add the $200 for the 4 replacement fee, plus storage of the ivory and admin fee of $920 and dip and pack of $500 which is half the fee. The total of everything is $4,720.
The crate will be directed through Phares Taxidermy in Indiana and they will take out all items you do not want and send your stuff to you right away. You will get some refund on the other stuff once it is at Phares Taxidermy.
The shippers will contact you re shipping costs etc.
Please can you do a transfer to us for the $4720 to the following account below. Thanks.
Cheers Dudley

Standard Chartered Bank
Blue jacket Street Branch
Francistown Botswana.
Branch code 661767
Swift Code SCHBBWGX
Acc Name Dudley H. Rogers
Acc No 8740036938600

Address. Plot 1482 Boatle
Ramotswa, Gabarone
Botswana

On 4/5/2016 12:41 AM, Thomas Lobrano wrote:

> Hey Dudley,
>
> Please find attached list with "Yes" written beside the items that I would like to have.
>
> Thanks,
>
> Thomas
>
> -----Original Message----- From: Dudley Rogers
> Sent: Monday, April 04, 2016 1:42 PM
> To: Thomas (b) (6) Lobrano,
> Subject: Bases
>
> Hello Tom,
> herewith a base carved by the same guy.. Need another coat of polish.
> Please send us the list of stuff you want so we can get the stuff shipped.
> Cheers Dudley

OUT BOUND
Cargo & Trophy
EXPORTERS

Outbound Cargo and Trophy Exporters

5 Grantham Road

Belmont

Bulawayo

Tel: 09 881531-3

Fax: 09 881534

info@outboundexports.com

http://www.facebook.com/pages/Outbound-Cargo-Trophy-Exporters/236856663047243#

From: Thomas (b) Lobrano, (b) (6) [redacted]
Sent: 18 October, 2016 12:40
To: outbound Info
Cc: Dudley Rogers
Subject: Re: Elephant Shipment

I assume Coppersmith will be agent because they are listed on the shipping destination. However, I have no contact information for them or Phares Taxidermy. This has been arranged by Mr. Dudley Rogers.

I'm realty not familiar with what an elephant permit is nor how to obtain one. Please advise so that I can get the process started.

Thanks,

Thomas (b) (6) Lobrano

Sent from my iPad

On Oct 18, 2016, at 1:05 AM, outbound Info <info@outboundexports.com> wrote:

> Hello Thomas,
>
> I believe you have to apply for the import permit as the elephant is yours, please contact your clearing agent for assistance. You will be using Coppersmith yes?
>
> *kindest regards,*
>
> Noma
>
> *<image001.jpg>*
>
> ***Outbound Cargo and Trophy Exporters***
>
> ***5 Grantham Road***
>
> ***Belmont***
>
> ***Bulawayo***
>
> ***Tel: 09 881531-3***
>
> ***Fax: 09 881534***
>
> **info@outboundexports.com**
>
> <image002.jpg>
>
> http://www.facebook.com/pages/Outbound-Cargo-Trophy-Exporters/236856663047243#

From: Thomas E. Lobrano, (b) (6) [redacted]
Sent: 17 October, 2016 17:09
To: outbound Info
Subject: Re: Elephant Shipment

No... I was not aware of that. I assumed that the taxidermist, Phares Taxidermy, was handling all necessary permits,etc.

Sent from my iPad

On Oct 17, 2016, at 5:53 AM, outbound Info <info@outboundexports.com> wrote:

> Hello Thomas,
>
> Many thanks for your prompt response, are you aware you now need to apply for a import permit for the elephant?
>
> *kindest regards,*
>
> Noma
>
> *<image001.jpg>*
>
> ***Outbound Cargo and Trophy Exporters***
>
> ***5 Grantham Road***
>
> ***Belmont***
>
> ***Bulawayo***
>
> ***Tel: 09 881531-3***
>
> ***Fax: 09 881534***
>
> **info@outboundexports.com**
>
> <image002.jpg>
>
> http://www.facebook.com/pages/Outbound-Cargo-Trophy-Exporters/236856663047243#

From: Thomas E. Lobrano (b) (6)
Sent: 17 October, 2016 12:48
To: outbound Info
Subject: Re: Elephant Shipment

Yes, that home address for me is still correct.

Thanks,

Thomas (b) (6) Lobrano

Sent from my iPad

On Oct 17, 2016, at 2:44 AM, outbound Info <info@outboundexports.com> wrote:

<image001.gif>

Hello Thomas,

We have been advised by Tshabezi that we can now send your elephant shipment. Please kindly advise if shipping instructions and home address details are still correct as follows:-

THOMA (b) (6) LOBRANO

(b) (6)

CENTREVILLE

MS (b) (6)

USA

SHIPPING ADDRESS: THOMAS (b) LOBRANO

C/O PHARES TAXIDERMY

C/O COPPERSMITH INC

760 BONNIE LANE
ELK GROVE VILLAGE, IL 60007

USA

kindest regards,

Noma

<image005.jpg>

Outbound Cargo and Trophy Exporters

5 Grantham Road

Belmont

Bulawayo

Tel: 09 881531-3

Fax: 09 881534

info@outboundexports.com

http://www.facebook.com/pages/Outbound-Cargo-Trophy-Exporters/236856663047243#

From: MacDonald, Tim tim_macdonald@fws.gov
Subject: Prt # 12331C
Date: Dec 16, 2016, 10:28:11 AM
To: (b) (6) [redacted]

RCVD DEC 27 2016 LB

Thomas,

Please provide a letter of explanation concerning why it has taken 12 years from the date of your hunt to apply for a import for this trophy. Please sign and date the letter of explanation and return the letter to me.

To help expedite this process you can email me a copy of the letter, and place the original document along with a copy of this email in the mail and send it to my attention using the address below.

Your application indicates you would like this permit to be sent by express delivery. I am unable to utilize charge card numbers. If you would like this service please provide me with a prepaid shipping, or Fedex account # so you can be directly billed.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

THOMAS (b) LOBRANO
(b) (6)
CENTREVILLE, MS (b) (6)

Tim MacDonald
Legal Instrument Examiner
Division of Management Authority
Branch of Permits: MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

RE: Prt# 12331C

Dear Sir:

There are multiple reasons that it has taken 12 years from the date of my hunt to apply for a permit to import this trophy. I take responsibility for the bulk of the delay; because at one point in the aforementioned timeframe, I refused to pay what I believed to be exorbitant taxidermy and shipping fees and told them that I no longer wanted the items. Additionally, there were delays because of bickering and arguments between my two professional hunters, delays because of dealing with a third world country where everything moves at a snail's pace and delays because some of the items from the hunt were taken to multiple taxidermists and were either lost or misplaced and one of the taxidermists closed and went out of business.

The hunt of a lifetime that I had been planning for 18 months was nearly cancelled two weeks prior to the start. I received a call from my South African PH, Gordon Mace, that trouble was occurring in Zimbabwe and he had lost his concession. He later rescheduled the hunt by subcontracting through a Zimbabwean outfitter, Dudley Rogers of Tshabezi Safaris.

When the hunt was over, I had paid Gordon Mace nearly $55,000---mostly borrowed money! It was my understanding that all fees of both PHs was satisfied and all the dipping, packing, inspecting fees, etc. had been paid as well. I had expected the delay in shipping because of the taxidermy services and general nature of the way business progresses in Zimbabwe.

After a couple of years, I began asking Mr. Mace for updates on the progress of the shipment, etc. That created a series of arguments between the two PHs. Mr. Rogers claimed that Mr. Mace had not satisfied the bill for the hunt, etc. Once that was worked out, it was determined that some of the trophies were missing and one of the taxidermists had closed.

Eventually, they claimed to have everything ready and wanted me to send them nearly $15,000 for the taxidermy and tanning fees! And this was before the shipping fees were calculated! Simultaneously, I had 3 children in college or private high schools and had lost nearly a million dollars in the stock market! I was also skeptical as to whether all of the trophies were actually mine. That's when I refused to pay them and told them to keep the trophies.

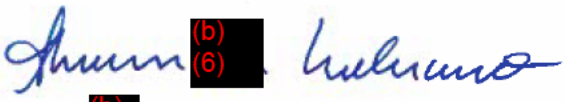
After years of no correspondence regarding the issue I received an email from Tshabezi asking if I was interested in obtaining the trophies. They had put together a packing list including taxidermy fees and replacement items that had been lost or sold. They wanted over $11,000 for this. Apparently, they were "stuck" with my elephant tusks since they were registered in my name and nontransferable.

Finally, I wired Mr. Rogers $4720 in April of this year, 2016. Again, more delays, and I get an email from the shippers in October stating my need for an import permit---that was the first time I had ever heard of an elephant import permit.

I will forward you several emails to substantiate these correspondences and transactions.

In regard to express delivery of the permit, that will not be necessary. You can mail it in the usual and customary manner to my mailing address listed on the permit and at the top of this letter.

Thanks for your help,



Thoma(b)(6) Lobrano

MacDonald, Tim <tim_macdonald@fws.gov>

Prt # 12331C

1 message

MacDonald, Tim <tim_macdonald@fws.gov> Wed, Jan 18, 2017 at 11:31 AM
To: (b) (6)

Thomas,

My apologies for the delay in my response. The only animal that will require an import permit is the elephant, the other items need export permits from the country of origin.

What you are requesting to import from the elephant changes between the documents you have provided. On your application you are saying you want to import tusks, 2 stools, and 2 trash cans. I other portions you have mentioned the elephants tail.

Finally, the tusks are problematic based upon the condition the tusks are in. If the tusks are not worked they can be imported, however worked (carved) ivory cannot be imported. I had to go to our law enforcement office to find out if it is possible for the tusks to be imported if they are carved. I was told no.

It is still possible to import the 2 stools and 2 trash cans. If you can send me a list of the elephant items you would like to import I can amend the application to correctly identify the items. Please clarify if the tusks have been carved. It is possible for me to remove the tusks from the application so you can at least get some of your trophy items.

The letter of explanation you have provided is adequate.

Please feel free to contact me if I have written anything that is confusing.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

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MacDonald, Tim <tim_macdonald@fws.gov>

Re: Prt # 12331C

1 message

Thomas Lobrano (b) (6) Wed, Jan 18, 2017 at 12:29 PM
To: "MacDonald, Tim" <tim_macdonald@fws.gov>

Dear Tim,

Thanks for your prompt response to my phone message. However, it appears that you are a bit confused about several things.

First, and foremost, the elephant tusks have not been carved. Please refer to previous email threads and attached invoice. The wooded bases that the tusks will be mounted on have been carved, but not the tusks. I sent you an email that shows two pictures of the carved wooded bases. But to be perfectly clear, **the tusks have not been carved!**

Secondly, the only mention of a tail was in an email thread from Dudley Rogers. I never stated that I planned to import the tail. Please find an attached invoice from Tshabezi Safaris. It not only lists the tail, but also ears, skin panels, etc. The items marked YES in the left hand column are the only products that I have paid for and am trying to import. From the elephant are: the ivory set, elephant foot dustbins and 2 elephant foot stools. The carved 3 tier bases are wood, not elephant. (I will provide pictures again if you need me too). I **am not** planning to import tail, ears, skin panels---only the items marked YES on the invoice and listed on the permit application.

Finally, I believe the application to be truthful and in order as it stands with no need for amendments. If you need any other information please call. My office phone is : (b) (6) or my cell phone number is: (b) (6).

Thanks for your help,

Thomas (b) (6) Lobrano

From: MacDonald, Tim
Sent: Wednesday, January 18, 2017 10:31 AM
To: (b) (6)
Subject: Prt # 12331C

Thomas,

My apologies for the delay in my response. The only animal that will require an import permit is the elephant, the other items need export permits from the country of origin.

What you are requesting to import from the elephant changes between the documents you have provided. On your application you are saying you want to import tusks, 2 stools, and 2 trash cans. I other portions you have mentioned the elephants tail.

Finally, the tusks are problematic based upon the condition the tusks are in. If the tusks are not worked they can be imported, however worked (carved) ivory cannot be imported. I had to go to our law enforcement office to find out if it is possible for the tusks to be imported if they are carved. I was told no.

It is still possible to import the 2 stools and 2 trash cans. If you can send me a list of the elephant items you would like to import I can amend the application to correctly identify the items. Please clarify if the tusks have been carved. It is possible for me to remove the tusks from the application so you can at least get some of your trophy items.

The letter of explanation you have provided is adequate.

Please feel free to contact me if I have written anything that is confusing.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
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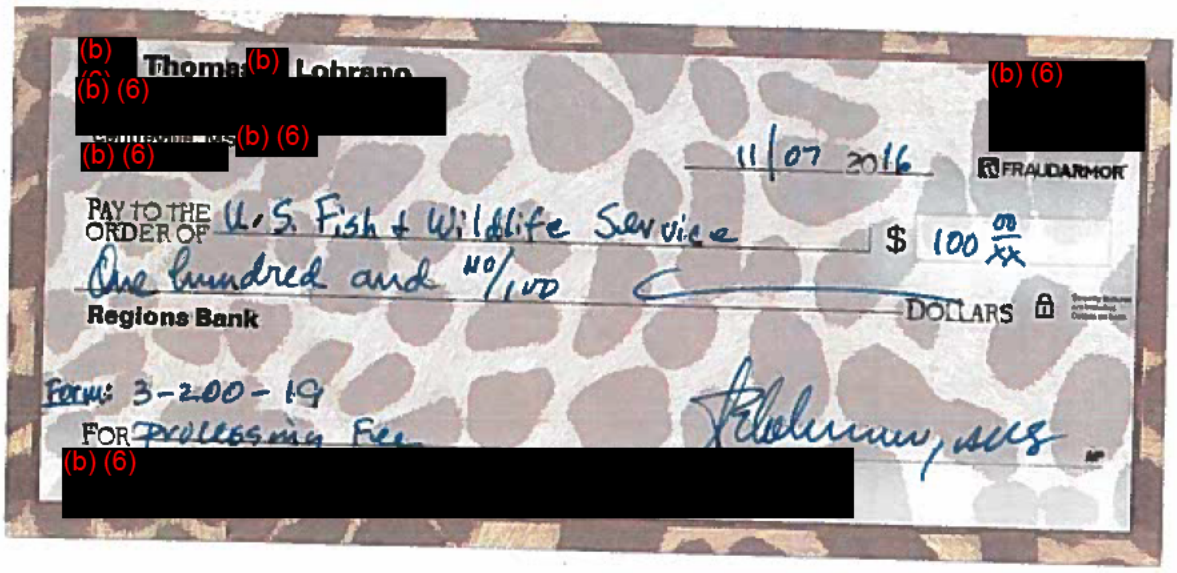
Tshabezi List.pdf
719K

RCVD NOV 14 2016



ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA12331C-0

Effective: 02/02/2017 Expires: 02/01/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

Mary Coglianese
FOR
CHIEF, BRANCH OF PERMITS, DMA

Permittee:
THOMAS (b) (6) LOBRANO
(b) (6)
CENTREVILLE, MS (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. **Trophy must have been taken during the 2005 hunting season.**

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

MacDonald, Tim <tim_macdonald@fws.gov>

Prt # 12331C

1 message

MacDonald, Tim <tim_macdonald@fws.gov> Thu, May 11, 2017 at 2:28 PM
To: Thomas Lobrano (b) (6)

Thomas,

All requests for amendment of permits must be mailed into this office with a completed 3-200-52. You will need to include the original permit and a check for the amendment.

To date, I have not received these documents, therefore I cannot open the file for amendment.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

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MacDonald, Tim <tim_macdonald@fws.gov>

Re: Prt #12331C

1 message

MacDonald, Tim <tim_macdonald@fws.gov> Thu, May 11, 2017 at 9:42 AM
To: "Thomas (b) Lobrano, (b) (6) [redacted]>

Thomas,

Your permit was mailed out on February 3, 2017. It was sent using the US Postal Service, when we use the US Post office we can only assume that you have received the permit, therefore if the permit is missing you will need to complete application form 3-200-66 for a duplicate permit.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

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On Thu, May 11, 2017 at 8:31 AM, Thomas (b) Lobrano (b) (6) [redacted]> wrote:

> Hello Tim,
>
> Can you give me an update on the amended permit? It's been slightly over 3 months since I returned the original permit to have it amended.
>
> Thanks,
>
> Thomas (b) Lobrano
>
> Sent from my iPad
>
> On Feb 7, 2017, at 2:15 PM, MacDonald, Tim <tim_macdonald@fws.gov> wrote:
>
> > Thomas,
> >
> > It takes us forever to process refunds. Put in a check for $50 or it if your really concerned put in two checks for $50 and we can return the check if it is not needed.
> >
> > (If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)
> >
> > Thank you,
> >
> > **Tim Mac Donald**

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

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On Tue, Feb 7, 2017 at 2:52 PM, (b) (6) t> wrote:

> Thanks Tim, but if I understand the situation correctly, all of the products have been inspected, permitted and packaged by the Zimbabwean officials. And, to break into subparts would require “more cost on repacking, new permits (from Zimbabwe) and a whole lot longer to ship.”
>
> I’ve waited this long, I can wait a little longer! Hope I don’t die of old age before this is completed!!!
>
> I’ll just attach a check for $100.00. If that is too much, I will gladly accept a refund!
>
> Thanks again,
>
> Thomas (b) Lobrano
>
> **From:** MacDonald, Tim
> **Sent:** Tuesday, February 07, 2017 1:26 PM
> **To:** Thomas Lobrano
> **Subject:** Re: Prt #12331C
>
> Thomas,
>
> Yes, you are correct there is a fee. I believe the fee is the same for an additional permit, in this case. By creating an additional permit you could send out what is completed and not delay the entire shipment waiting for the amendment.
>
> (If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)
>
> Thank you,
>
> **Tim Mac Donald**
>
> **Legal Instrument Examiner**
> **Division of Management Authority**
> **Branch of Permits; MS: IA**
> US Fish and Wildlife Service
> 5275 Leesburg Pike
> Falls Church, VA 22041-3805
>
> (w) 703-358-2256
> (F) 703-358-2280
>
> Interested in international conservation? Sign up for our e-newsletter! ***Sign up***
>
> On Tue, Feb 7, 2017 at 2:23 PM, (b) (6) wrote:
>
> > Hey Tim,

In reviewing form 3-200-52, am I correct in surmising that the amendment fee is $50.00? (The instructions stated to contact the issuing office for further information.)

Thanks,

Thomas (b) (6) Lobrano

From: MacDonald, Tim
Sent: Tuesday, February 07, 2017 11:13 AM
To: Thomas (b) (6) Lobrano, (b) (6)
Subject: Re: Prt #12331C

Thomas,

You have two choices on how to proceed.

You can file for an amendment using application form 3-200-52.
or

The other option is file for a new permit for the objects that you are wanting to add to the existing permit.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

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On Tue, Feb 7, 2017 at 12:01 PM, Thomas (b) (6) Lobrano, (b) (6) [redacted] > wrote:

> Hello Tim,
>
> The permit arrived in the mail today! Please advise me as to how I submit an amendment application.
>
> Thanks for your help,
>
> Thomas
>
> Sent from my iPad
>
> On Feb 7, 2017, at 10:14 AM, MacDonald, Tim <tim_macdonald@fws.gov> wrote:
>
> > Thomas,
> >
> > I issued the permit on Feb. 2nd and placed it in the US mail on Feb 3rd. We are unable to amend your permit without you submitting an amendment application, or you may apply for a new permit for the new items

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

Interested in international conservation? Sign up for our e-newsletter! ***Sign up***

On Mon, Feb 6, 2017 at 9:38 PM, Thomas Lobrano (b) (6) wrote:

> Dear Tim,
>
> I received a call from Dudley Rogers today. He is in the United States visiting and attending some outfitters meetings and shows. We had a discussion regarding the other elephant products that were on the packing list. We have now come upon an agreement wherein I would like to receive all of the elephant products he is offering.
>
> Therefore, I would like to amend my application to receive all of the elephant products that are listed on the attached list. Please advise if there are further requirements for me to accomplish this change of status.
>
> Thanks,
>
> Thomas (b) Lobrano

Virus-free. www.avast.com

Virus-free. www.avast.com

(b) (6) [redacted]

From: "MacDonald, Tim" <tim_macdonald@fws.gov>
Date: Tuesday, February 07, 2017 2:15 PM
To: "Thomas Lobrano" (b) (6) [redacted]
Subject: Re: Prt #12331C

MAY 16 2017

Thomas,

It takes us forever to process refunds. Put in a check for $50 or it if your really concerned put in two checks for $50 and we can return the check if it is not needed.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

Interested in international conservation? Sign up for our e-newsletter! ***Sign up***

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA12331C-0
Effective: 02/02/2017 Expires: 02/01/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

Mary Cogliano
FOR
CHIEF, BRANCH OF PERMITS, DMA

Permittee:
THOMAS (b) (6) LOBRANO
(b) (6)
CENTREVILLE, MS (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. **Trophy must have been taken during the 2005 hunting season.**

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0093
Expires 05/31/2017

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
(Enter address from pages 5 and 6 of application)

Type of Activity:
REISSUANCE, RENEWAL, OR AMENDMENT OF A PERMIT
(For this application, all permits, registrations, and certificates are referred to as a permit.)

Complete Sections A or B, C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Lobrano	Thomas	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			N/A

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; P.O. Boxes)				
(b) (6)				
1.b. City	**1.c. State**	**1.d. Zip code/Postal code:**	**1.e. County/Province**	**1.f. Country**
Centreville	MS	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of person if applicable)				
(b) (6)				
2.b. City	**2.c. State**	**2.d. Zip code/Postal code:**	**2.e. County/Province**	**2.f. Country**
Centreville	MS	(b) (6)		USA

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount indicated on pages 6 and 7.** Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes [X] If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: MA12331C-0 No [ ]

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature (**in blue ink**) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 02/07/2017

(b) (6)

05/12/2017

E. REISSUANCE, RENEWAL, OR AMENDMENT OF A PERMIT (For this application, all permits, registrations, and certificates are referred to as a permit.)

NOTE 1: If you are renewing your Designated Port Exemption permit, use form 3-200-2 (http://www.fws.gov/forms/3-200-2.pdf) and submit to appropriate Office of Law Enforcement address. If you are renewing your Import/Export license (required for commercial activities), use form 3-200-3 (http://www.fws.gov/forms/3-200-3.pdf) and submit to appropriate Office of Law Enforcement address.

NOTE 2: This form **cannot** be used for lost or damaged permit. If you need to replace a lost or damaged permit, please use form 3-200-66, http://www.fws.gov/international/pdf/permit-application-form-3-200-66-replacement-document.pdf. The application **must** be submitted to the office that issued the initial permit. Lost or damaged permit

NOTE 3: Some activities, such as all master files for multiple shipments, Certificate of Scientific Exchange (COSE), circus/traveling exhibits, and artificially propagated plants, can only be re-issued, renewed, or amended by submitting a new application for permits for those activities. Please refer to http://www.fws.gov/international/permits/by-form-number/index.html to determine if another application form would be more appropriate or contact the Division of Management Authority for more information.

1. **Permit number.** Enter the permit number to be reissued/renewed/amend MA123316-0

2. Submit the original permit with this application.

3. **Past activities.**
   a. Provide copies of all cleared documents and form 3-177 (FWS declaration of wildlife) associated with this permit. N/A
   b. Provide a summary detailing activities conducted under this permit, as well as a brief statement of why you are seeking reissuance/renewal.

4. **Annual Report**. If required by your permit, provide an annual report as conditioned (Please disregard if you have already submitted your annual report.) N/A

5. **Sport-hunted trophies:** If you did not hunt during the hunting season stated in your original application, you are not eligible for a renewal. Please submit a new application form. N/A

6. **Certification** - Complete one of the statements below and supply any additional documentation requested: (original signature is required)

   a. For **NO CHANGES** to original application:

   I certify that the information submitted in support of my original application for the permit indicated above has not changed and is still currently correct. I hereby request reissuance or renewal of this permit.

   Permittee's signature: _____ Date: _____

   b. For **CHANGES** to original application:

   On an attached page(s), provide a complete description of any changes (e.g., change in principal officer, personnel, address, location of activities, types of activities). Please sign each attached page. Also note that we need to request additional information regarding the changes after reviewing your initial request.

   I certify that the information submitted in support of my original application for the permit indicated above is still currently correct EXCEPT for the changes noted on the attached, signed page(s). I hereby request re-issuance or renewal of this permit with the indicated changes.

   Permittee's signature: [signature] (b) (6) Date: 02/07/2017

   [signature] 05/12/2017

7. All international shipment(s) must be through a designated port, unless otherwise authorized. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact either the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2) or the Division of Management Authority.

8. Name and address where you wish the permit to be mailed, **if** different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

   Thomas (b) Lobrano
   (b) (6)
   Centreville, MS (b) (6)

9. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

   ☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 8. I understand that you will contact me for my credit card information once the application has been processed.

Ammendment to Permit MA12331C-0

I would now like to receive all of the Elephant products listed on the attached Invoice from Tshabezi Safaris.

Thanks,

Shaman [redacted] (b) (6). Lobrena
02/07/2017

Shaman [redacted] (b) (6) Lobrena
05/12/2017

P. O. Box 45
West Nicholson
Zimbabwe
Tel: 263 [illegible]
Fax: 263 [illegible]
[illegible]@gmail.com

INV

Name	THOMAS LOBRANO
Date	1-Sep-14

Quantity	Description	Unit Price	Amount
	Elephant		
1	ivory set	0	$0.00
17.75	sqft tanned Elephant Skin panel	15	$266.25
24.25	sqft tanned Elephant Skin panel	15	$363.75
25	sqft tanned Elephant Skin panel	15	$375.00
35.75	sqft tanned Elephant Skin panel	15	$536.25
31	sqft tanned Elephant Skin panel	15	$465.00
21.5	sqft tanned Elephant Skin panel	15	$322.50
15.75	sqft tanned Elephant Headskin	15	$236.25
12	sqft tanned Elephant Trunk	15	$180.00
14	Outter Ear	15	$210.00
14	Outter Ear	15	$210.00
11	Inner Ear	15	$165.00
7.5	Inner Ear	15	$112.50
1	Tail	$150.00	$150.00
1	Set carved 3 teir bases + mounting (wooden bases)	2000	$2,000.00
2	Elephant foot Dustbins	350	$700.00
2	Elephant foot Stools	450	$900.00
4	Elephant foot replacements	50	$200.00
	Hippo		
14.5	sqft tanned Hippo skin panel	18	$261.00
12	sqft tanned Hippo skin panel	18	$216.00
12.75	sqft tanned Hippo skin panel	18	$229.50
50	Replacement Hippo skin due to fat damage	3.5	$175.00
4	Feet	50	$200.00
1	Teeth & Tusks full large set of 12	0	$0.00
	Crocodile		
1	Fullskin		$0.00
1	skull		$0.00
	Zebra		
1	Tanning	850	$850.00
1	Replacement skin	1250	$1,250.00
	Buffalo		
1	skull		$0.00
1	Cape		$0.00
20	Backskin		$0.00
2	Feet		$0.00
	Other		
1	Storage @ $5/Month x 84 Months	420	$420.00
1	Admin costs	500	$500.00

All

Thomas (b)(6) Lobrano
05/12/2017

Thomas (b)(6) Lobrano
02/07/2017

(b) (6)

(b) (6)

5/12 2017

FRAUDARMOR

PAY TO THE ORDER OF U.S. Fish + Wildlife Service $ 50 00/xx

fifty and NO/100 DOLLARS

Regions Bank

FOR (b) (6)

(b) (6)

(b) (6)

(b) (6)

5/12 2017

FRAUDARMOR

PAY TO THE ORDER OF U.S. Fish + Wildlife Service $ 50 00/xx

fifty and NO/100 DOLLARS

Regions Bank

FOR (b) (6)

MacDonald, Tim <tim_macdonald@fws.gov>

Prt # 12331C

1 message

MacDonald, Tim <tim_macdonald@fws.gov> Tue, May 30, 2017 at 12:15 PM
To: Thomas Lobrano (b) (6)

Thomas,

I am not sure what you are trying to accomplish. There is no need for an amendment, with the caviate that all of these items are coming from the same elephant that you hunted.

The documents that you provided only contain a copy of the permit issued, and not the original permit. The original permit is needed before I can do anything.

I am wondering if what you are actually requesting (and using the incorrect form) is a duplicate permit, because the original was lost. If this is the case you will need to return a completed form 3-200-66 to my attention.

Please reference Prt # 12331C in the application, and include a copy of this email. There is no need to write anymore checks, I am still holding the checks until I better understand what it is you need.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256
(F) 703-358-2280

Interested in international conservation? Sign up for our e-newsletter! ***Sign up***

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0093
Expires 05/31/2017

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
(Enter address from Page 4 and 5 of application)

Type of Activity:
REPLACEMENT DOCUMENT
(CITES/ESA/MMPA/WBCA/LACEY ACT)

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Lobrano	Thomas	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			N/A

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Centreville	MS	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country
Centreville	MS	(b) (6)		USA

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $50 nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☒

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

(b) (6) — 05/30/2017

Signature (**in blue ink**) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

E. REPLACEMENT DOCUMENT (CITES/ESA/MMPA/WBCA/LACEY ACT)

NOTE 1: Use this application to request a replacement document if your currently valid permit has been lost or misplaced (for this application, all permits, registrations, and certificates are referred to as a permit).

NOTE 2: The application **must** be submitted to the office that issued the initial permit.

Provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If needed, use a separate sheet of paper. On all attachments or separate sheets you submit, indicate the application question number you are addressing.

1. Identify the permit number (found in the upper right corner) of the permit needing replacement, if known:

   MA 12 331C-0

2. Current location of specimen (include address and country):

   5 Grantham Rd.
   Bulawayo, Zimbabwe

3. If the shipment has already occurred (i.e., the document was lost or damaged in transit), provide copies of:
   a. Cancelled CITES export or re-export document validated by OLE;
   b. For wildlife, cleared Declaration for Importation or Exportation of Fish or Wildlife (Form 3-177); **AND**
   c. Any correspondence you had with the shipper or importing country's Management Authority concerning the shipment.

   *Please be aware that if the permit was lost in transit, the issued permit will be forwarded to the Management Authority of the foreign country.

4. If the shipment has **not** occurred and the original permit no longer exists, submit a signed, dated, and notarized statement that:
   a. Refers to the permit number and describes the circumstances that resulted in the loss or destruction of the original permit;
   b. Includes a statement that affirms the shipment did not occur;
   c. You are requesting a replacement U.S. CITES permit;
   d. If found, the original permit will be returned to the Division of Management Authority.

5. If the shipment has **not** occurred and the original permit exists but has been damaged, submit the original damaged permit and a signed, dated, and notarized statement that:
   a. Describes the circumstances that resulted in the permit being damaged;
   b. Includes a statement that affirms the shipment did not occur;
   c. You are requesting a replacement U.S. CITES permit.

6. Address where you wish permit mailed (if different from page 1):

7. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☒ If a permit is issued, please send it via a courier service to the address on page 1 or question 6. I understand that you will contact me for my credit card information once the application has been processed.

8. Who should we contact if we have questions about the application? (Include name, phone number, and email):
Thomas (b) (6) Lobrano; (b) (6)

(b) (6)

9. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. [50 CFR 13.21(c)]. Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☒ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

From: MacDonald, Tim tim_macdonald@fws.gov
Subject: Prt # 12331C
Date: May 30, 2017, 11:16:01 AM
To: Thomas Lobranc (b) (6) [redacted]

JUN - 6 2017

Thomas,

I am not sure what you are trying to accomplish. There is no need for an amendment, with the caviate that all of these items are coming from the same elephant that you hunted.

The documents that you provided only contain a copy of the permit issued, and not the original permit. The original permit is needed before I can do anything.

I am wondering if what you are actually requesting (and using the incorrect form) is a duplicate permit, because the original was lost. If this is the case you will need to return a completed form 3-200-66 to my attention.

Please reference Prt # 12331C in the application, and include a copy of this email. There is no need to write anymore checks, I am still holding the checks until I better understand what it is you need.

(If we do not receive the information requested above within **45 days** from the date of this letter, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.)

Thank you,

Tim Mac Donald

Legal Instrument Examiner
Division of Management Authority
Branch of Permits; MS: IA
US Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3805

(w) 703-358-2256

Thomas (b) (6) Lobrano, (b) (6) [redacted]

May 30, 2017

RE: Permit Number: MA12331C-0

Gentlemen:

The above referenced permit was apparently lost in the mail. I attempted to mail it back to your office when I was under the opinion that it needed amending. I addressed it specifically to Mr. Tim Mac Donald but he said he never received it. I sent it First Class Mail, but there is no way to track that type of mail service.

The shipment has not occurred and the animal parts are still located in Zimbabwe.

I am requesting a replacement U.S. CITIES permit: specifically, Permit Number: MA12331C-0.

If the original permit is found and returned to me, I will return it to the Division of Management Authority.

Sincerely,

(b) (6) [redacted] Lobrano

Thomas (b) [redacted] Lobrano

Signed before me this 31st day of May 2017.

STATE OF MISSISSIPPI NOTARY PUBLIC ID # 32946 JENNIFER G. DAVIS Commission Expires June 8, 2019 WILKINSON COUNTY

Jennifer G. Davis
Notary Public

260 MAIN STREET P.O. BOX 789 CENTREVILLE, MISSISSIPPI 39631-0789 TELEPHONE (601) 645-5388 FAX (601) 645-9187

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA12331C-1

Effective: 06/23/2017 Expires: 02/01/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

for *CHIEF, BRANCH OF PERMITS, DMA*

Permittee:

(b) (6)

(b) (6)

(b) (6)

CENTREVILLE, MS

U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

C. Valid for use by permittee named above.

D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

E. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

F. Specimen may not be sold or transferred for any financial remuneration.

G. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

H. **Trophy must have been taken during the 2005 hunting season.**

I. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

J. Duplicate Permit: Replaces MA12331C-0 Issued 02/02/2017. Reported as lost.

RCVD NOV 27 2016

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Tindol	Jimmy	(b) (6)	Mr

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		NA

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)		NA	(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Midland	Texas	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☑ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: LE12027C-0 No ☐

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 11-16-2016

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit**. If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: Zimbabwe, Malipati Safari Area, several hours from Bulawayo
   b. Date wildlife was hunted: Hunt started April 1st thru 15th 2014 (Shot on April 5th)
   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks): Elephant skull, tusks, hide for shoulder mount, Panels with feet Attached
   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]: Trophy Consultants International, ~~Maple Shipping & Freight~~ 4 Josiah Chinamano Rd Belmont Bulawayo, Zimbabwe

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business: Maple Shipping and Freight
Name: Address: 4 Belmont Road, B
Address:
City: Bulawayo
State/Province:
Country, Postal Code: Zimbabwe,

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national**, provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: Jimmy Tindol Date: 11-16-16

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

SAME AS Page 1

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Jimmy Tindol, (b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

HUNTING RETURN FORM - TRAS2
APPLICATION FOR HUNTING NP/CITES

Issued in terms of Exchange Control Act (Chapter 22:05),
The Parks and Wild Life Act (Chapter 20:14) and the Tourism Act (Chapter 14:20)

0000073919
HUNT_FUNDS_CAPTURED

1. DETAILS OF THE SAFARI OPERATOR

Name of Operator	SSG Safaris t/a Go Luck	Client's Full Name	JIMMY (b) TINDOL
ZTA (HOP) No.	HOP0261	Passport Number	(b) (6)
		Country of Issue	UNITED STATES
Address	N M Zingal - 29 Impala Drive, Box 473 Chiredzi	Address	(b) (6) MIDLAND TEXAS (b) (6) U S A
Name of Professional Hunter	BRENT HEIN	Licence No.	146
Telephone		Fax	N/A

Number of Accompanying Guests	0
Are the trophies being exported after tanning and mounting?	Yes
Are the trophies being exported after primary treatment?	No

Name of Processing Agent or Taxidermist	TROPHY CONSULTANTS INTERNATIONAL	Address	4 JOSIAH CHINAMANO RD BELMONT BULAWAYO
Name of Shipping Agent	MAPLE SHIPPING AND FREIGHT	Address	4 BELMONT ROAD, BULAWAYO
Name of Foreign Agent		Address	

2. HUNTING AREAS

	Hunting Area Name	Province	Signature of Land Authority
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Date of Safari From	01-04-2014
Date of Safari To	15-04-2014
Daily Rate Charged For Big Game USD	600.00
Daily Rate Charged For Plains Game USD	.00
Daily Rate Charged for Non hunting guests USD	.00
Number of Accompanying Guests	0

ZPWMA
Date Stamp

3. DETAILS OF DEPOSITS

(All inclusive of Daily Rate, Trophy Fees, Processing, Handling charges and any other incidentals)

(i) Safari Operator

	Value Date	ECA Number	ECA Date	Currency	Invoice Amount	Amount Paid
1	20-NOV-2013	BEP/16631	28-AUG-2014	USD	31,250	3,220
2	20-NOV-2013	BEP/16631	28-AUG-2014	USD	31,250	28,030
3						
4						

(ii) Taxidermist

	Value Date	ECA Number	ECA Date	Currency	Invoice Amount	Amount Paid
1						
2						
3						
4						

4. FINANCIAL DATA

Total Daily rate	9,000.00	**Total Guests rate**	.00
Less Commission	.00	**Total Trophy fees**	22,250.00
Other fees (incidentals)	.00	**Grand Total USD**	31,250.00
Percentage Commission Charged	.00	**Total Processing Fees**	

5. DETAILS OF SPECIES HUNTED

	SPECIES	SEX	W/K	CONCESSION/FARM	GRID REF	DATE SHOT	SCI TROPHY SIZE	TROPHY FEES
1	ELEPHANT - WITH TUSKS	M	Killed	Malipati Safari Area	0337449/7567899	05-APR-2014	79.2 lbs	15,000
2	KUDU	M	Killed	Malipati Safari Area	0337076/7564778	12-APR-2014	130"	2,300
3	DUIKER	M	Killed	Malipati Safari Area	0337655/7572201	08-APR-2014	13"	300
4	KLIPSPRINGER	M	Killed	Malipati Safari Area	0226994/7891486	01-APR-2014	12"	700
5	ZEBRA	M	Killed	Malipati Safari Area	0339103/7574679	11-APR-2014	0	1,000
6	WATERBUCK	M	Killed	Malipati Safari Area	0331398/7502351	03-APR-2014	80"	2,500
7	IMPALA	M	Killed	Malipati Safari Area	0339125/7565028	06-APR-2014	50"	450
8								
9								
10								
11								
12								
13								
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15								
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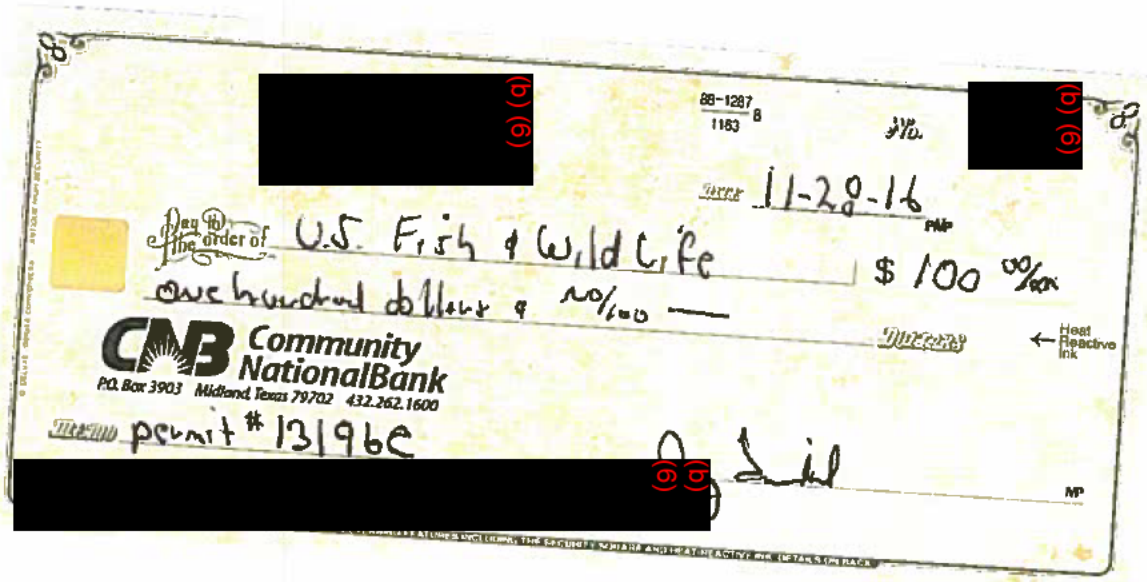
I .....hereby certify that the information given in this return is, to the best of my knowledge, true and correct.

Signature of Foreign Client _____ Date 11-14-16

Signature of Professional Hunter _____ Date _____

Signature of Safari Operator _____ Date _____

Just A Check submitted



RCVD DEC 01 2016

PRT-13196C (RH) permit

Notice:

Applicant Forgot to send Check with Application. (LS)

Vargas, Darcy <darcy_vargas@fws.gov>

Tindol, prt-13196c

Vannorman, Tim <tim_vannorman@fws.gov> Tue, Feb 21, 2017 at 12:32 PM
To: Darcy Vargas <darcy_vargas@fws.gov>

Darcy,

We can issue the Zimbabwe elephant import for Tindol. Tindol's application indicates that he hunted in April 2014. While he hunted after the negative finding that was made for 2014, it was before May 12 the date that the Appellate Court ruled was the valid date for our negative finding since that was the date that we actually published the finding in the FR.

I believe that Jorge has done a similar issuance and included language in Block 5 regarding the permittee documenting when the hunt actually occurred. I spoke to Mr. Tindol this morning and informed him that we could issue the permit and that he would need some documentation to show to the wildlife inspector at the time of import.

Tim

--
Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

***Sign up** for our e-newsletter to learn how we're working around the globe to protect species and their habitats!*

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA13196C-0

Effective: 02/27/2017 Expires: 02/26/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

Mary Coffman
FOR
CHIEF, BRANCH OF PERMITS, DMA

Permittee:

JIMMY (b) (6) TINDOL
(b) (6)
MIDLAND, TX (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

B. **Trophy must have been taken prior to May 12, 2014, during the 2014 hunting season.**

C. **Permittee must provide documentation demonstrating that this African elephant was taken on April 5, 2014.**

D. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

E. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

F. Valid for use by permittee named above.

G. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

H. Specimen may not be sold or transferred for any financial remuneration.

I. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

J. Based on enhancement finding of 1997. The 1997 enhancement finding is valid until May 12, 2014.

K. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

RCVD NOV 30 2016

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Campagna	Jeffrey	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Moline	IL	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
same

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 11-28-16

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
  (i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
  (ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
  (iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   Zimbabwe, South-East, Masvingo Province, 21,29'53 S"/30,47'02 E", Nuanetsi Ranch, Masvingo

   b. Date wildlife was hunted: June 08, 2015

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

   2 Tusks, 6 Panels, 1 Tail

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

   733 Iona Close, Harare, Borrowdale, BW957, Zimbabwe

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business	Safari Air Services
Name: Address:	
Address:	733 Iona Close
City:	Harare
State/Province:	Borrowdale
Country, Postal Code:	BW957 Zimbabwe

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy,** please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 11-28-16

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, **if** different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Jeff Campagna (b) (6) [redacted]

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

ELEPHANT

TROPHY EXPORT TAG

ZW 677/00/2015-LOX

ZW/2015-LOX

(Issued in terms of section 77 of the Parks and Wildlife (General) Regulations, 1990)

Parks and Wildlife Management Authority
MANAGEMENT SERVICES
23 JUN 2015
IVORY AND SKIN STORES
P O Box CY 140 Causeway Harare
Tel (04) 707624-9

Specified officer's signature and date-stamp

Cert. № 118596

Name Jeffery Champagne
(b) (6) [redacted]
Address Parkway Moline
Illinois (b) (6) [redacted] USA

Tusk serial number	ZW2015 0029
Tusk mass (kg)	14
Tusk length (metric)	138
Sex	M

Authority 676460

Signature of holder [redacted]

Notes

1. This certificate must be returned to the *Director, Department of National Parks and Wildlife Management, P.O. Box CY 140, Causeway*, in the event of the tusk being cut up for manufacturing purposes, lost, stolen or exported.
2. Transfer/sale of ivory or horn is to be done at National Parks offices.

CERTIFICATE OF OWNERSHIP OF IVORY AND RHINOCEROS HORN

(Issued in terms of section 77 of the Parks and Wildlife (General) Regulations, 1990)

Parks and Wildlife Management Authority
MANAGEMENT SERVICES
23 JUN 2015
IVORY AND SKIN STORES
P O Box CY 140 Causeway Harare
Tel (04) 707624-9

Specified officer's signature and date-stamp

Cert. № 118597

Name Jeffery Champagne
(b) (6) [redacted]
Address Parkway Moline
Illinois (b) (6) [redacted] USA

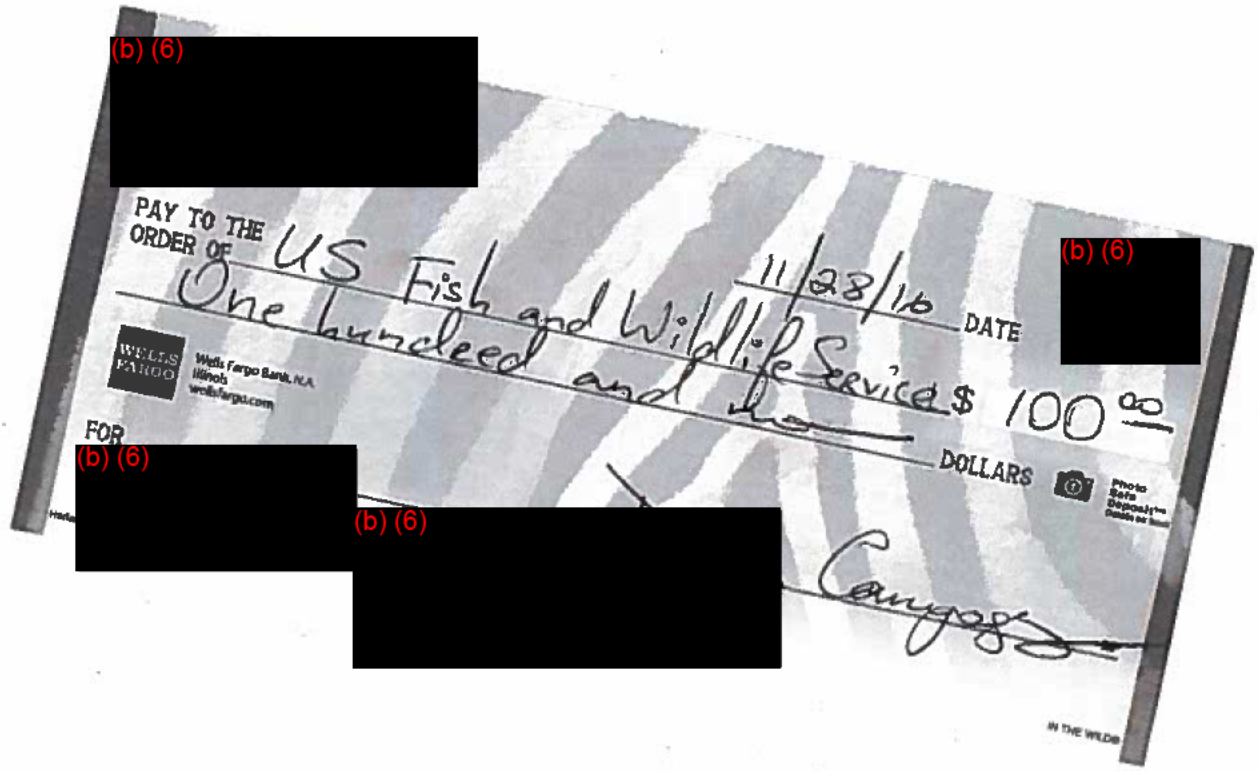
Tusk serial number	ZW2015 0030
Tusk mass (kg)	13
Tusk length (metric)	133
Sex	M

Authority 676460

Signature of holder [redacted]

Notes

1. This certificate must be returned to the *Director, Department of National Parks and Wildlife Management, P.O. Box CY 140, Causeway*, in the event of the tusk being cut up for manufacturing purposes, lost, stolen or exported.



RCVD NOV 30 2016

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

JUL 19 2017

In Reply Refer To:
FWS/AIA/DMA/PRT– 13402C

Mr. Jeffrey (b) (6) Campagna
(b) (6)
Moline, Illinois (b) (6)

Dear Mr. Campagna:

This letter responds to your November 28, 2016, application to import under the U.S. Endangered Species Act (Act), a personal sport-hunted African elephant (*Loxodonta africana*) trophy taken in Zimbabwe during the 2015 hunting season. After careful review of your request for a permit, and after reviewing all available data and information on activities and circumstances occurring in Zimbabwe at the time you conducted your hunt, your application is being denied for the reasons outlined below.

The African elephant is listed as threatened under the Act with a special rule under Section 4(d) of the Act[1], which is set forth in regulations found at 50 CFR 17.40 (e)[2]. Under the special rule, issuance of an import permit can only occur if the U.S. Fish and Wildlife Service (Service) finds that the killing of the trophy animal intended for import would enhance the survival of the species [50 CFR 17.40(e)(6)(i)(B)], and the trophy is accompanied by a threatened species permit issued under 50 CFR 17.32[3]. To enhance the survival of the species, the importation must be associated with activities that provide a direct or indirect benefit to the species in the wild. In evaluating whether the killing of the trophy animal intended for import into the United States contributes to the enhancement of African elephant populations within a given country, the Service looks at a number of factors. Such factors may include: current elephant population estimates in a given country, whether said county has a valid national and/or regional management plan, is the plan currently being implemented and does it contain achievable and measurable objectives, does the plan take an adaptive management approach and how often is it reviewed and/or updated, the designated authorities responsible for overseeing elephant management and how they are funded, the level of human-wildlife conflict taking place and how it is being addressed, any anti-poaching efforts undertaken, habitat conservation measures currently in place, as well as the amount of revenue generated by elephant hunting and how it is utilized in supporting conservation projects and/or managing the species.

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1 The text of this Act can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6dd.

2 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6m3.

3 Ibis

The best available scientific and management data, as well as information provided to the Service by Zimbabwe Parks & Wildlife Management Authority (ZPWMA), Conservation Force, and Safari Club International, was used in our evaluation. In evaluating the available data and information on elephant hunting in Zimbabwe at the time your hunt occurred, the Service was unable to determine that the killing of African elephants in Zimbabwe, whose trophies are intended for importation into the United States, would enhance the survival of the species. Therefore, the import of sport-hunted elephant trophies taken in Zimbabwe during the 2015 hunting season cannot be authorized. A copy of the Division of Management Authority's finding for the 2015 hunting season is enclosed for your reference.

As provided in 50 CFR 13.29(a)[4], you may request reconsideration of our decision to deny your application. Such a request must be in writing with the original signature of the person requesting reconsideration or by that person's legal representative, must contain a certification statement as provided at 50 CFR 13.12(a)(5)[5], should refer to your file number, PRT–13402C, and must be received in this office within 45 days of the date of this letter. The reconsideration of the decision to deny your request will be based on the information you provided in your original application. As such, your letter requesting reconsideration must address how our decision to deny your application was based on a misinterpretation of the information provided in your application or information available to the Service when making the original denial or it must present clarification of this information. **Should you supply new information that changes the scope of your original application, a new application will need to be submitted to this office before such information can be considered.**

If you have any questions, please contact Supervisory Policy Specialist Michael S. Moore of this office: Division of Management Authority, Branch or Permits, MS:IA, 5275 Leesburg Pike, Falls Church, VA 22041-3803 (703-358-2104, ext. 1983).

Sincerely,

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority

Enclosure

4 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xYDUk
5 Ibis

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

RCVD NOV 30 2016

LB

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Campagna	Jeffrey	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Moline	IL	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
same

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 11-28-16

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit**. If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: July 03, 2014

   Zimbabwe, South-East, Masvingo Province, 21,29'53 S"/30,47'02 E", Nuanetsi Ranch, Masvingo

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

   2 Tusks, 2 Panels, 2 Feet, 1 Tail, 2 Ears

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

   733 Iona Close, Harare, Borrowdale, BW957, Zimbabwe

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business	Safari Air Services
Name: Address:	
Address:	733 Iona Close
City:	Harare
State/Province:	Borrowdale
Country, Postal Code:	BW957 Zimbabwe

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: Jeffrey R Campagna Date: 11-28-16

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Jeff Campagna (b) (6) [redacted] Dasha Campagna (b) (6) [redacted]

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

(Issued in terms of section 77 of the Parks and Wildlife (General) Regulations, 1990)

Parks and Wildlife Management
MANAGEMENT SERVICES
23 JUL 2014
IVORY AND SKIN STORES
P.O Box CY 140, Causeway, Harare
Tel. (04) 70 324

Specified officer's signature and date-stamp

Cert. № 116758

Name Jeffery Campagna
(b) (6) [redacted]

Address Parkway Moline
Illinois (b) (6) [redacted] USA

Tusk serial number	ZW20140047
Tusk mass (kg)	11
Tusk length (metric)	132
Sex	M

Authority 074669

Signature of holder [signature]

Notes

1. This certificate must be returned to the *Director, Department of National Parks and Wildlife Management, P.O. Box CY 140, Causeway,* in the event of the tusk being cut up for manufacturing purposes, lost, stolen or exported.
2. Transfer/sale of ivory or horn is to be done at National Parks offices.

CERTIFICATE OF OWNERSHIP OF IVORY AND RHINOCEROS HORN

(Issued in terms of section 77 of the Parks and Wildlife (General) Regulations, 1990)

Parks and Wildlife Management
MANAGEMENT SERVICES
23 JUL 2014
IVORY AND SKIN STORES
P.O Box CY 140, Causeway, Harare
Tel. (04) 707624-9

Specified officer's signature and date-stamp

Cert. № 116757

Name Jeffery Campagna
(b) (6) [redacted]

Address Parkway Moline
Illinois (b) (6) [redacted] USA

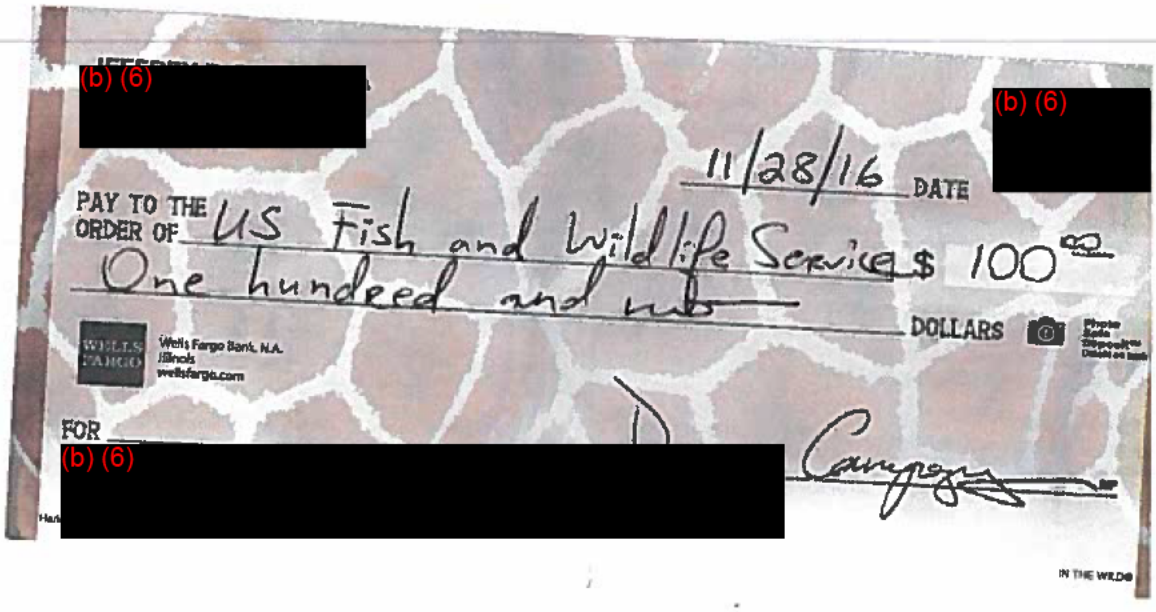
Tusk serial number	ZW20140046
Tusk mass (kg)	12
Tusk length (metric)	139
Sex	M

Authority

Signature of holder [signature]

Notes

1. This certificate must be returned to the *Director, Department of National Parks and Wildlife Management, P.O. Box CY 140, Causeway,* in the event of the tusk being cut up for manufacturing purposes, lost, stolen or exported.
2. Transfer/sale of ivory or horn is to be done at National Parks offices.


(b) (6)

(b) (6)

11/28/16 DATE

PAY TO THE ORDER OF US Fish and Wildlife Service $ 100 00

One hundred and no

DOLLARS

Wells Fargo Bank, N.A.
Illinois
wellsfargo.com

FOR (b) (6)

IN THE WILDS

RCVD NOV 30 2016

United States Department of the Interior

FISH AND WILDLIFE SERVICE

International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA/PRT– 13405C

JUL 19 2017

Mr. Jeffrey [redacted] Campagna
[redacted]
Moline, Illinois [redacted]

Dear Mr. Campagna:

This letter responds to your November 28, 2016, application to import under the U.S. Endangered Species Act (Act), a personal sport-hunted African elephant (*Loxodonta africana*) trophy taken in Zimbabwe in July 2014 during the 2014 hunting season. After careful review of your request for a permit, and after reviewing all available data and information on activities and circumstances occurring in Zimbabwe at the time you conducted your hunt, your application is being denied for the reasons outlined below.

The African elephant is listed as threatened under the Act with a special rule under Section 4(d) of the Act[1], which is set forth in regulations found at 50 CFR 17.40 (e)[2]. Under the special rule, issuance of an import permit can only occur if the U.S. Fish and Wildlife Service (Service) finds that the killing of the trophy animal will enhance the survival of the species [50 CFR 17.40(e)(6)(i)(B)], and the trophy is accompanied by a threatened species permit issued under 50 CFR 17.32[3]. To enhance the survival of the species, the importation must be associated with activities that provide a direct or indirect benefit to the species in the wild. In evaluating whether the killing of the trophy animal will enhance the survival of the species, the Service looks at a number of factors. Such factors include: current elephant population estimates in a given country, whether said country has a valid national and/or regional management plan, is the plan currently being implemented and does it contain achievable and measurable objectives, does the plan take an adaptive management approach and how often is it reviewed and/or updated, the designated authorities responsible for overseeing elephant management and how they are funded, the level of human-wildlife conflict taking place and how it is being addressed, any anti-poaching efforts undertaken, habitat conservation measures currently in place, as well as the amount of revenue generated by elephant hunting and how it is utilized in supporting conservation projects and/or managing the species.

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1 The text of this Act can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6dd.

2 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6m3.

3 Ibis

The best available scientific and management data, as well as information provided to the Service by Zimbabwe Parks & Wildlife Management Authority (ZPWMA), Conservation Force, and Safari Club International, was used in our evaluation. In evaluating the available data and information on elephant hunting in Zimbabwe at the time your hunt occurred, the Service was unable to determine that the killing of African elephants in Zimbabwe occurring after April 4, 2014, would enhance the survival of the species. Because you hunt took place after the effective date of the finding, the import of your sport-hunted elephant trophy taken in Zimbabwe in July 2014, cannot be authorized. A copy of the Division of Management Authority's finding for the 2014 hunting season is enclosed for your reference.

As provided in 50 CFR 13.29(a)[4], you may request reconsideration of our decision to deny your application. Such a request must be in writing with the original signature of the person requesting reconsideration or by that person's legal representative, must contain a certification statement as provided at 50 CFR 13.12(a)(5)[5], should refer to your file number, PRT–13405C, and must be received in this office within 45 days of the date of this letter. The reconsideration of the decision to deny your request will be based on the information you provided in your original application. As such, your letter requesting reconsideration must address how our decision to deny your application was based on a misinterpretation of the information provided in your application or information available to the Service when making the original denial or it must present clarification of this information. **Should you supply new information that changes the scope of your original application, a new application will need to be submitted to this office before such information can be considered.**

If you have any questions, please contact Supervisory Policy Specialist Michael S. Moore of this office: Division of Management Authority, Branch or Permits, MS:IA, 5275 Leesburg Pike, Falls Church, VA 22041-3803 (703-358-2104, ext. 1983).

Sincerely,

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority

Enclosure

4 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xYDUk
5 Ibis

RCVD DEC 30 2016

Department of the Interior
U.S. Fish and Wildlife Service

Federal Fish and Wildlife Permit Application Form

OMB No. 1018-0164
Expires 11/30/2016

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of
Southern African Leopard, African Elephant, and
Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Dinger	Scott		

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)		847-690-0699	lisaj@dlchb.com

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
Midland	TX	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE in the amount of $100, nonrefundable processing fee. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – *attach documentation of fee exempt status as outlined in Instructions.* (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue:_____ No ☒

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in *Title 50, Part 13 of the Code of Federal Regulations* and the other *applicable parts in subchapter B of Chapter I of Title 50*, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Lisa Jennings — 11/30/2016

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

IMPORT OF SPORT-H[redacted]IC[redacted]AN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
  (i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
  (ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
  (iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: Chegwore, South Concession, Mashonaland West Province, Zimbabwe
   b. Date wildlife was hunted: 4/21/2014
   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks): 1 skull, 6 panels, 4 feet, 2 tusks, 1 tail 2 ears and a trunk
   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]: Safari Air Services t/a Chifuti Head Office Harare, 733, Iona Close Borrowdale, Harare, Zimbabwe

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business: Safari Air Service, [redacted]
Name: Address: 733 Iona Close
Address:
City: Borrowdale.
State/Province: Harare, Zimbabwe
Country, Postal Code:

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: Lisa Jamieson Date: 11/30/2016

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature:_____ Date: _____

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

Chicago

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):
D4L CAB, LLC, 1500 Midway Court, Ste W201
Elk Grove Village, IL 60007

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☒ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

CUSTOMS POWER OF ATTORNEY
and
Acknowledgement of Terms and Conditions of Service

Copyright 1995, National Customs Brokers and Forwarders Association of America, Inc.
(Revised 07/04)

✓ appropriate box

- [X] Individual
- [ ] Partnership
- [ ] Corporation
- [ ] Sole Proprietorship
- [ ] Limited Liability Company

SS#✓ (b) (6) [redacted]

KNOWN ALL MEN BY THESE PRESENTS: That, ✓ Scott (b) (6) [redacted] Dinger doing
(Full name of individual, partnership, corporation, sole proprietorship, or limited liability company) (Identity)

business as a ✓ INDIVIDUAL under the laws of the State of ✓ TX
(Individual, partnership, corporation, sole proprietorship, or limited liability company) (state)

residing or having a principal place of business at ✓ (b) (6) [redacted] Midlothian TX (b) (6) [redacted], hereby constitutes and

appoints ✓ D&L CHB, LLC, its officers, employees, and/or specifically authorized agents, to act for and
(Grantee's Name)

on its behalf as a true and lawful agent and attorney of the grantor for and in the name, place and stead of said grantor, from this date,

in the United States (the "territory") either in writing, electronically, or by other authorized means, to:

Make, endorse, sign, declare, or swear to any customs entry, withdrawal, declaration, certificate, bill of lading, carnet or any other documents required by law or regulation in connection with the importation, exportation, transportation, of any merchandise in or through the customs territory, shipped or consigned by or to said grantor;

Perform any act or condition which may be required by law or regulation in connection with such merchandise deliverable to said grantor; to receive any merchandise;

Make endorsements on bills of lading conferring authority to transfer title; make entry or collect drawback; and to make, sign, declare, or swear to any statement or certificate required by law or regulation for drawback purposes, regardless of whether such document is intended for filing with U.S. Customs and Border Protection;

Sign, seal, and deliver for and as the act of said grantor any bond required by law or regulation in connection with the entry or withdrawal of imported merchandise or merchandise exported with or without benefit of drawback, or in connection with the entry, clearance, lading, unlading or navigation of any vessel or other means of conveyance owned or operated by said grantor, and any and all bonds which may be voluntarily given and accepted under applicable laws and regulations, consignee's and owner's declarations provided for in section 485, Tariff Act of 1930, as amended, or affidavits or statements in connection with the entry of merchandise;

Sign and swear to any document and to perform any act that may be necessary or required by law or regulation in connection with the entering, clearing, lading, unlading, or operation of any vessel or other means of conveyance owned or operated by said grantor;

Authorize other Customs Brokers duly licensed within the territory to act as grantor's agent; to receive, endorse and collect checks issued for CBP duty refunds in grantor's name drawn on the Treasurer of the United States; if the grantor is a nonresident of the United States, to accept service of process on behalf of the grantor;

And generally to transact Customs business, including filing of claims or protests under section 514 of the Tariff Act of 1930, or pursuant to other laws of the territories, in which said grantor is or may be concerned or interested and which may properly be transacted or performed by an agent and attorney;

Giving to said agent and attorney full power and authority to do anything whatever requisite necessary to be done in the premises as fully as said grantor could do if present and acting, hereby ratifying and confirming all that the said agent and attorney shall lawfully do by virtue of these presents;

This power of attorney to remain full force and effect until revocation in writing is duly given to and received by grantee (if the donor of this power of attorney is a partnership, the said power shall in no case have any force or effect in the United States after the expiration 2 years from the dates of its execution);

Grantor acknowledges receipt of ✓ D&L CHB, LLC Terms and Conditions of Service governing all transactions between the Parties.
(Grantee's Name)

If the Grantor is a Limited Liability Company, the signatory certifies that he/she has full authority to execute this power on behalf of the Grantor.

IN WITNESS WHEREOF, the said ✓ Scott (b) (6) [redacted] Dinger
(Full name of company)

caused these presents to be sealed and signed: (Signature) ✓ [signature]

(Capacity) ✓ N/A Date: ✓ 11-30-2016

Witness: (If required) N/A

If you are the importer of record, payment to the broker will not relieve you of liability for CBP charges (duties, taxes or other debts owed CBP) in the event the charges are not paid by the broker. Therefore, if you pay by check, CBP charges may be paid with a separate check payable to "U.S. Customs and Border Protection" which shall be delivered to CBP by the broker. Importers who wish to utilize this procedure must contact our office in advance to arrange timely receipt of duty checks.

APPERSON PRINT MANAGEMENT SERVICES • METAIRIE • NEW ORLEANS

RCVD DEC 30 2016

D&L CHB, LLC
1500 MIDWAY CT. W201
ELK GROVE VILLAGE, IL 60007

BANK ONE
CHICAGO IL 60670
2-1-710

DATE	CHECK NUMBER
12/02/16	(b) (4) [redacted]

PAY **********100DOLLARS&00CENTS

CHECK AMOUNT

$100.00**

PAY TO THE ORDER OF:

FISH & WILDLIFE

IL (b) (6) [redacted]

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA16522C-0

Effective: 02/23/2017 Expires: 02/22/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:

SCOTT DINGER
(b) (6)
MIDLAND, TX (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

B. **Trophy must have been taken prior to May 12, 2014, during the 2014 hunting season.**

C. **Permittee must provide documentation demonstrating that this African elephant was taken on April 21, 2014.**

D. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

E. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

F. Valid for use by permittee named above.

G. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

H. Specimen may not be sold or transferred for any financial remuneration.

I. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

J. Based on enhancement finding of 1997. The 1997 enhancement finding is valid until May 12, 2014.

K. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority Zimbabwe.

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

RCVD JAN 18 2017

LB

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of
~~Southern African Leopard~~, African Elephant, and
Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual			
1.a. Last name: Welker	1.b. First name: Daniel	1.c. Middle name or initial: (b) (6)	1.d. Suffix:
2. Date of birth (mm/dd/yyyy): (b) (6)	3. Occupation:	4. Affiliation/ Doing business as (see instructions):	
5.a. Telephone number: (b) (6)	5.b. Alternate telephone number:	5.c. Fax number:	5.d. E-mail address: (b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution			
1.a. Name of business, agency, Tribe, or institution: N/A	1.b. Doing business as (dba):		
2. Tax identification no.	3. Description of business, agency, Tribe, or institution:		
4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix
5. Principal officer title	6. Primary contact name		
7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information				
1.a. Physical address (Street address, Apartment #, Suite #, or Room #; no P.O. Boxes): (b) (6)				
1.b. City: Brookshire	1.c. State: Texas	1.d. Zip code/Postal code: (b) (6)	1.e. County/Province	1.f. Country: United States
2.a. Mailing Address (include if different than physical address; include name of contact person if applicable): Same				
2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE in the amount of $100, nonrefundable processing fee. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Daft Welker — 01/06/2017

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: 1 (Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity: 1 (Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: _____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   South Luangwa, Zambia in Nyamvu & West Petauke Game Management Areas, Nyimba being the closest town, operator and lease holders Nyamvu & Mopane Safaris Ltd.

   b. Date wildlife is to be hunted:

   July 22, 2017 - Aug. 12, 2017

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

Leopard: All parts including skin, skull, teeth, claws
Elephant: All parts including skin, skull, feet, ears, and tusks

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: N/A

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business	Michael Borman of Bangweulu Taxidermy
Name: Address:	4142K Chifwema Road, New Kasama
Address:	
City:	Lusaka
State/Province:	Southern
Country, Postal Code:	Zambia, 50100

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

Please see the information provided by Conservation Force, Zambia's DNPW, safari operators, and others to demonstrate enhancement.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy,** please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: Dale Caldwell Date: 01/06/2017

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, **if** different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Applicant or John J. Jackson, III or Regina Lennox of Conservation Force, 504-837-1233 / cf@conservationforce.org

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

DANIEL WALKER (b) (6)
(b) (6)
BROOKSHIRE, TX (b) (6)

07-14

(b) (6)

1-9-17
DATE

Pay to the Order of U.S. Fish + Wildlife Service $ 100.00

One hundred + NO/100 DOLLARS

Comerica Bank

Comerica Bank
www.comerica.com

For (b) (6)

RCVD JAN 18 2017

FORM 3-201A (1/97)

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

IMPORT PERMIT

Page 1 of 1

1. Original Permit/Certificate No.
17US18172C/9

2. Valid
11/12/2018

3. Permittee (name and address, country)
DANIEL (b) (6) WELKER
(b) (6)
BROOKSHIRE, TX (b) (6)
U.S.A.

4. Consignor (name and address, country)
MICHAEL W. BORMAN
BANGWEULU TAXIDERMY LTD.
41421K CHIFWEMA ROAD
NEW KASAMA, LUSAKA PROVINCE
LUSAKA
ZAMBIA

5. Special Conditions

ALL APPLICABLE FOREIGN, LOCAL, STATE, OR OTHER FEDERAL LAWS, INCLUDING THOSE REQUIRING PERMITS, MUST BE OBSERVED.

SPECIMEN MAY NOT BE SOLD OR TRANSFERRED FOR ANY FINANCIAL REMUNERATION.

MUST IMPORT THROUGH A DESIGNATED PORT LISTED IN CONDITION 10.

U.S. THREATENED SPECIES: TUSKS MUST BE MARKED AS PER [50 CFR 17.40(e)]. IN ACCORDANCE WITH THE AFRICAN ELEPHANT CONSERVATION ACT, RAW IVORY, INCLUDING SPORT-HUNTED TROPHIES THAT ARE WHOLLY OR PARTIALLY IVORY, MAY NOT BE RE-EXPORTED FROM THE U.S.

TROPHY MUST HAVE BEEN TAKEN DURING 2017 HUNTING SEASON.

5a. Purpose of Transaction
H

6. U.S. Management Authority
Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

U.S. CITES Management Authority

-May not be used for commercial purposes. For live animals, only valid if the transport conditions comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport, with IATA Live Animals Regulations.

11/13/2017
Issuing Date

United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

7/8. Common Name and Scientific name (genus and species) of Animal or Plant	9. Description of Part or Derivative, including identifying marks or numbers (age/sex if live)	10. Appendix No. and Source
A. Common Name: AFRICAN ELEPHANT Scientific Name: LOXODONTA AFRICANA	9. PERSONAL SPORT HUNTED TROPHY (shipment may contain bones, hair, hide, tusks, teeth, or any taxidermied part, as well as worked, manufactured, or handicraft items such as curios, jewelry, or other utilitarian items.)	10. 1 W 11. Quantity (including units): 1 NO 12. Country of Origin: ZAMBIA
B. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
C. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
D. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
E. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin

574677

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

RCVD JAN 18 2017

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of
Southern African Leopard, African Elephant, and
Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Turiello	Anthony	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)	
(b) (6)			

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)		
2. Tax identification no.	3. Description of business, agency, Tribe, or institution		
4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix
5. Principal officer title	6. Primary contact name		
7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
Santa Cruz	CA	(b) (6)		U.S.A.

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country
(b) (6)	CA	(b) (6)		U.S.A.

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 1/11/2017

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE ~~RHINOCEROS~~

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: 1 (Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity: 1 (Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

Zambia, Chikwa Hunting Block, Luangwa Valley, Eastern Province – nearest town is Lundazi

b. Date wildlife is to be hunted:

July 2017

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

For leopard: Skin, skull, teeth, claws
For elephant: Skin, skull, two tusks, four feet, two ears

3. **IF THE ANIMAL IS DEAD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: N/A

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business	Michael W. Borman
Name: Address:	Bangweulu Taxidermy Ltd.
Address:	41421K Chifwema Road
City:	New Kasama
State/Province:	Lusaka
Country, Postal Code:	Lusaka Province Zambia

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

Please see enhancement information provided by Conservation Force, range state authorities, hunting operators, and others.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 1/11/2017

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, **if** different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☑ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Applicant or John J. Jackson, III or Regina Lennox of Conservation Force, 504-837-1233, cf@conservationforce.org

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

Gmail

Regina Lennox <regina.lennox.cf@gmail.com>

Enhancement information in support of PRTs 03367C, 93398B, etc. (Zambia lion and elephant imports)

1 message

Regina A. Lennox <regina.lennox@conservationforce.org> Fri, Jan 13, 2017 at 11:50 AM
To: "Vannorman, Tim" <tim_vannorman@fws.gov>, "Vargas, Darcy" <darcy_vargas@fws.gov>
Cc: "John J. Jackson, III" <cf@conservationforce.org>
Bcc: "Regina A. Lennox" <regina.lennox@conservationforce.org>

Dear Tim and Darcy,

Attached please find three reports from safari hunting operators demonstrating enhancement. You will receive import permit applications for 2017 lion trophies taken in Zambia, for clients who hunted with these operators. We request that you consider the attached reports in making an enhancement finding for 2017, and in making an enhancement finding in for the 2016 applications that we previously submitted (Robert Hixson (elephant and lion), Amanda Henson (lion), Stephen Crooks (lion), and Lawrence Rudolph (lion)).

These operators are: Nyamvu Safaris, Ltd., Mopane Safaris, Ltd., and Muchinga Adventures, Ltd. (for which you also received a 2016 enhancement report). Together they protect thousands of square kilometers of wildlife habitat in Zambia. Nyamvu Safaris operates in a previously depleted area, but since 2005 it has created and restored the Nyamvu Game Reserve through anti-poaching, community engagement, water provision, and restocking. The Game Reserve now supports healthy populations of lion, leopard, elephant, and other species. Mopane Safaris operates in Luembe-West Petauke Concession, a "secondary" area that they are protecting and stewarding. The same is true for Muchinga Adventures. After operating and growing the wildlife population on another concession for ten years, the company took over Chifunda GMA, and expects to have the same success, for the benefit of the Chifunda rural communities.

Each operator has significantly invested in anti-poaching, community support, habitat protection, and water provision so as to encourage the growth of local wildlife. For example:

Nyamvu and Mopane Safaris invested a total of over $60,000 in anti-poaching in 2015. This includes scout salaries and equipment (~$39,450), donations of petrol and rations to government rangers and community scouts (~$17,385), and rewards to local villagers for information on poachers (~$4,805), among other investments. Mopane Safaris took over its concession in 2015, so its initial anti-poaching investment is high. Nyamvu Safaris has been protecting the game reserve for over ten years, and the amount it has paid out in rewards has decreased every year, as the poaching has declined as the local community becomes more involved in conservation. These companies recorded an average of 328 patrol days and 2,184 anti-poaching patrol hours. In 2016, Muchinga Safaris invested approximately $90,500 in anti-poaching, which includes $48,000 in salaries, $8,000 in rations, $13,500 in fuel, and $7,000 in rewards. Anti-poaching patrols are conducted 365 days of the year. In 2015, the company collected 94 snares, 28 muzzle loaders and 7 shotguns.

These companies also heavily support rural communities. All have committed to sharing at least 50% of game meat harvested with local villages (60%+ for Nyamvu and Mopane Safaris). For Mopane Safaris, the total value of game meat contributed in 2015 was $24,371. Each company spends over $20,000 annually in community support, including the building of schools, clinics, roads, renovations to the traditional leader's home, and more, with a focus on education and healthcare. Muchinga has also committed to helping the local community develop a tourist camp, and provided $5,000 for this project, which increased business for the community by more than 300% in 2016.

The companies together employ 133 full-time staff and several hundred seasonal staff, which supports more than 1,000 local dependents. Each company maintains a conflict fund to compensate villagers damaged by

elephant, lion, and other species. In 2015, Mopane Safaris paid $1,000 in compensation for damage to maize fields and $2,500 to the family of a person killed by an elephant. In 2016, Muchinga paid for the funeral of a person killed by a buffalo, and compensated farmers who lost livestock to a leopard, which avoided the leopard being controlled as a problem animal. The companies' community support, employment, and compensation programs link the livelihoods and benefits for local villagers to the conservation and protection of wildlife, and help to increase tolerance and ultimately, wildlife populations in these areas.

These companies rely on the revenue from licensed, regulated hunting to pay for their anti-poaching and community investment. For example, Muchinga Adventures relies on lion and elephant hunts for more than half its operating revenue. The companies all hunt sustainably. For instance, Nyamvu Game Reserve was not hunted for the first three years to allow game species to build up. All three companies have implemented an age restriction of six years for lion. Only five lion have been hunted in the Nyamvu Game Reserve in the past 11 years. Muchinga Adventures was allocated a quota of one lion for 2016, but because the lion was aged and found to be over six years by the DNPW, the company has been allocated a second lion for the 2017 season (at almost 5,000 km2, the concession can sustainably support two lion on quota). As another example, both Nyamvu and Mopane Safaris have implemented size limits above-and-beyond Zambia's national requirement that elephant trophies exceed 15kg. The companies penalize their professional hunters if they harvest elephant with tusks below 20kg.

Notably, all three companies rely on U.S. hunters as clients. The companies and local villagers benefit from the additional donations and contributions made by these U.S. citizens, including anti-poaching donations and damage compensation donations.

Please let us know if you have questions about this information, and please consider it in making enhancement findings for lion and elephant imports from Zambia.

Best wishes,
Regina

Regina A. Lennox
Conservation Force
3240 S I-10 Service Road W, Suite 200
Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

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3 attachments

MOPANE SAFARIS-REPORT FOR LION CONSERVATION.pdf
349K

NYAMVU SAFARIS-REPORT FOR LION CONSERVATION - Copy.pdf
577K

Muchinga Adventures Lion Enhancement Report 2017.pdf
155K

ZAMBIA LION ENHANCEMENT REPORT – CHIFUNDA GMA, NORTH LUANGWA

MUCHINGA ADVENTURES, LTD.
PO BOX 390003, LUMUMBA RD, LUSAKA ZAMBIA – CHIFUNDA GMA
JOHN AND LAURA DU PLOOY – jcrserviceszambia@gmail.com or
info@muchingahuntingsafaris.com

DECEMBER 2016

I. DESCRIPTION OF COMPANY AND CONCESSION

Muchinga Adventures Ltd (the company) has been operating in Chifunda GMA since March 2015. The concession is 4900 square kilometres in size and provides a habitat for baboon, buffalo, chobe bushbuck, common duiker, crocodile, grysbok, hippo, hyaena, cookson wildeebst, zebra, kudu, impala, puku, wild dog, elephant, leopard, lion and various other plains game and carnivore species. The concession is in the north Luangwa and has 70km of river frontage with the North Luangwa National Park. The area is a natural buffer zone for the national park where Frankfurt Zoological Society operates and protects the rhino. The lease is issued in partnership with the Chifunda GMA community, known as the Chifunda Community Resource Board, and the Zambia Wildlife Authority (ZAWA), now the newly named Department of National Parks and Wildlife (DNPW). This is our third lease agreement with ZAWA/DNPW, having operated in the adjacent concessions - Chanjuzi GMA and Nyaminga GMA from 2003 to 2012.

Muchinga Adventures Ltd was formed in 1993 and is a family owned and operated business. The du Plooy family have been in Zambia since the 1880's. The company is responsible for the full time employment of four full time professional hunters and several part time professional hunters, forty five camp staff members embracing trackers, skinners, cooks, waiters and general workers. Our operations support forty scouts and a further one hundred and thirty people gain employment through jobs that cover the airstrip, opening roads, creating fire breaks, infrastructure development and annual camp building. There are 2143 families in the Game Management Area with more than 7,000 children, many of whom have lost one or both parents. Our employment significantly contributes to the support of the rural community and supports more than seven hundred dependents.

As part of the Muchinga Adventures lease proposal there is a written concession plan that covers community and anti poaching responsibilities, Muchinga Adventures Ltd always exceed these commitments.

II. ANTI-POACHING

Muchinga Adventures Ltd is committed to a financial obligation each year towards law enforcement. Food rations have been supplied covering corn meal, cooking oil, fish, beans, sugar and salt. This allows for a further six patrols a month to be conducted in the Game Management Area. Each team is equipped with uniforms, boots and food rations. The company is committed to providing 210 litres of fuel per month to assist with resource monitoring of the wildlife, movement of the fishermen and spot checks at water sources throughout the Game Management Area. John du Plooy, the managing Director of Muchinga Adventures Ltd, is a senior honorary wildlife police officer and works closely with the Park

Ranger to monitor the activities in the concession. John is based in the concession for six months each year, with daily movements through the GMA monitoring unusual activity.

Frankfurt Zoological Society (FZS) already have a presence in the region due to the rhino project in the national park. Muchinga Adventures works closely with the DNPW, the community and FSZ,. Rather than doubling up on what FZS are doing they are invited to attend community meetings at the start of each safari season to discuss the next twelve months.

Last year it was identified that the scout's living conditions were not at a satisfactory level, this was creating hardship especially in the rainy season and resulting in a loss of skilled labour to the area. Muchinga Adventures provided roofs to forty houses for the scouts in the Game Management Area. This provided local employment to the community through labour as well as improving conditions to the scouts and their families.

In 2015 the anti poaching efforts resulted in 94 wire snares, 28 muzzle loading firearms and 7 home made shotguns being seized. Two wounded elephant were found dead with ivory removed, two lions were snared (one male and one female in two different locations), The human animal conflict is probably the biggest concern, with a child killed by a leopard in 2015. Almost annually people are being mauled or killed by lion, elephant and buffalo. Elephant and buffalo are constantly destroying crops, tolerance to this is due only to the revenue being received by the community through safari hunting. The joint and consistently intense effort by DNPW, the community, Frankfurt Zoological Society and Muchinga Adventures Ltd is keeping poaching to a minimum in this game management area.

The community benefit financially from the revenue of the hunting with a share in the funds raised. They get 50% of the trophy fee and 20% of the concession fee. This is in addition to other commitments from the company. The community fund the employment for up to thirty village scouts from this revenue. With the agreement of the community areas have been zoned for fishing to limit movement, disturbance to the habitat and encroachment in the concession. Muchinga Adventures endeavor to drive each road in the area every week to ensure that it is maintained and passable for anti poaching efforts. Abnormal activity is reported to the scouts for further investigations. Fire breaks are maintained to protect the habitat for the wildlife and for the safety of the scouts who may be on foot patrols. Anti poaching patrols are done 365 days of the year in Chifunda GMA.

Our anti poaching and conservation commitment both in 2016 and for 2017 covers:

1. Food rations to increase the six full patrols each month
2. Fresh meat as a protein source to the scouts
3. Fuel for resource monitoring
4. Money to conduct village sweeps
5. Rewards for information leading to the arrest and conviction of poachers
6. Rewards for the handing in or seizure of illegal firearms
7. Rewards for the handing in of snares to remove them from circulation

2015 SUMMARY OF ANTI POACHING FINANCES IN CHIFUNDA GMA

Item	Spend (USD)	Notes
Community revenue	48,000	Hunting revenue used for scout salaries
Food rations	8,000	Increases patrols by six per month

Diesel / petrol	12,000	Resource monitoring and anti poaching
Rewards	5,000	Between snares, illegal firearms and information
Infrastructure development, fire management and road maintenance	15,000	Includes employment
TOTAL	$88,000	

2016 SUMMARY OF ANTI POACHING FINANCES IN CHIFUNDA GMA

Item	Spend (USD)	Notes
Community revenue	48,000	Hunting revenue used for scout salaries
Food rations/ Anti poaching funds	8,000	Increases patrols by six per month
Diesel / petrol	13,500	Resource monitoring and anti poaching
Rewards	7,000	Between snares, illegal firearms and information
Infrastructure development, fire management and road maintenance	14,000	Includes employment
TOTAL	$90,500	

Muchinga Adventures Ltd is annually reviewed by DNPW and any prospects of a future lease agreement are contingent on our current performance in wildlife protection and community obligations.

III. COMMUNITY PARTICIPATION

A. Community Assistance Component

The concession has approximately 15,000 people resident in the block. There are seven VAGS with five main villages in the concession. Each VAG has its own headman and the concession falls under the jurisdiction of HRH Chief Chifunda. The Community Resource Board are elected to handle the decisions for the Game Management Area residents. They directly receive 20% of the concession fee and 50% of the Government trophy fees.

Muchinga Adventures Ltd are obligated to a US$20,500 annual payment for the community to use in projects of their choosing. The emphasis being on community welfare, wildlife conservation, education and medical care.

In addition to this Muchinga Adventures Ltd has committed to developing a business for the community. They have a community camp that is based at the crossing from North Luangwa National Park which is ideal for any travellers crossing from Mpika to Chama or Lundazi. The commitment is to rebuild the bush camp to an international standard, provide training of the camp staff and management so that they can realize a long term and sustainable financial return. US$5000 was given to the community to refurbish parts of the camp and their business has increased more than 300% in 2016.

There are projects/ assistance that are on going and are extra to our obligations and these are:

1. Toilets at the clinic (2016)

2. The employment of a teacher – salary for 12 months (2016)
3. A scholarship for a deserving academic achieving student or adult in the field of education, medical care/medicine or wildlife/environmental conservation – awarded to Mr Chilembo from the Chifunda GMA community for an undergraduate degree in wildlife (2016)
4. Paid for the community meeting twice a year, this builds bridges and trust with the community who are involved in decisions that affect them directly. This includes Muchinga Adventures reporting the monies paid through hunting which they directly benefit from and to allow for financial transparency to all community members.
5. Employment of a liaison officer to help with communications between DNPW, the community and our company

More than 50% of the edible meat harvested is delivered to the community through the hunting season.

Muchinga Adventures Ltd is providing assistance with the community in their application for secondary school classrooms. The closest secondary school is more than 50km from the village and therefore most children do not receive education beyond grade 7.

Muchinga Adventures Ltd relationship with DNPW and the community is a collaborative one based on respect for our partners in the industry. DNPW determines whether to allow a future lease based on the performance of the company in the current lease, Muchinga Adventures Ltd are monitored by an annual review.

B. Conflict Control

The Managing Director is a Senior Honorary wildlife Police Officer, he is in a position to provide assistance whenever required on the ground. Control and putting down of the problem animals is done by National Parks and Wildlife. Reports of wounded animals sighted are done by radio, which all parties have. The community use fireworks bangers and loud noises to chase the animals from their fields. Education of the community members is done through discussions at the community meetings to disperse to each village member. Understanding the financial contribution by hunting and in that each community member benefits on a rotation basis of the fresh meat harvested has significantly led to increased tolerance of the wildlife. In 2016 the company paid for the funeral of a village member killed by a buffalo that had been wounded by lions. The company also paid compensation to farmers who lost livestock to a leopard with cubs, this resulted in the leopard not being controlled as a problem animal as allowed under the Wildlife Act.

IV. HABITAT PROTECTION AND CONSERVATION DEVELOPMENT

During hunting herd disturbance of the buffalo is kept to a minimum to encourage breeding and to encourage the lion not to look for alternate food sources close to the villages.

Fires are controlled and done with the community and the wildlife department to ensure that habitats are conserved so as not to put pressure on the wildlife during the dry season. Fire breaks are maintained, movement of people in the GMA is strictly monitored for a number of reasons including the prevention of unplanned fires.

There is no logging or mining in this concession. The community have chosen not to explore the revenue options of these industries whilst they have the hunting revenue.

The community have committed to not increasing the number of fields they have, thereby preventing further loss of habitat for the wildlife.

V. OTHER INFORMATION

A. Prey Base

In our former hunting block over a period of ten years we more than doubled the buffalo numbers to 700 strong in a single herd through anti poaching and hunting off take controls. We are using this same method and approach in Chifunda. Extra incentives to the scouts for removing illegal firearms and snares have been introduced. Buffalo are the largest food source for the lion and there are an estimated 4000 buffalo in Chifunda.

B. Lion Population Tracking

Lion are notoriously difficult to survey or census. To track the lion population trend in our concession we are bringing in the use of trail cameras, GPS units and sightings of the lion, spoor and footprints recorded by ZAWA, ourselves and the community. Conflict situations will also be studied in order to find solutions that help reduce these.

C. Lion Aging Approach

Our company was involved in the lion aging project by Dr Paula White from when it was started and we are constantly involved in educating our professional hunters in identifying age appropriate lion. Our company policy is to not harvest a lion below the age of 6 years old and to have a conservative visual attitude towards the aging of the lion. This is in the employment contract of each professional hunter. No pride lions will be harvested so as to reduce the incidents of cub mortality and disruption to the population of lion. We are committed to attending workshops to help with lion aging, constant education of our employees and contributing to scientific research of lion.

We have had clients that have seen lion but not taken one due to being selective. We have voluntarily reduced our lion quotas when we feel that this has been required even when we were allowed more lion on quota. In one of our hunting blocks, Tondwa GMA, we removed lion, leopard, buffalo, hippo, waterbuck and hartebeest from the quota as it was felt that hunting these would be detrimental to these species. Our company has a responsible attitude to stewardship, conservation and wildlife management.

In Chifunda GMA trail cameras were used to collect data on both lion and leopard during 2016. The initial quota was one lion for 2016. All data and biological samples for the lion were submitted to Department of National Parks and Wildlife. A second lion on quota was allocated after data was examined by DNPW and determined to be of six years or older. The extra lion allocation was based on scientific data with the size of the Chifunda being 4900 square kilometres. The Trophy Hunting of African Lions: Scale, Current Management Practices and Factors Undermining Sustainability (Lindsey) supports a lion harvest rate that does not exceed 0.5 lion per 1000km. in accordance with this widely cited study Chifunda GMA can sustain an off take of two lions annually.

D. Lion Hunting Revenue

Lion and elephant are our highest-value species. Revenue from these is expected to be more than 50% of our income. This will significantly help us in being able to meet our obligations to the community, to the anti poaching projects and to the protection of these species and their habitat. In our concession proposal we committed to the second highest financial hunting commitment in Zambia to our partners. We believe in a partnership where the community, the wildlife authority, the country and the wildlife all need to benefit from the relationship in a sustainable manner.

E. U.S. Hunters

Most of our clients (75%) are from the United States. These hunters have a conservation ethic and usually contribute above their fees to anti-poaching and our community projects. They are members of associations that expect and support ethical hunting practices. They support our conservative approach to the hunting of lion. US hunters being allowed to import Zambian lion into USA will significantly benefit and contribute to the welfare and long term sustainability of the lion species in Zambia.

CONCLUSION

Muchinga Adventures Ltd is committed to the long term, sustainable and ethical practice of hunting lion. Our involvement in this practice allows us to improve the habitat of the lion, improving the attitude of the community in tolerance towards lion. Our anti poaching practices protect and enhance the lion in the concession, growing their numbers of prey and reducing down snare encounters. The community see a real benefit from partnering in the hunting industry, we answer to them and the Wildlife Authority for our performance towards anti poaching and community obligations. Their involvement and recognition of the value of hunting has made them want to protect their wildlife and be pro active in reducing animal – human conflicts.

Without hunting and the revenue that is earned from the harvesting of the animals the community will turn the land into farming land, removing habitat and kill or poison the wildlife. Poverty and malnutrition are very real problems in rural Zambia. Without a value to the community the wildlife will be the losers as people try to find a way to feed their families.

We believe that lion hunting is a crucial and necessary part of conserving the whole of Chifunda GMA.

Signed: _____

John du Plooy

Operator Name: MUCHINGA ADVENTURES LTD

Title: MANAGING DIRECTOR

ATTACHMENTS

No.	Title	Time Period
1	Map of concession	
2	Company annual reports to the Wildlife Authority	2015
3	Company concession, anti-poaching, community assistance, or other written plan(s) This is the proposal put forward in our bid	2015 - 2022
4	Annual report for Chifunda GMA to Wildife Department	2015
6	Food rations to scouts	2015
7	Supportive letters/acknowledgements from village or district leaders	2015
8	Meetings with village/district leaders - their participation in deciding how to use donations or contributions from hunting	2015
10	Supportive letters/acknowledgements	2015
11	Company Lion Aging Policy	2015
13	Photographs of anti-poaching patrols, snares, etc.	2015
14	Photographs of community projects and game meat distributions	2015
15	Photographs of habitat enhancement	2015
16	Company annual report to the Wildlife Authority	2016
17	Support to the scouts and anti poaching in 2016	2016
18	Trail camera photos of lion in Chifunda 2016	2016
19	Scholarship for tertiary education for Chifunda GMA	2016
20	Financial breakdown of Chifunda in 2016. This increase was the addition of lion and elephant to the quota	2016
21	Payment of a school teacher for the community	2016
22	Employment 2016	2016
23	Meetings with the village/district leaders – their participation in deciding how to use donations or contributions from hunting	2016
24	Supportive letters/ acknowledgement	2016
25	Chifunda end of year Annual report	2016
26	Community support	2016
27	Education	2016
28	Employment	2016
29	Community Letter to Minister of Arts and Tourism	2016
30	Community Letter to President	2016
31	Lion and leopard submission to DNPW	2016
32	Lion trail camera	2016
33	Meat distribution	2016
34	Meetings in community	2016
35	Otmar lion data	2016
36	Chebanenko lion data	2016
37	Payments	2016

NYAMVU SAFARIS, LTD.
Address, 6980 KATANGA ROAD LUSAKA
Operator email: ZAID137@HOTMAIL.COM

I. DESCRIPTION OF COMPANY AND CONCESSION

Nyamvu Safaris, Ltd. has been operating Nyamvu Game Reserve since April 2005. The Game Reserve provides habitat for a range of species including lion, kudu, leopard, buffalo, and elephant and is also a None Fenced Game Reserve but open and wild like all other hunting blocks in Zambia. The Game Reserve is in Nyimba District in Eastern Province of Zambia. The Area is along the Luangwa River. Nyamvu Safaris has entered into a Long term project with the Wildlife Authorities to try and develop a Game Reserve for Animals for a period of Ninety Nine years.

The Director of Nyamvu Safaris is Mr. Zaeed Patel. Nyamvu has permanent employees who work throughout the year and are on two year contracts that are renewable. The camp has a resident Professional Hunter and a camp Manager. Other employees include four game trackers, nine anti-poaching scouts, and six camp staff (cooks, cleaning, miscellaneous). We estimate a total of about 113 people to be direct beneficiaries from Nyamvu Safaris employees. These beneficiaries come from the local community.

When Nyamvu Game Reserve was acquired in 2005 the Area was completely depleted such that even seeing an Impala was almost impossible. It had to take frantic efforts by Mr. Zaeed Patel to begin the Anti-Poaching Patrols and then creating water points for animals to access water easily. Slowly the animals started coming back to Nyamvu Game Reserve and as we speak today after 10 years of progressive anti-poaching and creation of suitable conditions for Animals Nyamvu is now home to most of the wild species of Southern Africa including Elephant, Lion and Leopard. The director of Nyamvu has even carried out a restocking exercise of Sable Antelope which originally was not there. We can confirm that Nyamvu now has enough sable that can even be included on Safari Quota to be hunted. The restocking exercise is not only limited to sable only but other species as well.

Among the many efforts done to improve the number of animals in Nyamvu include provision of salt Leaks, provision of Maize Bran, creation of Dams for easy accessibility of water are among the many efforts done to create suitable conditions for Animals to stay in Nyamvu.

We further wish to put it on record that Nyamvu Game reserve is an Area where the director has invested heavily to make it what it is today. The Area was not hunted for about three years from 2005 when it was acquired to about 2008. In all these years the director was merely investing in Anti-poaching patrols, creation of water points among other things to attract game. This is the kind of effort that was invested in this None Fenced Game Reserve to ensure that we have enough stocks of animals.

Safari Hunting was therefore introduced to help with the conservation and income generation for the area and for the help of re-building. In order to make the community benefit from such animals it was agreed that some revenue can be derived from selling these animals on Safari and the revenue can be used to improve the welfare of the surrounding communities.

We can confirm that Schools, Clinics, Bridges, Grave Roads have been built in the surrounding communities of Nyamvu Game Reserve through the revenues raised from Safari Hunting. The chief has equally had a fair share of some benefits through the construction and periodical renovations of the chief's palace and grading of the road which leads to the palace. Nyamvu further purchased Banana Boats that are used by villagers in the community to cross the Luangwa River when trying to access the other side of the River. School Children, Community health workers are among the beneficiaries who use the Banana boat to cross the Luangwa River.

II. ANTI-POACHING COMPONENT

Nyamvu Safaris maintains three groups of anti-poaching teams. Each team consists of three men per team and is equipped with a 4x4 Land cruiser, uniforms and boots, tents, rations, and a satellite phone. The patrols are done in conjunction with the Wildlife Scouts. We supply rations at least twice per month to both the government game scouts and our village scouts to ensure they are sufficiently equipped for the patrols.

Nyamvu Safaris spends about $ 26000 on average per annum to carry out Anti-poaching patrols in the Game Reserve. A total of between 300 and 350 days is recorded per annum. 3000 liters of diesel are used on average per annum which is consumed by 2400 hours of patrol hours. The amount spent on payments for rewards after abducting poachers has been steadily decreasing from 2005 although an average of about 2800 dollars is spent per annum in rewards. A breakdown of spending on anti-poaching is below.

Item	Spend (USD)	Notes
Scout salaries	5650	Directly paid and some subsidies to WA
Scout equipment	9450	Clothing, vehicles, rations, phones, tents, etc.
Diesel / petrol	3900	For scouts and WA
Rations for WA and community scouts	3800	
Rewards	2800	For information and arrests
TOTAL	$ 25600	

In the Picture Below two poachers that were apprehended by our Vigilant Scouts.

COMMUNITY PARTICIPATION

A. Community Assistance Component

The agreement that Nyamvu Game Reserve has with the community does not specify what amounts need to be contributed to the community. However on Average, Nyamvu contributes about $ 20000 per annum.

In addition to these direct contributions, we pledge to distribute at least 60% of game meat harvested to the villages.

A hammer mill donated to the community by Nyamvu Safaris

B. Conflict Control

Our problematic animals are mainly the Lions and Elephant. Attached are extracts from the media which confirm Lions attacking Human Beings in Nyimba District of Eastern province where Nyamvu Game Reserve is situated. Management of Nyamvu Safaris has set aside a fund which is used to compensate victims of such unfortunate circumstances. The fund is usually 5000 dollars but can be adjusted depending on the number of such occurrences in a particular year.

IV. HABITAT PROTECTION AND CONSERVATION DEVELOPMENT

We have developed the water infrastructure for the exclusive use of wildlife in our concession. The infrastructure developed so far is natural pans which costs approximately $5000 to maintain per annum. The increased water supply increases the carrying capacity of the concession and the lion's prey base due to more game residing in the Game Reserve by finding water resource. This usually attracts Lion and Leopard to come and hunt in the game Reserve.

V. OTHER INFORMATION

A. Prey Base

Nyamvu Safaris has been monitoring the population growth of the Lion and Leopard which is a result from efforts done so far such as anti-poaching efforts, water provision, and fire management.Nyamvu Safaris will further engage the wildlife Authorities in Monitoring the resources on the ground by position cameras in strategic Areas so as to monitor the Activities of the Lion and Leopard.

B. Lion Population Tracking

Lion is not easy to track and as such we are still developing tools which we will use to study the population of Lon in our Area. As at now we use Lion tracks and foot prints. Sightings by individuals and just the a few cameras which we use to monitor the size and age for Lion and Leopard when Hunting.

C. Elephant Hunting

Our area is endowed with some very good Elephant hunting and due to the long term conservation plan produces good quality tusks now of between 50 and 60 pounds. Our well-coordinated anti-poaching system has made poaching of Elephant in Nyamvu very difficult. The community has also assisted management at Nyamvu by bringing reports of members of the community that have links with suspected poachers and stringent measures have been taking which include imprisonment for those that were found guilty of poaching. Through our various anti–poaching awareness programs with the community we have managed to make the community assist to guard this natural resource jealously. Nyamvu Safaris maintains a policy of not taking any Elephant whose tusks are weighing 20 kilograms and below.

E. Lion Aging Approach

We use the Lion aging approach when conducting Safari Hunting for Lion. Earlier on we mentioned of Human Animal conflicts mainly with Lions. This can be managed by removing the older Lions in the system through Safari Hunting. It has always been a Policy for Nyamvu Safaris not to harvests any Lions or Leopard which are not old enough to have outlived their useful life. In view of this approach not more than five Lions have been taken in Nyamvu game Reserve from the time Safari Hunting was introduced.

F. U.S. Hunters

It is of no doubt that this is the most sought after market with regards to Safari Hunting in Zambia. Nyamvu Safaris has had a number of clients donating equipment and in some instances funds for Anti –poaching programs. This can confirm to you that these hunters are not only after fulfilling their interests but to also allow the community to benefit through a conservative based approach to Safari Hunting.

CONCLUSION

Nyamvu Safaris can proudly confirm that the project which it started in 2005 has been a success looking at the way the numbers of wildlife has increased in our game reserve. We recognize that the Cat and Elephant hunts bought and booked by our American Clients contribute a higher percentage of income in the Safari Hunting and it is our obligation to share these finances with the communities who have played an important role to conserve this resource. We also realize that these species are a renewable resource and as such we will endeavor to provide suitable conditions for the reproduction and sustainability of these species with the allowance of our American Clients to keep coming and hunting the different species in Africa.

Signed: _____

Operator Name: Zaeed Patel

Title: Director

MOPANE SAFARIS, LTD.
Address, 515 FRANCISTOWN ROAD LIVINGSTONE
Operator email: karimtd@yahoo.com

I. DESCRIPTION OF COMPANY AND CONCESSION

Mopane Safaris, Ltd. has been operating in Luembe-West Petauke Concession since April 2015. The concession provides habitat for a range of species including lion, kudu, leopard, buffalo, and elephant. The concession is in Eastern Province of Zambia. The Area is along the Luangwa River and is about 3227 square kilo meters in connection and conjunction with Nyamu Game Reserve our other area. The Area is classified as Secondary Hunting Area. Mopane Safaris has entered into a Ten Year Lease agreement with the wildlife Authority and is renewable subject to conducting successful conservation records of the Ecological system.

Our company is a Limited Company whose Directors are Mr. Saeed Omar Abdul Karim and Mr. Chishimba Mumba. This concession was acquired in April 2015. In view of this Mopane Safaris has one resident Professional Hunter who also provides the functions and duties of a Camp Manager. Other employees include, four game trackers, twelve anti-poaching scouts, and six camp staff (cooks, cleaning, miscellaneous). We estimate a total of about 215 people to be direct beneficiaries from Mopane Safaris employees. These beneficiaries come from the local community.

We very much welcome the donations that are made by some clients from the United States of America as these go a long way in improving the quality of life in these rural communities of Zambia. In most circumstances these communities do not have an economic activity which can assist them raise money for school fees and medication. The only activities which they engage themselves in is farming which is done at subsistence level to only provide for their families. This therefore follows that Safari Hunting provides some economic benefit to these communities as it enable the employees to raise some money to send their children to school, buy School necessities and meet some basic healthcare requirements.

Safari hunting therefore helps not only meet some financial needs of these communities but also prevents them from Illegal Hunting Activities which have adverse effects on the population of the animals. It therefore follows that most of the revenue for Safari Hunting is derived from Hunting of Cats and Elephant. With this in mind Mopane Safaris, the Community and the Wildlife Authorities have an enormous task to prevent the Cats from going into extinction by providing a more robust anti–poaching system to prevent the extinction of cats in these concessions.

II. ANTI-POACHING COMPONENT

Mopane Safaris maintains four groups of anti-poaching teams. Each team consists of three men per team and is equipped with a 4x4 Land cruiser, uniforms and boots, tents, rations, and a satellite phone. The patrols are done in conjunction with the Wildlife Scouts. We supply rations at least twice per month to both the government game scouts and our village scouts to ensure they are sufficiently equipped for the patrols.

Fig I. Director and Resident Professional Hunter of Mopane Safaris Mr.Karim (Center) planning the Anti-Poaching Patrols with a wildlife officer and a member from the community.

Fig ii. In the Picture below some Ivory Tusks recovered from Poachers and weapons used for poaching.

In 2015, Mopane Safaris spent almost $ 30900 in Luembe-West Petauke Consession on anti-poaching patrols, equipment, and assistance to the Wildlife Authority and community scouts, including by providing 1450 liters of diesel for patrol vehicles. We recorded 328 patrol days and well above 1968 patrol hours. We also made over $ 2005 in payments of rewards to leads helping in the abduction of poachers. A breakdown of spending on anti-poaching is below.

Item	Spend (USD)	Notes
Scout salaries	11900	Directly paid and some subsidies to WA
Scout equipment	12450	Clothing, vehicles, rations, phones, tents, etc.
Diesel / petrol	1885	For scouts and WA
Rations for WA and community scouts	7800	
Rewards	2005	For information and arrests
TOTAL	$ 36040	

The concession agreement has a clause which requires Mopane Safaris to submit Annual reports on the Anti-Poaching Activities and patrols done in each particular year to the Wildlife Authorities. This report will be taken into account in 2025 whether to renew the concession or not.

III. COMMUNITY PARTICIPATION

A. Community Assistance Component

We make contributions to the community Resource Boards of about $ 25900 annually as per agreement which was entered into 2015 by Mopane Safaris, the Community and the Wildlife Authorities.

In addition to these direct contributions, we pledge to distribute at least 60% of game meat harvested to the villages. In 2015 the value was $ 24371.

Fig iii. Resident Professional Hunter and Director attending a community Meeting.

B. Conflict Control

We usually have reports of problem Animals mainly Elephants destroying crops for villagers and Human Animal conflict from Lions. $ 12000 has been set aside for compensation purposes when we have such occurrences. In 2015 we paid $ 1000 in compensation to maize fields that were damaged by Elephants to grain fields for Villagers. We further compensated a family whose member was attacked and killed by an Elephant and was one of our Village Scouts who had gone out of camp and on returning to camp the incident occurred. The total cost for compensation and funeral arrangements was $ 2500

IV. HABITAT PROTECTION AND CONSERVATION DEVELOPMENT

We have developed the water infrastructure for the exclusive use of wildlife in our concession. The infrastructure developed so far is natural pans which costs approximately $5000 to maintain in 2015 and 2016 respectively. The increased water supply increases the carrying capacity of the concession and the lion's prey base due to more game residing in the concession by finding water resource. The concession is along the Luangwa River and this makes it have smaller streams flowing in the concession creating more water points for animals. As a result we have a lot of Game in our concession which attracts Lion, Elephant and Leopard.

V. OTHER INFORMATION

A. Prey Base

Mopane Safaris in Luembe-West Petauke is still monitoring the population growth of the Lion, Leopard, Elephant and other species which will result from efforts done so far such as anti-poaching efforts, water provision, and fire management. Mopane Safaris will further engage the wildlife Authorities in monitoring the resources on the ground by position cameras in strategic Areas so as to monitor the Activities of the Game and Cats. Luembe is a secondary Area and as such we have applied more concerted efforts aimed at mitigating the impact of poaching that had characterized the Area for the years when we were not operating in the Area.

We also engaged the wildlife authorities to regulate resident Hunting by proposing that resident Hunting be temporarily stopped for five years so as to give room for animals to breed so as to improve the numbers in the Eco system in Luembe Game Management Area.

B. Lion Population Tracking

Lion is not easy to track and as such we are still developing tools which we will use to study the population of Lon in our Area. As at now we use Lion tracks and foot prints. Sightings by individuals and just the a few cameras which we used this year to monitor the size and age for Lion and Leopard.

C. Lion Aging Approach

Like other Safari Companies we have been following an age-based policy for African lion trophies since 2015, after adopting a mutual aging agreement with our wildlife Authorities, and to be conservative in estimating age.

A number of potential Lion Trophy were not hunted this year because of our company policy and selectiveness.

Our approach as a company from 2015 until 2025 when our concession will be due for renewal is to hunt Lion which has reached an advanced and mature age only of 6 years and above.

D. Elephant

Elephant Hunting in Luembe is also one of the High Income earners. Mopane Safaris is alive to the fact that Ivory is of high value on the world market and is on high demand in particular the Far East. Mopane Safaris therefore has put up a robust Anti-Poaching program to protect this rare species. In view of this we have a policy as company not to harvest any Elephant with Tusks weighing below 20 kilograms. We recognize the fact that it may be difficult to judge but we expect the Professional Hunters to exercise caution and use their judgment before allowing a client to hunt one. Professional Hunters have been given an allowable allowance of 1 kg so as not to go below the recommended threshold by the wildlife authorities of 15 Kilograms as a minimum shoot able size Elephant.

E. U.S. Hunters

Most of our clients are from the United States. These hunters have a conservation ethic and usually contribute above their fees to anti-poaching of our community compensation fund or community assistance programs.

CONCLUSION

Mopane Safaris regulated, sustainable-use based hunting program enhances the survival of the Lion, Leopard and Elephant and we recognize that the Cat and Elephant hunts bought and booked by our American Clients contribute a higher percentage of income in the Safari Hunting and it is our obligation to share these finances with the communities who have played an important role to conserve this resource. We also realize that these species are a renewable resource and as such we will endeavor to provide suitable conditions for the reproduction and sustainability of these species with the allowance of our American Clients to keep coming and hunting the different species in Africa.

Signed: _____

Operator Name: Saeed Karim

Title: Director

NOTICE OF REPRESENTATION

This is a notice to the U.S. Fish and Wildlife Service that I have appointed John J. Jackson, III and Regina Lennox of the non-profit firm Conservation Force as my attorneys and legal representatives for all matters concerning my applications for permits to import lawfully hunted African elephant, leopard, and lion trophies.

This authority is inclusive and extends to all applications and filings, whether administrative or judicial, including but not limited to any request for reconsideration, appeal, and litigation.

I also request that these attorneys, through the address for Conservation Force below, be copied with all correspondence, acknowledgements, notices and decisions concerning my application to import my trophies at the following address:

John J. Jackson, III
Regina Lennox
Conservation Force
3240 S. I-10 Service Road W., Suite 200
Metairie, Louisiana 70001 USA
T: (504) 837-1233
F: (504) 837-1145
E: jjj@conservationforce.org
E: regina.lennox@conservationforce.org

Signed: [signature]

Name: [redacted]

Date: 1/11/2017

RCVD JAN 18 2017

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1/11/2017

AY TO THE RDER OF U.S. Fish and Wildlife Service

$ **100.00

One Hundred and 00/100********** DOLLARS

U.S. Fish and Wildlife Service

Security features. Details on back.

AUTHORIZED SIGNATURE

MEMO

(b) (6)

FORM 3-201A (1/97)

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

IMPORT PERMIT

Page 1 of 1

1. Original Permit/Certificate No.
17US18173C/9

2. Valid
11/12/2018

3. Permittee (name and address, country)
ANTHONY (b) (6) TURIELLO
(b) (6)
SANTA CRUZ, CA (b) (6)
U.S.A.

4. Consignor (name and address, country)
MICHAEL W. BORMAN
BANGWEULU TAXIDERMY LTD.
41421K CHIFWEMA ROAD
NEW KASAMA, LUSAKA PROVINCE
LUSAKA
ZAMBIA

5. Special Conditions

ALL APPLICABLE FOREIGN, LOCAL, STATE, OR OTHER FEDERAL LAWS, INCLUDING THOSE REQUIRING PERMITS, MUST BE OBSERVED.

SPECIMEN MAY NOT BE SOLD OR TRANSFERRED FOR ANY FINANCIAL REMUNERATION

MUST IMPORT THROUGH A DESIGNATED PORT LISTED IN CONDITION 10.

U.S. THREATENED SPECIES: TUSKS MUST BE MARKED AS PER [50 CFR 17.40(e)]. IN ACCORDANCE WITH THE AFRICAN ELEPHANT CONSERVATION ACT, RAW IVORY, INCLUDING SPORT-HUNTED TROPHIES THAT ARE WHOLLY OR PARTIALLY IVORY, MAY NOT BE RE-EXPORTED FROM THE U.S

TROPHY MUST HAVE BEEN TAKEN DURING 2017 HUNTING SEASON.

5a. Purpose of Transaction
H

6. U.S. Management Authority
Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

U.S. CITES Management Authority

-May not be used for commercial purposes. For live animals, only valid if the transport conditions comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport, with IATA Live Animals Regulations.

11/13/2017
Issuing Date

United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

7/8. Common Name and Scientific name (genus and species) of Animal or Plant	9. Description of Part or Derivative, including identifying marks or numbers (age/sex if live)	10. Appendix No. and Source
A. Common Name: AFRICAN ELEPHANT Scientific Name: LOXODONTA AFRICANA	9. PERSONAL SPORT HUNTED TROPHY (shipment may contain bones, hair, hide, tusks, teeth, or any taxidermied part, as well as worked, manufactured, or handicraft items such as curios, jewelry, or other utilitarian items.)	10. 1 W 11. Quantity (including units): 1 NO 12. Country of Origin: ZAMBIA
B. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
C. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
D. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
E. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin

574679

CONSERVATION FORCE
A FORCE FOR WILDLIFE CONSERVATION

† BARON BERTRAND DES CLERS, PH.D.
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April 25, 2017

MAY 2 2017

Division of Management Authority
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-IA
Falls Church, Virginia 22041-3803

Re: Application for a permit to import the trophy of an African elephant (*Loxodonta africana*) hunted in Zimbabwe in 2014

BY FEDERAL EXPRESS

Dear Chief Van Norman:

Enclosed please find one application for an FWS—ESA permit to import the trophy of an African elephant hunted in Zimbabwe in 2014. In evaluating this import permit application, please consider the information in your files submitted by Conservation Force, the Zimbabwe Parks and Wildlife Management Authority, the Safari Operators Association of Zimbabwe, the Bubye and Save Valley conservancies, individual safari hunting operators, and others, which describes Zimbabwe's well-managed elephant hunting program.

Please also refer to the recent request for reconsideration of the denials of permit applications PRT-04846 and PRT-04205, which was submitted by Conservation Force on April 6, 2017.

Please process this application at your earliest convenience and advise if additional information is needed. Please copy us with any correspondence to Zimbabwean authorities or the applicant.

Thank you for your usual courtesy and attention to this application.

Sincerely,

Conservation Force
3240 S. I-10 Service Rd. W., Suite 200
Metairie, LA 70001
(504) 837-1233
cf@conservationforce.org

Encl.: Permit application; check; notice of representation

NOTICE OF REPRESENTATION

This is a notice to the U.S. Fish and Wildlife Service that I have appointed John J. Jackson, III and Regina Lennox of the non-profit firm Conservation Force as my attorneys and legal representatives for all matters concerning my applications for a permit to import a lawfully hunted AFRICAN ELEPHANT trophy.

This authority is inclusive and extends to all applications and filings, whether administrative or judicial, including but not limited to any request for reconsideration, appeal, and litigation.

I also request that these attorneys, through the address for Conservation Force below, be copied with all correspondence, acknowledgements, notices and decisions concerning my application to import my trophy at the following address:

Conservation Force
3240 S. I-10 Service Road W., Suite 200
Metairie, Louisiana 70001 USA
T: (504) 837-1233
F: (504) 837-1145
E: cf@conservationforce.org

Signed: Atlas (b) (6) Cheek (b) (6)

Name: ATLAS (b) (6) CHEEK, (b) (6)

Date: 4/18/17

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

MAY 2 2017

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Cheek	ATLAS	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)	
(b) (6)		N/A	

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)
N/A	

2. Tax identification no.	3. Description of business, agency, Tribe, or institution		

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)				
(b) (6)				

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
FARMERS BRANCH	TX	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)				

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee.** Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

(b) (6) Cheek (b) (6) — 4/18/17

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
  (i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
  (ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
  (iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: Chewore North Safari Area, Zimbabwe 7/28/14

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

   SKIN

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

   Chifuti Safaris
   733 IONA CLOSE
   HARARE, ZIMBABWE

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business: INTERCON FREIGHT
Name: Address: 31 FLEETWOOD RD.
Address: ALEX PARK
City: HARARE
State/Province:
Country, Postal Code: ZIMBABWE

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

Please see enhancement information provided by Conservation Force, range state authorities, hunting operators, and others.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: N/A _____ **Date:** _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: [redacted] Date: 4/18/17

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Applicant or John J. Jackson, III or Regina Lennox of Conservation Force, 504-837-1233, cf@conservationforce.org

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

SAFARI CLUB INTERNATIONAL *et al.*
v.
SALLY M. R. JEWELL, *et al.*,

MOTION FOR SUMMARY JUDGMENT BY SAFARI CLUB INTERNATIONAL AND NATIONAL RIFLE ASSOCIATION OF AMERICA AND MEMORANDUM IN SUPPORT

Civ. No. 14-cv-00670-RCL;
15-cv-01026-RCL (consolidated)

Exhibit 2

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

SAFARI CLUB INTERNATIONAL, *et al.* Plaintiffs, v. S.M.R. JEWELL, *et al.* Defendants.	Civ. No. 14-cv-670 (RCL) Consolidated with Civ. No. 15-cv-1026 (RCL)

DECLARATION OF ATLAS LAWRENCE CHEEK, III

I, Atlas Lawrence Cheek, III, being first duly sworn on oath, depose and state as follows:

1. I am from Farmers Branch, Texas.

2. I have been a member of Safari Club International since 1997.

3. I have been a member of the North Texas Chapter of SCI since 1997. I have been on the Board of Directors for the last 16 years, and I have been the 2nd Vice President of the Chapter for the last 10 years.

4. I am also a member of the National Rifle Association of America, Ducks Unlimited, and Dallas Safari Club.

5. I have been hunting for 63 years. My father introduced me to hunting when I was young. I grew up hunting with all of my friends.

6. In the United States, I have hunted for white-tailed deer, pronghorn elk, moose, black bear, Alaskan brown bear, mountain lion, mule deer, bobcat, foxes, coyotes, rabbits, squirrels, woodcock, quail, cranes, marsh hens, pheasant, chukar partridge, Hungarian partridge, grouse, doves, turkey and geese. I have hunted in Mexico for ducks and geese; in Canada for caribou; in South America for doves, ducks, geese and red stag; and in Spain for red stag and fallow deer.

7. I have been on eleven safaris in Zimbabwe from 1997 to 2014. During those safaris, I hunted for leopard, lion, Cape buffalo, elephant, hippo, crocodile, hyena, eland, greater kudu, waterbuck, southern bushbuck, Limpopo bushbuck, impala klipspringer, duiker, grysbok, nyala, sable, warthog, zebra, genet, bush pig and wildebeest.

8. In 2013, I hunted in Tanzania for Thomson's gazelle, Grant's gazelle, gerenuk, lesser kudu, wildebeest and zebra.

9. In 2003, I hunted for a bull elephant in Zimbabwe. In 2008 and 2014, I hunted for a tuskless cow elephant in Zimbabwe.

10. I saw many elephants in Zimbabwe during my previous elephant hunts. The damage to the habitat by elephants was alarming. I saw stripped mopane trees, denuded forests, and large eroded areas caused by a loss of vegetation.

11. I also saw signs of poaching. The cow elephants of the Zambezi Valley were extremely aggressive and would charge unprovoked when least expected. Vehicles and anything on two legs were fair game. I believe poaching and harassment to be the cause of this behavior.

12. I believe that hunting elephants benefits the species and the local people that live in areas with elephants. My 2003 Zimbabwe hunt took place in Dande North, close to the Mozambique border, in a "Communal Area Management Programme for Indigenous Resources" (CAMPFIRE). The CAMPFIRE program allows the residents of communal lands to share in the benefits generated by the wildlife in the area. During my hunt, after being told of damage done to a maize field by a herd of elephants, villagers took me to the field, where we picked up the track of the herd. After tracking for some time, I successfully hunted a bull elephant. We then went to the nearest village and told the locals that we successfully took an elephant. Men were sent to take the meat from the elephant, which then went to the villagers. I kept the hide and tusks. It was a win-win for all. The village was benefited by the fresh meat and sorely needed source of protein; an elephant that caused damage to the agricultural field was removed from the population; and I was able to participate in a successful and sustainable hunt of an African elephant.

13. My hunt in 2014 occurred in late July in the Zambezi Valley in Zimbabwe. I went forward with my hunt, even though I knew that I would be unable to import my trophy at that time. The skin from my successful hunt in 2014 is being stored in Zimbabwe and I hope to be able to import it someday.

14. I take great pride in knowing that hunting elephants will help with the species' survival. Regulated sport-hunting of elephants amounts to a small number of elephants taken compared to the overall populations in each country. Poaching takes a far greater toll on the elephant populations. Reducing elephant hunting only reduces the anti-poaching efforts that are undertaken by safari operators, staff and hunting clients out in the field. With the reduction in revenue from U.S. hunters, CAMPFIRE and similar programs will fail and the local people will take matters into their own hands. Elephant poaching will increase and the number of elephants will decline. I believe that without proper game management via hunting, the African elephant will be doomed.

15. Many safari operators in Zimbabwe depend on U.S. hunters coming to hunt elephants. Unfortunately, I think that most U.S. hunters will stop going to Zimbabwe to hunt elephants if they are not allowed to import the trophy.

16. I submit this declaration in support of Safari Club International's efforts to challenge the U.S. Fish and Wildlife Service's decision to prohibit the importation of sport-hunted elephant trophies from Zimbabwe.

In accordance with 28 U.S.C. §1746, I declare under penalty of perjury that the foregoing is true and correct.

Dated this 12th day of February, 2016, at [illegible]

Atlas Lawrence Cheek, III

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

SAFARI CLUB INTERNATIONAL 501 2nd Street NE Washington, DC 20002, Plaintiff, v. SALLY M. R. JEWELL, in her official capacity as Secretary of the U.S. Department of the Interior; U.S. DEPARTMENT OF THE INTERIOR, an agency of the United States; DANIEL ASHE, in his official capacity as Director of the U.S. Fish and Wildlife Service; and U.S. FISH AND WILDLIFE SERVICE, an agency of the United States 1849 C Street, NW Washington, DC 20240, Defendants.	)	Civ. No. 14-cv-00670(ABJ) DECLARATION OF ATLAS LAWRENCE CHEEK, III

I, Atlas Lawrence Cheek, III, being first duly sworn on oath, depose and state as follows:

1. I am from Farmers Branch, Texas.

2. I have been a member of Safari Club International since 1997.

3. I have been a member of the North Texas Chapter of SCI since 1997. I have been on the Board of Directors for the last 14 years, and I have been the 2nd Vice President of the Chapter for the last 8 years.

4. I am also a member of the National Rifle Association of America and Ducks Unlimited.

5. I have been hunting for 61 years. My father introduced me to hunting when I was young. I grew up hunting with all of my friends.

6 In the United States. I have hunted for white-tailed deer, pronghorn elk, moose, black bear, Alaskan brown bear, mountain lion, mule deer, bobcat, foxes, coyotes, rabbits, squirrels, woodcock, quail, cranes, marsh hens, pheasant, chukar partridge, Hungarian partridge, grouse, doves, turkey and geese. I have hunted in Mexico for ducks and geese; in Canada for caribou; in South America for doves, ducks, geese and red stag; and in Spain for red stag and fallow deer.

7. I have been on ten safaris in Zimbabwe from 1997 to 2013. During those safaris, I hunted for leopard, lion, Cape buffalo, elephant, hippo, crocodile, hyena, eland, greater kudu, waterbuck, southern bushbuck, Limpopo bushbuck, impala klipspringer, duiker, grysbok, nyala, sable, warthog, zebra, genet, bush pig and wildebeest.

8. In 2013, I hunted in Tanzania for Thomson's gazelle, Grant's gazelle, gerenuk, lesser kudu, wildebeest and zebra.

9. In 2003, I hunted for a bull elephant in Zimbabwe. In 2008, I hunted for a tuskless cow elephant in Zimbabwe. I recently paid a deposit to hunt a tuskless cow elephant in Zimbabwe in July 2014.

10. I saw many elephants in Zimbabwe during both of my previous elephant hunts. The damage to the habitat by elephants was alarming. I saw stripped mopane trees, denuded forests, and large eroded areas caused by a loss of vegetation.

11. I also saw signs of poaching. The cow elephants of the Zambezi Valley were extremely aggressive and would charge unprovoked when least expected. Vehicles and anything on two legs were fair game. I believe poaching and harassment to be the cause of this behavior.

12. I believe that hunting elephants benefits the species and the local people that live in areas with elephants. My 2003 Zimbabwe hunt took place in Dande North, close to the Mozambique border, in a "Communal Area Management Programme for Indigenous Resources" (CAMPFIRE). The CAMPFIRE program allows the residents of communal lands to share in the benefits generated by the wildlife in the area. During my hunt, after being told of damage done to a maize field by a herd of elephants, villagers took me to the field, where we picked up the track of the herd. After tracking for some time, I successfully hunted a bull elephant. We then went to the nearest village and told the locals that we successfully took an elephant. Men were sent to take the meat from the elephant, which then went to the villagers. I kept the hide and tusks. It was a win-win for all. The village was benefited by the fresh meat and sorely needed source of protein; an elephant that [illegible] damage to the agricultural field was removed from the population; and I

13. My hunt planned for 2014 is scheduled for late July in the Zambezi Valley in Zimbabwe. I have paid a deposit of $4,000 and expect the total cost for the hunt to range between $25,000.00 and $30,000.00. I am prepared to go forward with the hunt despite my concern that I will be unable to import the trophy, but I am hopeful that the U.S. Fish and Wildlife Service will rescind the bans before it is time for me to import my trophy (if I am successful).

14. I take great pride in knowing that hunting elephants will help with the species' survival. Regulated sport-hunting of elephants amounts to a small number of elephants taken compared to the overall populations in each country. Poaching takes a far greater toll on the elephant populations. Reducing elephant hunting only reduces the anti-poaching efforts that are undertaken by safari operators, staff and hunting clients out in the field. With the reduction in revenue from U.S. hunters, CAMPFIRE and similar programs will fail and the local people will take matters into their own hands. Elephant poaching will increase and the number of elephants will decline. I believe that without proper game management via hunting, the African elephant will be doomed.

15. I have heard that most safari operators are not offering refunds to U.S. hunters that have already paid deposits for elephant hunts in 2014. I do not think it would be financially viable for them to offer refunds. They depend on U.S. hunters coming to hunt elephants. Unfortunately, I think that most U.S. hunters will not go to Zimbabwe or Tanzania to hunt elephants if they are not allowed to import the trophy.

16. I submit this declaration in support of Safari Club International's efforts to challenge the U.S. Fish and Wildlife Service's decision to prohibit the importation of sport-hunted elephant trophies from Zimbabwe and Tanzania in 2014.

In accordance with 28 U.S.C. §1746, I declare under penalty of perjury that the foregoing is true and correct.

Dated this 22 day of April, 2014, at Farmers Branch, Tx

Atlas Lawrence Cheek, III

Atlas Lawrence Cheek, III

ATLAS [redacted] CHEEK (b) (6) [redacted]

FARMERS BRNCH, TX (b) (6)

Fidelity® Cash Management Account

(b) (6) [redacted]

4/18/17

Date

Pay to the Order of U.S. Fish and Wildlife Service $ 100.00

One hundred and 00/100 Dollars

Security Features Details on Back

Fidelity INVESTMENTS

UMB Bank, N.A.
Kansas City, MO

(b) (6) [redacted]

MP

Harland Clarke

United States Department of the Interior

FISH AND WILDLIFE SERVICE

International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA/PRT– 33591C

Mr. Atlas (b) Cheek (b)
(b) (6)
Farmers Branch, Texas (b) (6)

JUL 27 2017

Dear Mr. Cheek:

This letter responds to your April 18, 2017, application to import under the U.S. Endangered Species Act (Act), a personal sport-hunted African elephant (*Loxodonta africana*) trophy taken in Zimbabwe in July 2014 during the 2014 hunting season. After careful review of your request for a permit, and after reviewing all available data and information on activities and circumstances occurring in Zimbabwe at the time you conducted your hunt, your application is being denied for the reasons outlined below.

The African elephant is listed as threatened under the Act with a special rule under Section 4(d) of the Act[1], which is set forth in regulations found at 50 CFR 17.40 (e)[2]. Under the special rule, issuance of an import permit can only occur if the U.S. Fish and Wildlife Service (Service) finds that the killing of the trophy animal will enhance the survival of the species [50 CFR 17.40(e)(6)(i)(B)], and the trophy is accompanied by a threatened species permit issued under 50 CFR 17.32[3]. To enhance the survival of the species, the importation must be associated with activities that provide a direct or indirect benefit to the species in the wild. In evaluating whether the killing of the trophy animal will enhance the survival of the species, the Service looks at a number of factors. Such factors include: current elephant population estimates in a given country, whether said country has a valid national and/or regional management plan, is the plan currently being implemented and does it contain achievable and measurable objectives, does the plan take an adaptive management approach and how often is it reviewed and/or updated, the designated authorities responsible for overseeing elephant management and how they are funded, the level of human-wildlife conflict taking place and how it is being addressed, any anti-poaching efforts undertaken, habitat conservation measures currently in place, as well as the amount of revenue generated by elephant hunting and how it is utilized in supporting conservation projects and/or managing the species.

1 The text of this Act can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6dd.
2 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6m3.
3 Ibis

The best available scientific and management data, as well as information provided to the Service by Zimbabwe Parks & Wildlife Management Authority (ZPWMA), Conservation Force, and Safari Club International, was used in our evaluation. In evaluating the available data and information on elephant hunting in Zimbabwe at the time your hunt occurred, the Service was unable to determine that the killing of African elephants in Zimbabwe occurring after April 4, 2014, would enhance the survival of the species. Because your hunt took place after the effective date of the finding, the import of your sport-hunted elephant trophy taken in Zimbabwe in July 2014, cannot be authorized. A copy of the Division of Management Authority's finding for the 2014 hunting season is enclosed for your reference.

As provided in 50 CFR 13.29(a)[4], you may request reconsideration of our decision to deny your application. Such a request must be in writing with the original signature of the person requesting reconsideration or by that person's legal representative, must contain a certification statement as provided at 50 CFR 13.12(a)(5)[5], should refer to your file number, PRT–33591C, and must be received in this office within 45 days of the date of this letter. The reconsideration of the decision to deny your request will be based on the information you provided in your original application. As such, your letter requesting reconsideration must address how our decision to deny your application was based on a misinterpretation of the information provided in your application or information available to the Service when making the original denial or it must present clarification of this information. **Should you supply new information that changes the scope of your original application, a new application will need to be submitted to this office before such information can be considered.**

If you have any questions, please contact Supervisory Policy Specialist Mary M. Cogliano of this office: Division of Management Authority, Branch or Permits, MS:IA, 5275 Leesburg Pike, Falls Church, VA 22041-3803 (703-358-2104, ext. 1991).

Sincerely,

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority

Enclosure

4 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xYDUk
5 Ibis

RCVD MAY 10 2017

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of
Southern African Leopard, African Elephant, and
Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
THOMPSON	MICHAEL	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)	
(b) (6)			
5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. Email address
(b) (6)			(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)		
2. Tax identification no.	3. Description of business, agency, Tribe, or institution		
4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix
5. Principal officer title	6. Primary contact name		
7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
NOBLESVILLE	IN	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☒

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Michael (b) (6) Thompson — Signature of applicant/person responsible for permit (No photocopied or stamped signatures)

05/05/17 — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: N/A (Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity: ONE (Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: N/A (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: HURUNGWE SAFARI AREA - RIFA (MASHONALAND WEST) ZIMBABWE 24 APRIL 2014

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

   ONE PAIR ELEPHANT TUSKS

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

   TROPHY CONSULTANTS INTERNATIONAL, 4 JOSIAH CHINAMANO ROAD, BELMONT,BULAWAYO, ZIMBABWE

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business	TROPHY CONSULTANTS INTERNATIONAL
Name: Address:	4 JOSIAH CHINAMANO ROAD
Address:	BELMONT
City:	BULAWAYO
State/Province:	ZIMBABWE
Country, Postal Code:	

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: Michael (b) (6) Thompson Date: 05

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

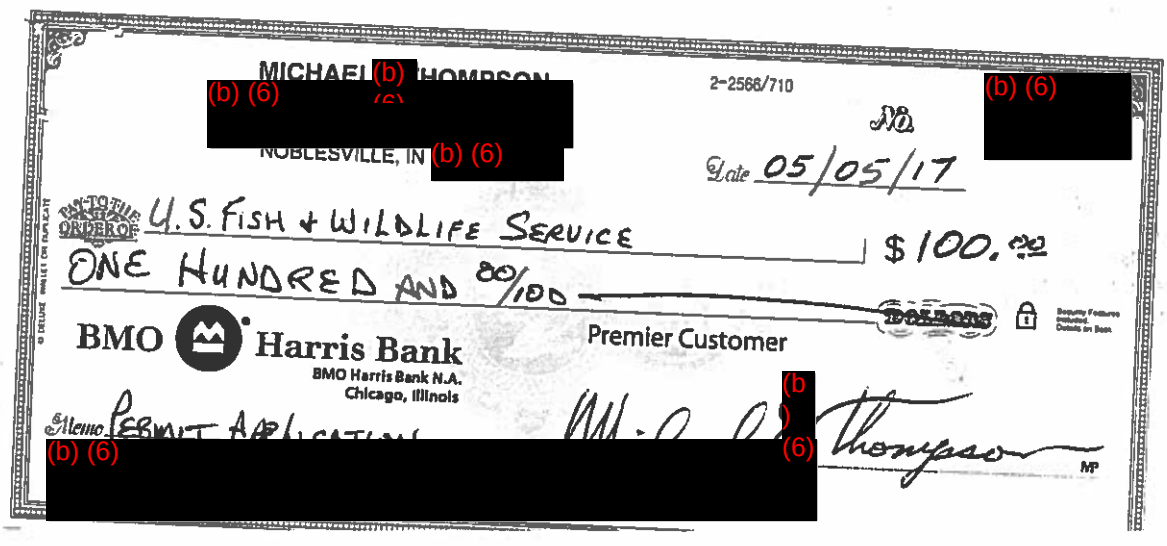
☒ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☒ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

RCVD MAY 10 2017



MICHAEL (b) (6) THOMPSON
(b) (6)
NOBLESVILLE, IN (b) (6)

2-2566/710

(b) (6)

No.

Date 05/05/17

PAY TO THE ORDER OF U.S. FISH + WILDLIFE SERVICE $100.00

ONE HUNDRED AND 00/100 DOLLARS

BMO Harris Bank
BMO Harris Bank N.A.
Chicago, Illinois

Premier Customer

Memo PERMIT APPLICATION

(b) (6)

(b) (6)

Thompson

MP

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA35243C-0

Effective: 10/06/2017 Expires: 10/05/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

Mary Ogliano
FOR
CHIEF, BRANCH OF PERMITS, DMA

Permittee:

MICHAEL(b) THOMPSON
(b) (6)
NOBLESVILLE, IN(b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Authorizations and Conditions:

A. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

B. Specimen may not be sold or transferred for any financial remuneration.

C. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

D. **Trophy must have been taken during the 2014 hunting season.**

E. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

F. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

G. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. **This permit can be photocopied.**

H. Valid for use by permittee named above.

I. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

RCVD MAY 10 2017

OMB No. 1018-0164
Expires 11/30/2016

Department of the Interior
U.S. Fish and Wildlife Service

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
GORECKI	DANIEL	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)	
(b) (6)			

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)		
2. Tax identification no.	3. Description of business, agency, Tribe, or institution		
4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix
5. Principal officer title	6. Primary contact name		
7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address, Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
HARTLAND	WISC.	(b) (6)		USA

2.a. Mailing Address (include if different than physical address, include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes [X] If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue 06575C No [ ]

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Daniel Gorecki — 5/2/2017
Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit**. If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following: N/A
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: ZIMBABWE - UMGUSA FOREST - BULAWAYO
   b. Date wildlife was hunted: AUGUST 28, 2013
   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):
      1) GOODS MANUFACTURED FROM ELEPHANT SKIN: wallets, hand bags, gun cases, BOOTS, BELTS, TRAVEL BAGS
      2) EARS
      3) FOOT STOOLS
   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:
      OUTBOUND CARGO AND TROPHY EXPORTERS
      5 GRANTHAM ROAD - BELMONT - BULAWAYO - ZIMBABWE

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

   Name: Business OUTBOUND CARGO and Trophy Exporters
   Name: Address:
   Address: 5 GRANTHAM ROAD
   City: BELMONT BULAWAYO
   State/Province: ZIMBABWE
   Country, Postal Code: AFRICA

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: Daniel Gorelki Date: May 2, 2017

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):
DAN GORELKI (b) (6) [redacted]
(b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☒ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

RCVD MAY 10 2017

DANIEL (b) GORECKI
(b) (6)
HARTLAND, W (b) (6)

(b) (6)

DATE 5/2/2017

PAY TO THE ORDER OF U.S. Fish and Wildlife Servic $ 100.00

One hundred and 00/100 DOLLARS

usbank.

THE PRIVATE CLIENT RESERVE

MEMO

(b) (6)

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA35539C-0

Effective: 06/05/2017 Expires: 06/04/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
DANIEL (b) (6) GORECKI
(b) (6)
HARTLAND, WI (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

B. Specimen may not be sold or transferred for any financial remuneration.

C. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

D. **Trophy must have been taken during the 2013 hunting season.**

E. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit ssued by the Management Authority of Zimbabwe.

F. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

G. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. **This permit can be photocopied.**

H. Valid for use by permittee named above.

I. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

RCVD MAY 25 2017

David (b) Strickland

(b) (6) [redacted]

(b) (6) [redacted]

OMB No. 1018-0093
Expires 05/31/2017

Federal F

Return to: U.S. Fish and Wildlife Service
Division of Management Auth
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2

phant, and

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
BRISTOW	DENNIS	(b) (6) [redacted]	N/A

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6) [redacted]			

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6) [redacted]			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6) [redacted]

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
WILSON	WYOMING	(b) (6) [redacted]		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6) [redacted]

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country
WILSON	WYOMING	(b) (6) [redacted]		

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

[signature] 11-05-2017

Signature (in blue ink) of applicant/person responsible for permit (No photocopied or stamped signatures) Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: The U.S. FWS has determined that a trophy consists of raw or tanned parts of a specimen taken by a hunter during a sport hunt for personal use. It may include the bones, claws, hair, head, hide, hooves, horns, meat, skull, teeth, tusks, or any taxidermied part, including, but not limited to, a rug or taxidermied head, shoulder, or full mount. It does not include articles made from a trophy, such as worked, manufactured, or handicraft items for use as clothing, curios, ornamentation, jewelry, or other utilitarian items. If you wish to import such products, please contact the Division of Management Authority for the proper application form.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy. If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: _____ (Limited to the import of two per calendar year)

African elephant (*Loxodonta africana*) Quantity: One (Import permit is not required for trophies harvested in Botswana, Namibia, South Africa, or Zimbabwe). **Note: once imported, ivory cannot be re-exported.**

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: _____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you are looking to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: SENGWA RESEARCH, MIDLANDS PROVINCE, UTM297991, GOKWE, ZIMBABWE
   b. Date wildlife was hunted:

      27 SEPTEMBER 2012

RCVD MAY 25 2017

DOCUMENT IS PRINTED ON CHEMICALLY REACTIVE PAPER - THE BACK OF THIS DOCUMENT INCLUDES A TAMPER EVIDENT CHEMICAL WASH WARNING BOX

(b) (4)

(b) (6)

(b) (4)

DATE

AMOUNT

05/24/2017

$100.00

One hundred and 00/100

PAY
TO THE
ORDER
OF

US Fish and Wildlife Service
Branch of Permits
5275 Leesburg Pike
Falls Church, VA 22041-3803

AUTHORIZED SIGNATURE

THE BACK OF THIS DOCUMENT

(b) (6)

RCVD MAY 25 2017

OMB No. 1018-0093
Expires 05/31/2017

Federal F

(b) (6)

(b) (6)

Return to: U.S. Fish and Wildlife Service
Division of Management Auth
Branch of Permits, MS: IA
5275 Leesburg Pike
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BRISTOW	DENNIS	(b) (6)	N/A

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
WILSON	WYOMING	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country
WILSON	WYOMING	(b) (6)		

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

11-05-2017

Signature (in blue ink) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: The U.S. FWS has determined that a trophy consists of raw or tanned parts of a specimen taken by a hunter during a sport hunt for personal use. It may include the bones, claws, hair, head, hide, hooves, horns, meat, skull, teeth, tusks, or any taxidermied part, including, but not limited to, a rug or taxidermied head, shoulder, or full mount. It does not include articles made from a trophy, such as worked, manufactured, or handicraft items for use as clothing, curios, ornamentation, jewelry, or other utilitarian items. If you wish to import such products, please contact the Division of Management Authority for the proper application form.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy. If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: _____ (Limited to the import of two per calendar year)

African elephant (*Loxodonta africana*) Quantity: One (Import permit is not required for trophies harvested in Botswana, Namibia, South Africa, or Zimbabwe). **Note: once imported, ivory cannot be re-exported.**

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: _____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you are looking to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: SENGWA RESEARCH, MIDLANDS PROVINCE, UTM297991, GOKWE, ZIMBABWE
   b. Date wildlife was hunted:

      27 SEPTEMBER 2012

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

2 X TUSKS - BRASS CAPPED ON WOODEN BASES

d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

KARL HUMAN TAXIDERMY, CRESTWOOD FARM, BRAKPAN, EAST LONDON, SOUTH AFRICA

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name:	KARL HUMAN
Business Name:	KARL HUMAN TAXIDERMY,
Address:	CRESTWOOD FARM,
Address:	BRAKPAN
City:	EAST LONDON
State/Province:	EASTERN CAPE
Country, Postal Code:	SOUTH AFRICA

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year (if applicable). In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: _____ Date: _____

7. **If you are the hunter applying to import your own trophy,** please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year (if applicable). In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 11-05-2017

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):
MARK BRISTOW - (b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

PERMIT / CERTIFICATE 171892

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

- [ ] EXPORT
- [x] RE-EXPORT
- [ ] IMPORT
- [ ] OTHER

ORIGINAL

2. Valid until 05-09-2017

3. Importer (name and address)
Mark Bristow
[redacted] Wilson
Wyoming, [redacted]
U.S.A.

3a. Country of import U.S.A.

4. Exporter / Re-exporter (name, address and country)
Karl Human Taxidermy
Crestwood Farm
Brakfontein
East London, RSA

5. Special conditions This is a Tops integrated permit
TUSK No 01ZW2012 1906-17Kg
ZW2012 1905-15Kg.
Tag No. ZW249/500/2012-AFR
Replaces 154326 dd 07.06.2016 (Expired)

For live animals, this permit or certificate is only valid if its transport conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations. Permit / certificate valid for one consignment only.

5a. Purpose of the transaction (see reverse) H

5b. Security stamp No. 1360779

6. Name, address, national seal / stamp and country of Management Authority

Department of Environmental Affairs
Private Bag X447
PRETORIA
0001
SOUTH AFRICA

	7.8 SCIENTIFIC NAME (genus and species) AND COMMON NAME OF ANIMAL OR PLANT	9. Description of specimens, including identifying marks or numbers (age/sex) if live	10. Appendix No. and source (see reverse)	11. Quantity (including unit)	11a. Total exported / quota
A	7.8 Loxodonta africana Elephant	9. 1X Set Tusks	10. II (W)	11. ONE (1)	11a. 211 500/2012
	12. Country of origin* ZW; Permit No. ZW/0938/2013; Date 16/05/2013	12a. Country of last re-export; Certificate No.; Date		12b. No. of the operation ** or date of acquisition ***	
B	7.8 Loxodonta africana Elephant	9. 2X Feet	10. II (W)	11. TWO (2)	11a.
	12. Country of origin* ZW; Permit No. ZW/0937/2013; Date 16/05/2013	12a. Country of last re-export; Certificate No.; Date		12b. No. of the operation ** or date of acquisition ***	
C	7.8	9.	10.	11.	11a.
	12. Country of origin*; Permit No.; Date	12a. Country of last re-export; Certificate No.; Date		12b. No. of the operation ** or date of acquisition ***	
D	7.8	9.	10.	11.	11a.
	12. Country of origin*; Permit No.; Date	12a. Country of last re-export; Certificate No; Date		12b. No. of the operation ** or date of acquisition ***	

* Country in which the specimens were taken from the wild, bred in captivity or artificially propagated (only in case of re-export)
** Only for specimens of Appendix I species bred in captivity or artificially propagated for commercial purposes
*** For Pre-Convention specimens

2017-03-06

13. THIS PERMIT / CERTIFICATE IS ISSUED BY: N. Bam

Bhisho — Place
06-03-2017 — Date
1360779 — Security stamp, signature and official seal

14. EXPORT ENDORSEMENT:

Block	Quantity
A	
B	
C	
D	

15. Bill of Lading/Air Waybill Number:

Port of Export | Date | Signature | Official stamp and title

V & R Printing Works (Pty) Ltd (012) 333 2462 (2621)

PERMIT / CERTIFICATE 171892

CONDITIONS FOR PERMIT NO. /s 17892

PERMIT CONDITIONS FOR THE NATIONAL/ INTERNATIONAL IMPORT, EXPORT OR RE-EXPORT OF CITES AND NON-CITES SPECIES AND ANY PRODUCTS THEREOF; NON-CITES LIVE WILD ANIMALS, LIVE EXOTIC ANIMALS, HUNTING TROPHIES, WILD ANIMAL PRODUCTS, PROTECTED PLANTS AND LIVE FISH

These conditions will be applicable to all National/ International imports, Exports and Re-Exports of CITES and Non-CITES species and any products thereof; live wild animals, live exotic animals, hunting trophies, wild animal products, protected plants and live fish by air, mail, rail and road within the Gauteng Province of which the first port of entry into and/ or the last port of exit out of the Province of Gauteng/ South Africa will be OR Tambo International Airport.

Import permits are not valid unless the imported consignment is accompanied by a valid ***(original)*** export permit from the country/ province of origin ***(if required)***, which must be handed to the authorized Environmental Management Inspector on inspection.

THE FOLLOWING CONDITIONS ARE APPLICABLE TO:

(A) ALL NATIONAL/ INTERNATIONAL IMPORTS, EXPORTS AND RE-EXPORTS OF CITES AND NON-CITES SPECIES AND ANY PRODUCTS THEREOF; LIVE WILD ANIMALS, LIVE EXOTIC ANIMALS, HUNTING TROPHIES, WILD ANIMAL PRODUCTS, PROTECTED PLANTS AND LIVE FISH (INCLUDING AIR, MAIL, RAIL, ROAD)

THIS PERMIT:

1. a) Shall not be transferable;
   b) Shall be invalid until the signature of the holder/ Recipient thereof been appended thereto;
   c) This permit is not valid unless it has been endorsed and released by an authorized Environmental Management Inspector/ official prior to the import, export or re-export taking place. In cases of importation of live animals, which are to be quarantined at OR Tambo International Airport's Quarantine Station, the permit must be released prior to the animals leaving quarantine. Original import permits to be inserted into a sealed envelope and placed in the Environmental Management Inspector box that's provided at the quarantine station, no more than 14 working days after import;
   d) Shall be subject to the provisions of any other law and or regulation;
   e) Shall be valid for one consignment only;
   f) This permit is subject to the compliance of Veterinary and Agricultural requirements; and to the compliance of IATA Live Animal Regulations.

2. The permit holder or his delegated agent must contact one of the authorized Environmental Management Inspector/ officials, per telephone ***and*** confirm per fax a minimum of ***48 hours*** prior to the import, export or re-export taking place to book an inspection (the inspection booking must be requested a minimum of 48 hours prior to the intended inspection), applicable for shipments done over weekends and public holidays, with the following information:
   a) Name / Company Name of Importer / Exporter;
   b) Name of Airline and Warehouse where intended inspection will take place;
   c) Date and Time of Import / Export / Re-Export;
   d) Date and Time of intended inspection (subject to approval);
   e) Agents particulars (if applicable), Carrier Name, Flight Number, Flight Time and Waybill Number;
   f) The applicable permit number/s and relevant expiry dates; and
   g) Detailed packing list as per condition 7.

3. Inspections are by appointment only and early booking is necessary. An authorized Environmental Management Inspector/ official may be contacted at the following telephone numbers during office hours ***(07:00 – 15:30)***:
   Office: +27 (11) 390-3687/ 2311
   Fax: +27 (11) 390-1720

4. All relevant documentation, including ***original*** permit/s ***(CITES permits must include original and coloured copy)***, Packing List/s, Waybill/s and Bill of entry/s (SAD/ DA 550) must be presented for inspection. A photo copy of all these documents must also be handed to the Environmental Management Inspector/ official on inspection. The original permit/s, these conditions and packing list/s must accompany the consignment/s.

5. All transport containers must be numbered and the numbers must coincide with the numbers on the packing list/s. The country/ province of destination as shown on the containers must coincide with the country/ province of destination as on the permit. The details on the packing list/s must coincide with the details on the permit/s and Waybill/s.

6. Detailed packing list/s, that are signed and dated must accompany the consignment/s, with the following information:
   a) Details of Importer and Exporter (Names, addresses and contact numbers);
   b) Waybill number/s and name of carrier, flight number, date and time;
   c) Transport container number/s;
   d) Scientific name of species (in full) with relevant transponder / tag / ring numbers; a detailed description of specimen / product and the origin thereof;
   e) Common name of species (in full);
   f) Number per species per container (actual number exported / imported); and
   g) Applicable permit number/s

7. If this permit is not used, the ***original permit (CITES permits must include coloured copy)*** must be returned to the issuing authority within ***14 working*** days after expiry thereof. Import permits must be returned to the issuing authority within ***14 working days*** after use. Export permits must be handed to a Management Authority of the importing country/ province within ***14 working days*** after use.

8. The permit holder must make and retain photo copies of permit/s for audit inspections. Copies of import permits must be made and retained ***after endorsement***, for Re-export permit applications. When applying for a Re-export permit, a copy of the ***endorsed import permit*** must be submitted to the Permit office with the application.

9. Only A person authorized thereto by the Premier or Minister may make any alteration on the permit.

10. Failure to comply with any of the permit conditions renders the permit invalid and may result in criminal proceedings, cancellation of the permit/s and seizure of the consignment/s.

11. The holder of the permit and / or his/ her delegated agent will be held responsible for any legal costs; costs incurred for delays and / or storage fees due to irregularities and / or due to the consignment being withheld due to incorrect documentation, and / or incorrect consignment/s and / or failure to comply with permit conditions.

12. Permit holders or their delegated agents must inform the Environmental Management Inspector/ official if an inspection is cancelled, or if they are to be late for an inspection within a reasonable time before the inspection is due to take place.

2017 -03- 06

Signature of Issuing Officer	Date	Signature of Recipient	Date
Full Name		Full Name	

Conditions to this permit have been issued in terms of the applicable provisions of the NEMBA, the CITES and TOPS Regulations as well as the relevant provincial legislation (where applicable).

RCVD MAY 25 2017

DOCUMENT IS PRINTED ON CHEMICALLY REACTIVE PAPER - THE BACK OF THIS DOCUMENT INCLUDES A TAMPER EVIDENT CHEMICAL WASH WARNING BOX

(b) (4)

(b) (6)

(b) (4)

DATE

AMOUNT

05/24/2017

$100.00

One hundred and 00/100

PAY
TO THE
ORDER
OF

US Fish and Wildlife Service
Branch of Permits
5275 Leesburg Pike
Falls Church, VA 22041-3803

AUTHORIZED SIGNATURE

(b) (6)

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA37207C-0

Effective: 07/25/2017 Expires: 07/24/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
DENNIS (b) (6) BRISTOW
(b) (6)
WILSON, W (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Conditions and Authorizations:

A. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

B. Specimen may not be sold or transferred for any financial remuneration.

C. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

D. **Trophy must have been taken during the 2012 hunting season.**

E. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

F. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

G. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. **This permit can be photocopied.**

H. Valid for use by permittee named above.

I. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

RCVD JUN 15 2017

James (b) (6) Thompson
(b) (6)
Houston, Texas (b) (6)
(b) (6)

June 9, 2017

U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Re: Permit Application Form

To Whom it May Concern:

Please find attached my Federal Fish and Wildlife Permit Application Form along with my $100 processing fee payment.

Kindest Regards,

James (b) (6) Thompson

Department of the Interior
U.S. Fish and Wildlife Service

Federal Fish and Wildlife Permit Application Form

OMB No. 1018-0093
Expires 05/31/2017

RCVD JUN 15 2017

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
IMPORT OF SPORT-HUNTED TROPHIES
(Appendix I of CITES and/or ESA)

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Thompson	James	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Houston	Texas	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☑ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: MA67603A-0 No ☐

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature (in blue ink) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 06/09/2017

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES *(Appendix I of CITES* and/or *ESA)*

Note 1: If you hold an import permit for trophy/trophies that you did not use, please **return the unused original permit**. If you are requesting reissuance of a permit because you have taken a trophy, but are unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: Applications for species listed as endangered under the U.S. Endangered Species Act are published in the Federal Register for a 30-day public comment period. Please allow at least **90 days** for the application to be processed.

Note 3: USFWS has determined that a trophy consists of raw or tanned parts of a specimen taken by a hunter during sport hunt for personal use. It may include the bones, claws, hair, head, hide, hooves, horns, meat, skull, teeth, tusks, or any taxidermied part, including, but not limited to, a rug or taxidermied head, shoulder, or full mount. It does not include articles made from a trophy, such as worked, manufactured, or handicraft items for use as clothing, curios, ornamentation, jewelry, or other utilitarian items. If you wish to import such products, please contact the Division of Management Authority for the proper application form.

Note 4: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If needed, use a separate sheet of paper. On all attachments or separate sheets you are submitting; please indicate the application question number you are addressing. If applying for more than one trophy, be sure to answer questions 1-5 for each trophy addressed in this application. If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. For each trophy to be imported, provide:
   a. Scientific name (genus, species, and, if applicable, subspecies) and common name.

      Loxodonta, africana, Elephant

   b. Sex (if known).

      Male

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and PLACE (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and PLACE (area, region, GIS coordinates, ranch AND nearest city) where wildlife was removed from the wild (provide a map if possible):

      Zimbabwe; Matetsi Safari Area; 18 deg 30 min S, 25 deg 56 min E; SSE of Victoria Falls Zimbabwe (See attached map)

   b. Date wildlife was hunted:

      08/27/2012

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks).

Skin & Tusks

d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export documents]:

Outbound Cargo & Trophy Exporters
5 Grantham Rd, Bulawayo, Zimbabwe

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you must provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will also appear on your Namibian export permit and must match the U.S. import permit].

Name:	Outbound Cargo & Trophy Exporters
Business Name:	5 Grantham Rd
Address:	Bulawayo, Zimbabwe
Address:	
City:	
State/Province:	
Country, Postal Code:	

5. Please be aware that the U.S. Fish and Wildlife Service must make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., population status or trend data; how the funds from license/trophy fees will be spent; what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year (if applicable). In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: _____ Date: _____

7. **If you are the hunter applying to import your own trophy,** please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year (if applicable). In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 06/09/2017

Be aware that there may be additional permitting or approval requirements by your local or state government, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist you, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish permit mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

   Cindi Rulon
   WELL Worldwide Energy Logistics Customs Brokers
   17401 Aldine Westfield Rd., Houston, Texas 77073

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

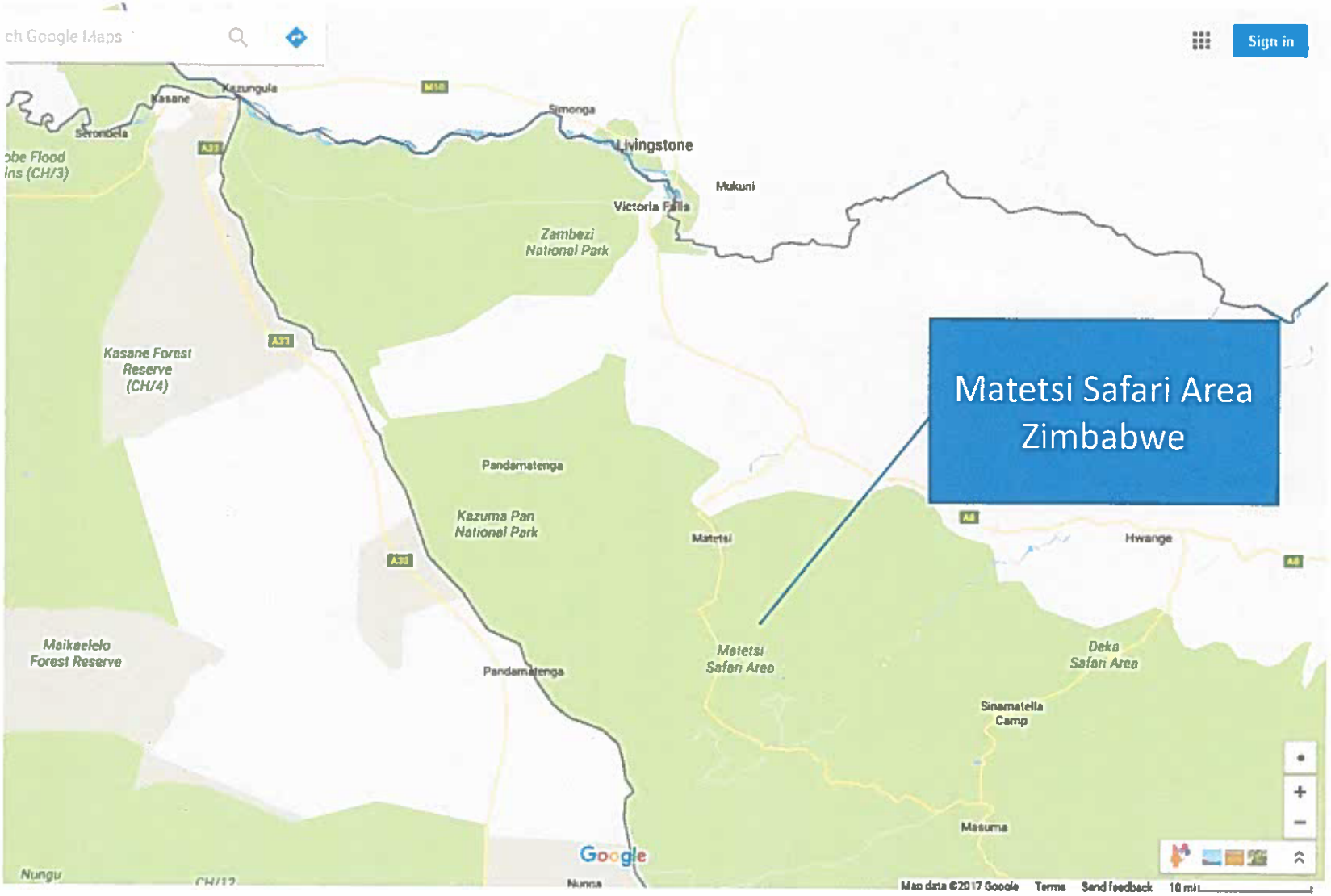
☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

   James (b) Thompson
   (b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.


Sign in
Kazungula
Kasane
Simonga
Livingstone
Mukuni
Victoria Falls
Zambezi National Park
Kasane Forest Reserve (CH/4)
Matetsi Safari Area Zimbabwe
Pandamatenga
Kazuma Pan National Park
Matetsi
Hwange
Maikaelelo Forest Reserve
Matetsi Safari Area
Deka Safari Area
Sinamatella Camp
Masuma
Nungu
Google
Map data ©2017 Google
Terms
Send feedback
10 mi

RCVD JUN 15 2017

JAMES THOMPSON 08-02

(b) (6)

HOUSTON, TX (b) (6)

June 9, 2017

Pay to the order of US Fish & Wildlife Service $ 100 00/XX

One hundred dollars & 00/100 Dollars

Photo Safe Deposit™ Details on back

U.S. TRUST

Bank of America, N.A.

ACH R/T 011500010

For Permit

(b) (6)

Dziwulski, Kara <kara_dziwulski@fws.gov>

CITES Export Permit PRT# 40985C

8 messages

Dziwulski, Kara <kara_dziwulski@fws.gov> Wed, Jul 12, 2017 at 1:32 PM
To: (b) (6)

Mr. Thompson,

My name is Kara and I am a biologist with the USFWS Management Authority. I am contacting you regarding your application with us to import an elephant trophy from Zimbabwe from 2012.

In order for me to continue with your application I need to know why this trophy is now being imported 5 years after the animal was harvested? Also, you need to provide me a copy of your hunting license that covered you for this hunt.

Thanks,

Kara

If we do not receive the information requested above within 45 days from the date of this email, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.

--
Kara Dziwulski
Permits Biologist
Division of Management Authority
U.S. Fish and Wildlife Service
Office of International Affairs
5275 Leesburg Pike, MS:IA
Falls Church, VA 22041-3803
703-358-1797

Dziwulski, Kara <kara_dziwulski@fws.gov> Wed, Jul 12, 2017 at 1:39 PM
To: (b) (6)

[Quoted text hidden]

James Thompson (b) (6) > Wed, Jul 12, 2017 at 3:55 PM
To: "Dziwulski, Kara" <kara_dziwulski@fws.gov>

Kara,

Greetings… The elephant trophy was harvested in 2012 as stated on the permit application and then, after our safari was completed back then, the local land owner and local outfitter got into a conflict over some issues, unbeknownst to me, with the outfitter team I booked the safari through (Cabela's and African Silwane Hunters). The result was that ALL of my trophies, including the elephant, and the trophies of the others in my party for that safari, were held ransom, per se, until the matters in dispute were settled. The dispute went on for years, ended up in court as I understand it, and was finally resolved to the satisfaction of both parties only a few months ago. This triggered all of our trophies, including my elephant, being sent from the local outfitter, who was "retaining" them, to the outbound cargo exporter there in Zimbabwe for shipment back to the US. This, in turn, triggered my USFWS permit application you now have in hand to have my 2012 elephant trophy brought back to the US as I legally harvested.

So, the short answer to your question is: The reason why my elephant trophy is being imported now to the US 5 years after it was legally harvested is because it was entangled in a legal dispute between the local land owner and the

outfitters involved for the entirety of the past 5 years. That dispute matter, now resolved, has allowed the elephant trophy to be forwarded on to the local Zimbabwe exporter for export pending the USFWS permit for import to the US.

I'll look in my records to see if I have the actual hunting license from back in 2012. I'm not sure I do, but I'll look. In the meantime, I'm attaching the original Cabela's worksheet booking the safari and then the actual invoice to me of the safari from Silwane Hunters documenting the 2012 safari and, specifically, the elephant as included as a trophy back then. Furthermore, as I understand it from the exporter in Zimbabwe, they have paperwork and documentation on the elephant trophy which supports the harvest date, etc. as issued by their local authorities. Furthermore, if needed, I'm sure I can get the local outfitter I had booked through to provide further support and corroboration to all of the above.

I'll revert back after I search my files for the hunting license itself. I'm not sure what I was given back then or if I still have any paperwork in my possession.

Thanks for your inquiry and I hope this didn't appear as too much of a big drama. But I can tell you it has been hell working to get all of our trophies back over here from that 2012 safari.

Regards,

James F. Thompson

From: Dziwulski, Kara [mailto:kara_dziwulski@fws.gov]
Sent: Wednesday, July 12, 2017 12:39 PM
To: (b) (6)
Subject: CITES Export Permit PRT#40985C

[Quoted text hidden]

2 attachments

Cabela's 2012 Africa Safari.pdf
645K

0040 - J Thompson.pdf
60K

James Thompson (b) (6) Thu, Jul 13, 2017 at 10:26 AM
To: "Dziwulski, Kara" <kara_dziwulski@fws.gov>

Kara,

As a follow-up to my sent email yesterday, I did find my file on my 2012 Safari to Zimbabwe at home and after going through it, I find no hunting license per se. I have several invoices from the outfitters documenting I was on an elephant safari to the Zimbabwe Matetsi area in 2012 similar to what I sent you yesterday. Further, I have a receipt stamped at the airport in Zimbabwe documenting I was there at the time of the safari as stated. I'll be happy to scan what I have if that is of any benefit to you.

Please advise. Regards,

James F. Thompson

From: James Thompson
Sent: Wednesday, July 12, 2017 2:55 PM
To: 'Dziwulski, Kara' <kara_dziwulski@fws.gov>
Subject: RE: CITES Export Permit PRT#40985C

[Quoted text hidden]

Dziwulski, Kara <kara_dziwulski@fws.gov> Wed, Aug 2, 2017 at 4:00 PM
To: James Thompson (b) (6) >

Mr. Thompson,

I apologize for the delay in getting back to you, as you realize your situation is not typical so I have had to consult with my supervisors about what can be done. Unfortunately, in order to issue the permit we need proof that the elephant was hunted in 2012. While, the receipts from Cabela's show you paid for a elephant hunt, they do not prove that you actually ended up going on the hunt in 2012, and that the elephant you are looking to import was also taken in 2012.

Therefore, we need you to provide us with one of the following:

- A copy of the Zimbabwe CITES export permit
- The stamp # that was placed on the tusks of the elephant you killed (these should have been stamped as soon as the animal was killed)

In addition, please be aware that USFWS law enforcement might require a copy of your license anyhow upon importation to verify that you are truly authorized to import this elephant. Therefore, I would see if the outfitter, the Zimbabwe game ranch, or the Zimbabwe government have a copy of your license on record somewhere. It also might help to speak with a USFWS law enforcement officer at the port you are looking to import the trophy in through once this process furthers.

Once I have the information I requested above I can move forward with your permit.

Thanks,

Kara

If we do not receive the information requested above within 21 days from the date of this email, your incomplete application will be placed in our inactive files and we will not complete your request for a permit.
[Quoted text hidden]

James Thompson (b) (6) Wed, Aug 9, 2017 at 12:09 PM
To: "Dziwulski, Kara" <kara_dziwulski@fws.gov>

Kara,

Thank you for your below email…

As pure coincidence would have it, I have actually been on a safari in exactly the same area (Matetsi) as I was back in 2012, but with a different Outfitter now, of course. While internet service was non-existent to spotty at best, I did receive your below email and then had detailed discussions with my current Outfitter to become clear as to what permits, tags, and “licenses” are issued in the process.

As I have been informed, the CITES permit itself isn’t issued until the time that the export cargo company in Zimbabwe is ready to ship the Elephant trophy itself as there is an expiration on the permit (i.e. it needs to be ready to ship when the permit is applied for). HOWEVER, there is a CITES tag that goes with the Elephant trophy that has all the

information, I believe, you would need to confirm the year of the harvest, etc. I am now tracking that CITES tag down with both the local Zimbabwe export company and taxidermist.

Also, the elephant tusks themselves should have the stamp as you referenced in your below email and I am asking the local taxidermist, who is in possession of the tusks, to send me a picture of these stamps on the tusks.

When I get the CITES tag copy/pic along with the tusk pic of the stamp(s) on them, I will send to you immediately.

Lastly, regarding the matter of the "license," I have been advised by my current Outfitter that there is no license per se assigned to me directly. In the case of my current safari just now completed, indeed this was the case. I have no paperwork or license from the Govt. of Zimbabwe which documents my permission to hunt in Zimbabwe. HOWEVER, the Professional Hunter (i.e. the Outfitter I've referenced above) does get the permission and permits for me to hunt on the safari and he is responsible for maintaining these records and logging them into a system they have called TR 2 or TRAS 2. This, in essence, as I've been educated, is my "license" to hunt. But the hunter (i.e. me) never actually receives or even sees this TR 2 or TRAS 2 paperwork (and it is my understanding that it is all computerized now; however, I'm speculative on that reliability given the norms of Zimbabwe). Regardless, I'm going to strive to get a copy of whatever is available in regards to my TR 2 or TRAS 2 paperwork for additional confirmation at the time of importation.

Sorry for the long email, but this has been quite an experience; and an education.

I'll send you the information you requested (CITES tag and pictures of the stamps on the tusks) as soon as I can get them. I'll be traveling back to Houston over the course of the next few days.

Kindest Regards,

James F. Thompson

From: Dziwulski, Kara [mailto:kara_dziwulski@fws.gov]
Sent: Wednesday, August 2, 2017 10:01 PM
To: James Thompson <(b) (6)
Subject: Re: CITES Export Permit PRT#40985C

[Quoted text hidden]

James Thompson (b) (6) Mon, Aug 14, 2017 at 9:50 AM
To: "Dziwulski, Kara" <kara_dziwulski@fws.gov>

Kara,

I am including herewith a "Proof of Ownership" document I have prepared with all of the requesting information plus additional information which verifies my ownership of the ivory in question and my legal harvest of the elephant back in 2012.

This document includes the Certificates of Ownership of the Ivory as issued by the Govt. of Zimbabwe, my CITES export tag, pictures of the Ivory clearly showing the stamps affixed on the tusks which match, exactly, the Tusk Serial

numbers on the Certificates of Ownership, and my TRAS2 hunting permit as printed out from the Zimbabwe computer system they have now invoked to track this information.

I think you will find this information complete and accurate according to my permit application as submitted.

I would appreciate your acknowledgement of receipt of this document and the anticipated processing time of completing the approval of my permit as submitted.

This has been an exhaustive process, but I appreciate the need for due diligence on this matter and your continued work on this permit application.

Kindest Regards,

James F. Thompson

From: Dziwulski, Kara [mailto:kara_dziwulski@fws.gov]
Sent: Wednesday, August 2, 2017 3:01 PM
To: James Thompson <(b) (6)
Subject: Re: CITES Export Permit PRT#40985C

[Quoted text hidden]

James Thompson Elephant - Proof of Harvest Date.pdf
813K

Dziwulski, Kara <kara_dziwulski@fws.gov> Mon, Aug 14, 2017 at 2:42 PM
To: James Thompson (b) (6)

Mr. Thompson,

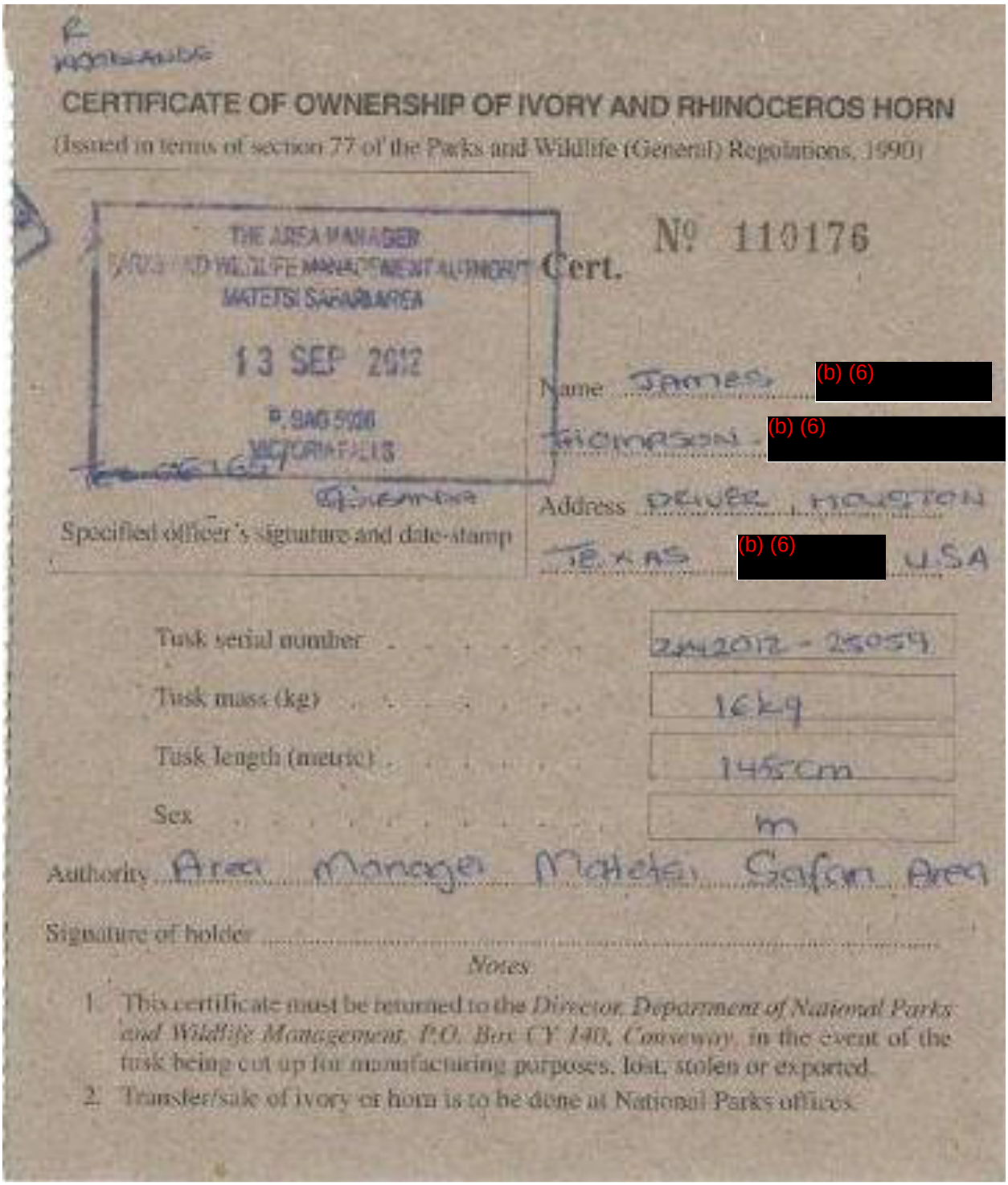
Thank you for providing me with all the additional documentation. I believe that is all we need to move forward with your permit.

Thank you for your patience and cooperation with us!

Kara
[Quoted text hidden]

James F. Thompson
Proof of Elephant Harvest – Zimbabe Matetsi Area, 2012

Certificate of Ownerships of Ivory:



CERTIFICATE OF OWNERSHIP OF IVORY AND RHINOCEROS HORN

(Issued in terms of section 77 of the Parks and Wildlife (General) Regulations, 1990)

THE AREA MANAGER
PARKS AND WILDLIFE MANAGEMENT AUTHORITY
MATETSI SAFARI AREA
13 SEP 2012
P. BAG 5926
VICTORIA FALLS

Cert. Nº 110176

Specified officer's signature and date-stamp

Name James (b) (6)

THOMPSON (b) (6)

Address DENVER, HOUSTON

TEXAS (b) (6) U.S.A

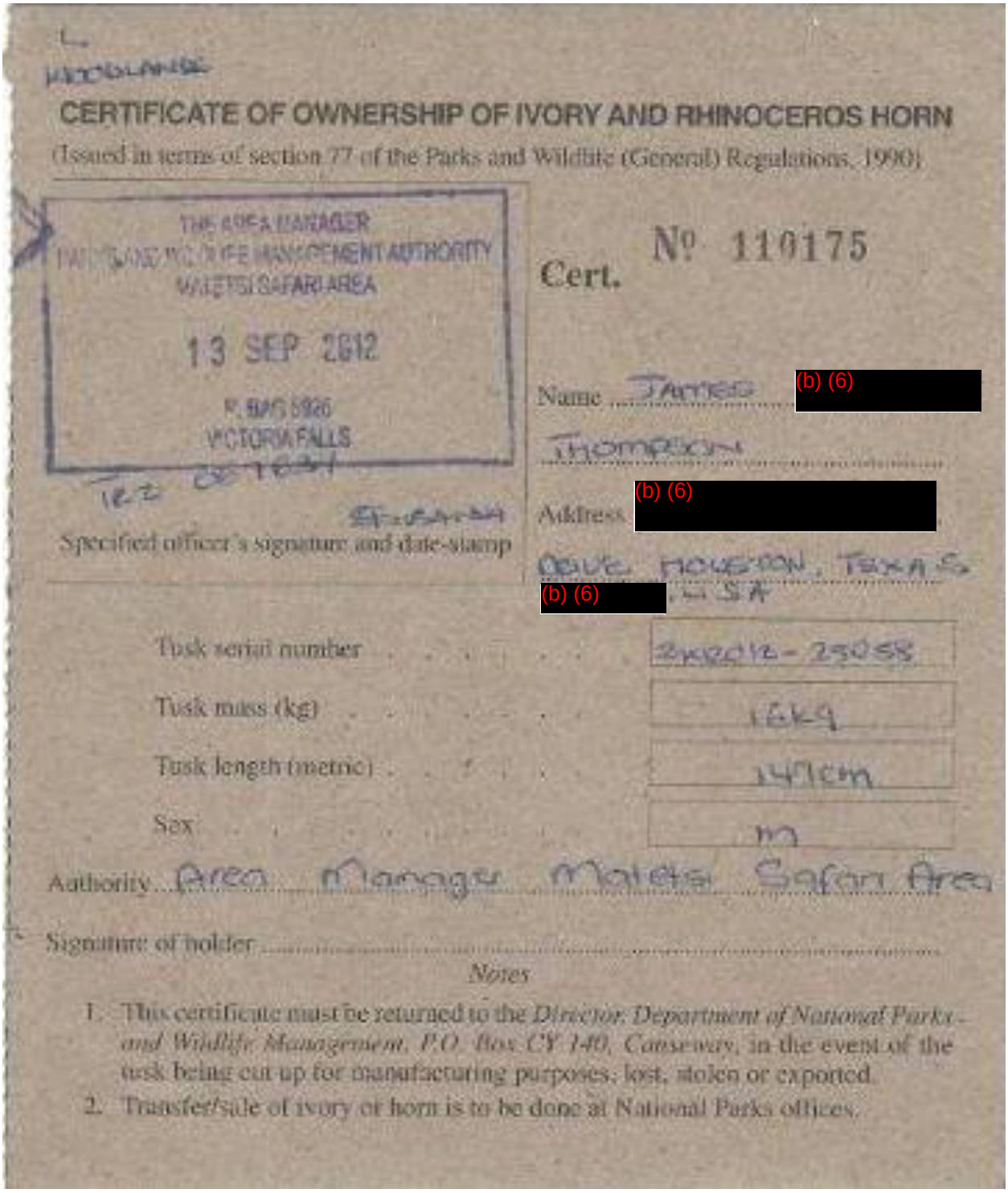
Tusk serial number	2M2012 - 25054
Tusk mass (kg)	16kg
Tusk length (metric)	145cm
Sex	M

Authority Area Manager Matetsi Safari Area

Signature of holder .....

Notes

1. This certificate must be returned to the *Director, Department of National Parks and Wildlife Management, P.O. Box CY 140, Causeway*, in the event of the tusk being cut up for manufacturing purposes, lost, stolen or exported.
2. Transfer/sale of ivory or horn is to be done at National Parks offices.



KOOBLANDE

CERTIFICATE OF OWNERSHIP OF IVORY AND RHINOCEROS HORN

(Issued in terms of section 77 of the Parks and Wildlife (General) Regulations, 1990)

THE AREA MANAGER
PARKS AND WILDLIFE MANAGEMENT AUTHORITY
MATETSI SAFARI AREA
13 SEP 2012
P. BAG 5926
VICTORIA FALLS

Cert. № 110175

Name JAMES (b) (6) [redacted]
THOMPSON

Address (b) (6) [redacted]
DRIVE HOUSTON, TEXAS
(b) (6) [redacted], USA

Specified officer's signature and date-stamp

Tusk serial number	2KR2012-25058
Tusk mass (kg)	16kg
Tusk length (metric)	147cm
Sex	m

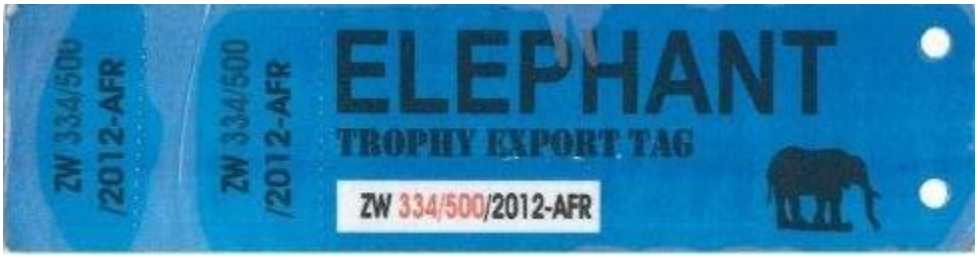
Authority Area Manager Matetsi Safari Area

Signature of holder

Notes

1. This certificate must be returned to the *Director, Department of National Parks and Wildlife Management, P.O. Box CY 140, Causeway*, in the event of the tusk being cut up for manufacturing purposes, lost, stolen or exported.
2. Transfer/sale of ivory or horn is to be done at National Parks offices.

CITES Tag for Elephant:



Pictures of Elephant Tusks and Stamps on Tusks:

TRAS2 Form (License as Printed out from Computer System):

HUNTING RETURN FORM - TRAS2
APPLICATION FOR HUNTING NP/CITES

Issued in terms of Exchange Control Act (Chapter 22:05),
The Parks and Wild Life Act (Chapter 20:14) and the Tourism Act (Chapter 14:20)

0000067637
ACQUITTED

1. DETAILS OF THE SAFARI OPERATOR

Name of Operator	Woodlands Safaris	**Client's Full Name**	James (b) Thompson
ZTA (HOP) No.	HOP0262	**Passport Number**	(b) (6)
		Country of Issue	UNITED STATES
Address	Woodlands Farm Matetsi CT427 VICTORIA FALLS	**Address**	(b) (6) Houston Texas (b) USA
Name of Professional Hunter	THULANI DUBE	**Licence No.**	104
Telephone		**Fax**	0772782316

Number of Accompanying Guests	0
Are the trophies being exported after tanning and mounting?	No
Are the trophies being exported after primary treatment?	No
Name of Processing Agent or Taxidermist	Address
Name of Shipping Agent	Address
Name of Foreign Agent	Address

2. HUNTING AREAS

	Hunting Area Name	Province	Signature of Land Authority
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Date of Safari From	27-08-2012
Date of Safari To	10-09-2012
Daily Rate Charged For Big Game USD	300.00
Daily Rate Charged For Plains Game USD	.00
Daily Rate Charged for Non hunting guests USD	.00
Number of Accompanying Guests	0

ZPWMA
Date Stamp

3. DETAILS OF DEPOSITS

(All inclusive of Daily Rate, Trophy Fees, Processing, Handling charges and any other incidentals)

(i) Safari Operator

	Value Date	ECA Number	ECA Date	Currency	Invoice Amount	Amount Paid
1						
2						
3						
4						

(ii) Taxidermist

	Value Date	ECA Number	ECA Date	Currency	Invoice Amount	Amount Paid
1	28-JUN-2013	BEP/121	23-JAN-2013	USD	19,125	19,125
2						
3						
4						

4. FINANCIAL DATA

Total Daily rate	3,000.00	Total Guests rate	.00
Less Commission	.00	Total Trophy fees	15,750.00
Other fees (Incidentals)	375.00	Grand Total USD	19,125.00
Percentage Commission Charged	.00	Total Processing Fees	

5. DETAILS OF SPECIES HUNTED

	SPECIES	SEX	W/K	CONCESSION/FARM	GRID REF	DATE SHOT	SCI TROPHY SIZE	TROPHY FEES
1	KUDU	M	Killed	Sekebelo	S18	01-SEP-2012	118	600
2	ELEPHANT - WITH TUSKS	M	Killed	Woodend	818130544	27-AUG-2012	0	10,000
3	BUFFALO	M	Killed	Woodend	S18 05 1126	03-SEP-2012	85	2,500
4	SABLE ANTELOPE	M	Killed	Woodend	S18106133	30-AUG-2012	98	2,500
5	HYENA	M	Killed	Woodend	S18.61222	01-SEP-2012	0	100
6	BABOON	M	Killed	Woodend	S18 05 1122	02-SEP-2012	0	50
7								
8								
9								
10								
11								
12								
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30								

ELEPHANT IMPORT FROM ZIMBABWI

Permit Number: MA40985C-(

Effective: 08/15/2017 Expires: 08/14/201

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:
JAMES (b) (6) THOMPSON
(b) (6)
HOUSTON, TX (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Authorizations and Conditions:

A. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

B. Specimen may not be sold or transferred for any financial remuneration.

C. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

D. **Trophy must have been taken during the 2012 hunting season.**

E. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II export permit issued by the Management Authority of Zimbabwe.

F. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

G. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law.

H. Valid for use by permittee named above.

I. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

JUN 19 2017

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Anderson	Travis	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address, Apartment #, Suite #, or Room #, no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
Meridian	ID	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 03/20/2017

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
  (i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
  (ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
  (iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, hofns. tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: 9.5.14 | Zimbabwe, Matabeleland North, Farm 37

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

      Ear, tusks

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

      Highveld Taxidermy | Farm 354, Hennopsriver Gauteng, 0023, South Africa (This is also the exporter)

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business Name: Address: Address: City: State/Province: Country, Postal Code:	Broker is: Oxi Logistics Farm 354 Hennopsriver Gauteng, 0023, South Africa

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 3/20/17

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

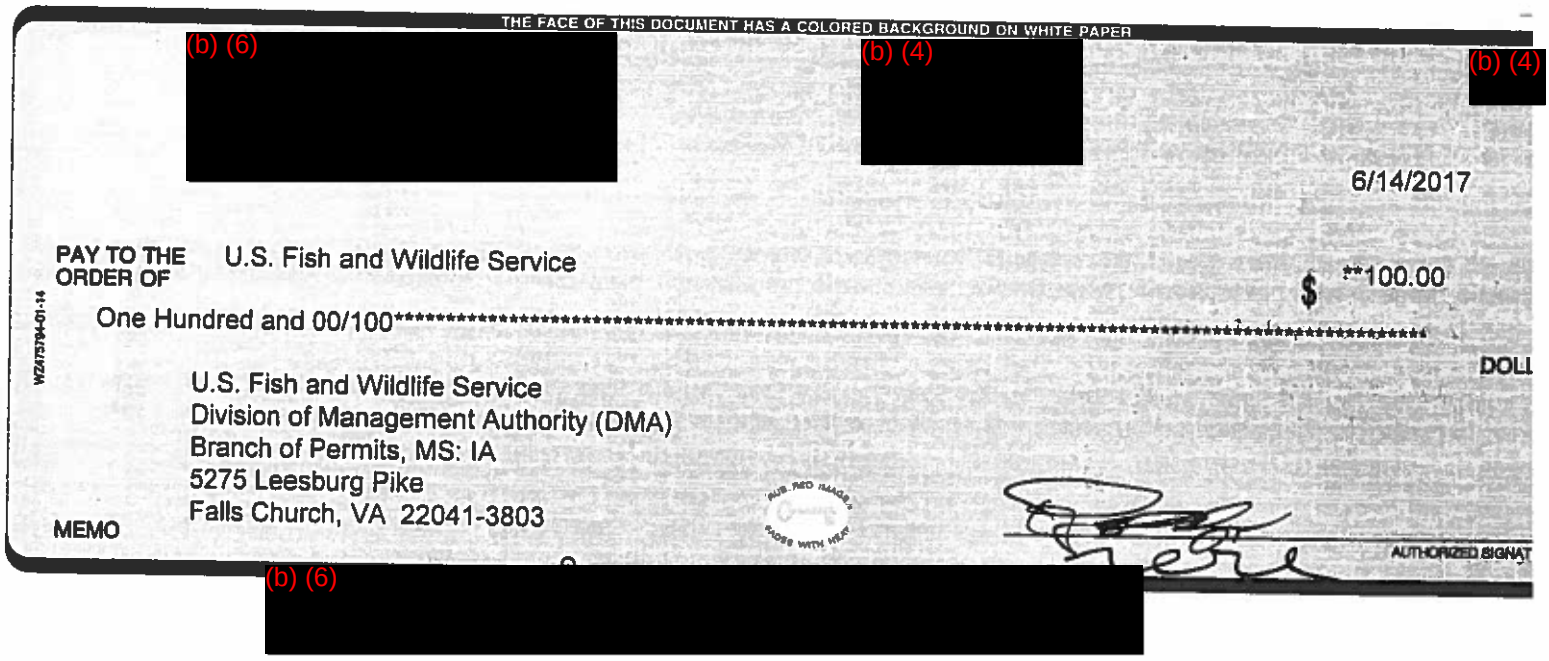
11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Travis Anderson (b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

JUN 19 2017


THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER
(b) (6)
(b) (4)
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6/14/2017
PAY TO THE ORDER OF
U.S. Fish and Wildlife Service
$ **100.00
One Hundred and 00/100**********
DOLL
U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
MEMO
AUTHORIZED SIGNAT
(b) (6)

In Reply Refer To:
FWS/AIA/DMA

Memorandum

To: The File

From: Chief, Branch of Permits 4/17/14

Subject: Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe during 2014

[This finding was originally signed on April 4, 2014. It was revised on April 17, 2014, for clarification purposes, to make editorial corrections, and to revise the effective date such that the effective date of the suspension is April 4, 2014. Hunters who hunted an African elephant in Zimbabwe in 2014 prior to April 4 may import their elephant trophy if they can provide adequate documentation to show that the elephant was taken before the effective date of the suspension.]

The African Elephant (Loxodonta africana) is listed as threatened under the U.S. Endangered Species Act with a special rule [50 CFR 17.40(e)]. The special rule gives the requirements for the import of sport-hunted trophies, including marking requirements for ivory. Under paragraph 17.40(e)(3)(iii)(C), in order for the U.S. Fish and Wildlife Service (Service) to authorize the import of a sport-hunted elephant trophy, the Service must make a finding that the killing of the animal whose trophy is intended for import would enhance the survival of the species in the wild. In evaluating the available data on elephant hunting in Zimbabwe, the Service does not have the ability at this time to make a finding that the sport-hunting of African elephants and subsequent imports would meet the enhancement requirements. Therefore, the Service is ***unable to find*** that the killing of an elephant in Zimbabwe during the 2014 hunting season for the purpose of importing into the United States will enhance the survival of the species.

General considerations:

In evaluating whether sport-hunting is contributing to the enhancement of African elephants within a country, the Service looks at a number of factors. The Service evaluates whether a country has a valid national or regional management plan and if the country has the resources and political will to enact the plan. Does the plan have clear, achievable objectives? If there is a plan, what government entities implement the plan and how often is it reviewed and updated? Is there an adaptive management approach within the management plan so that enacting agencies can quickly respond to changing environmental or social issues?

The Service also evaluates the status of the elephant population and trends over time. Particularly, we are interested in population numbers, sex and age-class distribution, and mortality rates (both natural and man-induced). Are standardized surveys being conducted and,

if so, what are the timing, census methodology, and coverage? Since elephant populations can move across international borders, what level of cooperation is there between neighboring countries in management and surveying efforts for shared populations? How is poaching accounted for within survey efforts?

As with any wildlife species, the policies on how the central and regional governments address management efforts, human-elephant conflicts, poaching, and sport-hunting greatly affect the long-term survival of elephant populations. While recognizing that there may be limited resources available for elephant management, the Service considers what national policies are in place to address human-elephant conflicts and problem elephant control. Is there a policy on culling surplus animals and removal of nuisance animals? Is there domestic harvesting of elephants for local consumption or use? The amount of protected area either set aside for elephants or managed for elephant populations and the level of protection provided is also important in the Service's ability to determine whether imports of trophies could be authorized.

Finally, the Service considers how sport-hunting has been incorporated into national/regional management strategies and the effectiveness of implementing hunting programs. Are sufficient funds to address management needs generated through the hunting program? Are the funds dedicated to management efforts or do they go to a general treasury fund? How are hunting quotas distributed? If there are concession areas, how are they managed and allocated?

Basis for Finding for Zimbabwe:

Information received from the Zimbabwe Parks & Wildlife Management Authority (ZimParks), previously Department of National Parks & Wild Life Management (DNPWLM), has been very limited since 1997. Through the CITES Secretariat, we have confirmed that the sport hunting of elephants continues to be authorized for non-commercial purposes. An Elephant Management Plan was provided to the Service in 1997, but we have not been informed of any change, modification, or adaptive management since that date. The Service has sent letters to the Zimbabwe wildlife authorities on several occasions, most recently on March 21, 2007, requesting information on the management plan, population status, hunting policies and regulations, and conservation programs. We received a response consisting of three undated and unsigned papers, which seemed to rely on somewhat dated information. Since 2007, we have received no additional updates. Service representatives have met in person with Zimbabwe representatives at various times in the past 6 years, usually in the context of annual meetings hunting organizations in the United States. Little new or additional information has been provided during those meetings. We have received recent information to indicate that ivory poaching has been taking place in various areas of the country. Most recently, it has been widely publicized in 2013, that over 300 elephants were poisoned and their ivory removed in Hwange National Park leading to a number of arrests. There also appears, based on the media and CITES documentation, to have been an increase in human-elephant conflicts due to an increasing human population and settlement or re-settlement into elephant habitat.

Management Plan: As stated, the Division of Management Authority (DMA) requested an update of the Zimbabwe management plan on March 21, 2007. The information received in response to

through sample counts or dung counts and the remainder guesses. However, until very recently, the government continues to provide population estimates exceeding 100,000 elephants. In recent news articles in September of 2013 ZimParks spokesperson Caroline Washaya-Moyo stated that the country's elephant population was 100,000 strong and becoming too large to manage. Similar statements estimating the population at 120,000 were made by the same individual in interviews related to the Hwange poisoning event.

The summary in the IUCN report indicates that, of recent surveys, only about 1% of the country has been covered by aerial or ground surveys for population estimates, while about 50% was covered by sample counts or dung counts. For a substantial portion of the country, there have been no recent surveys and most estimates are based on 2001 figures. Even problem areas such as Hwange National Park do not appear to have been surveyed since 2001. Several areas that were covered in the current surveys (2006 – 2010) indicate that there has been a substantial decline in the population, whether related to habitat degradation or poaching is unknown.

Figures presented at the 16th Meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora in Bangkok, Thailand, March 3-14, 2013, indicates that, from 2002 – 2010, the percentage of illegally killed elephants (PIKE) in Zimbabwe was circa 24%, whereas in 2011 that number jumped to 67%. While the numbers for 2012 and 2013 are not yet available, the trend would indicate a higher percentage of illegal killings and a population in decline.

Regulations and Enforcement: Under the Parks and Wild Life Act, Zimbabwe has regulations in place that provide substantial penalties for the unlawful possession of or trading in ivory. The first offense carries a minimum of 5 years and a maximum of 15 years in prison. The second offense carries a minimum prison term of 7 years and a maximum of 15 years. If properly enforced, these penalties should be sufficient to reduce the desire for poaching.

In 1993, "Operation Safeguard Heritage" was launched by the President of Zimbabwe which incorporated large numbers of army personnel along with Air Force support, the Zimbabwe Republic Police (ZRP), and ZimParks in a coordinated anti-poaching effort throughout the country. At the time, and possibly now, the overall anti-poaching manpower densities in protected areas stood at one game scout per 76 sq. km. The Investigations branch of the ZimParks was 9 officers and 7 game scouts based in Harare, Bulawayo, Mutare, Kariba, Hwange, and Beitbridge. The ZRP had a support unit of 112 men which assist anti-poaching programs in the districts of Makuti, Mashumbi Pools, Binga, and Hwange. Elephants located in communal lands come under the protection of the CAMPFIRE program. Currently, it is not clear if these numbers have been increased or held steady.

However, based on the limited information the Service currently has, the ZimParks operational budget allocation from the central government has been severely reduced since its inception. In 1997, the law enforcement expenditure was equivalent to $49.00 spent per sq. km on the elephant range, greatly reducing enforcement capabilities. The status of ZimParks changed in January 1996, when the Government of Zimbabwe approved the establishment of the Parks and Wild Life Conservation Fund, a statutory "Fund" responsible for financing operations directly from wildlife revenues. However, only revenues generated through sport-hunting conducted on state and private

lands are used to finance ZimParks and to our knowledge, no other government funding is provided. The 2013 CITES Panel of Experts raised concerns as to the status of ZimParks relating to its weak financial base, lack of management skills, inadequate and old equipment, and poor infrastructure. We have no current information as to the funding level of ZimParks or any indication that the financial base, management skills, equipment, or infrastructure have changed.

At the 15th Meeting of the Conference of the Parties to CITES, a report on the Elephant Trade Information System (ETIS) was presented (CoP15 Doc. 44.1 Annex). In the report, Zimbabwe was specifically identified in regards to management issues and illicit ivory trade. The report noted the existence of organized criminal activities within Zimbabwe, including reports of the involvement of politicians, military personnel, and Chinese nationals in illicit wildlife trade (Anon. 2009a, 2009b). The report goes on to state that the law enforcement effort ratio within the countries grouped for the analysis had dropped to 40%, a decline of 4% from the CoP14 analysis. This declined indicates a less than average performance and was attributed to the situation in Zimbabwe.

Sustainable Use: The CITES Secretariat has provided current documentation that Zimbabwe has established a quota of 500 elephants (1000 tusks) for the 2014 hunting season. These quotas are established each year by ZimParks apparently based upon standardized aerial surveys and analysis of biological data collected from hunts in determining the sustainability of offtake.

There are six categories of offtake monitored by ZimParks which include: Cropping (meat supply to rural communities and live animals to breeders), Natural Mortality (found dead of natural causes), Accidents (killed by trains, landmines, or vehicles), Poaching (illegal take), Problem Animals (elephants destroyed to protect human life and property), Management Offtake (offtake due to other management decisions). Cropping presumably includes sport hunting, though that is not specifically stated in any documents provided.

The principle form of utilization of the elephant in Zimbabwe is sport-hunting. These quotas are set to maximize the sustainable production of high quality trophies without detriment to the population. However, Zimbabwe has not indicated how the quotas are determined and what factors go into these decisions. Clearly, the government's belief that they have a population of 100,000 elephants may result in the over-estimation of the sustainable offtake. Under the CAMPFIRE program, rural communities should benefit from revenue generated by sport-hunting. With increased human-elephant conflicts on Communal lands, sport-hunting may be an important tool which gives these communities a stake in sustainable management of the elephant as a natural and economic resource. However, without current information on how funds are utilized and the basis for hunting off-takes, the Service is unable to confirm this assumption.

CITES Implementation: The Control of Goods (Import and Export) (Wildlife) Regulations of 1982, and the Parks and Wild Life Act of 1975 as amended on August 1, 1990, allow for the implementation of the provisions of CITES in Zimbabwe. All exports of sport-hunted trophies from Zimbabwe should conform with CITES regulations.

Summary: Based on the available survey information publicly available, the elephant population in Zimbabwe has declined from 84,416 elephants in 2007 to 47,366 elephants in 2012. There

appears to have been virtually no annual elephant population surveys for many years, with the government depending on past surveys and anecdotal information to make decisions. We have no current information to indicate how sport hunting quotas are determined, even though Zimbabwe maintains the highest export quota in Africa. The current poaching problem does not appear to be under control or even acknowledged. Finally, the information available to the Service does not indicate that the current offtake of elephants in Zimbabwe is sustainable.

The most significant aspect of our analysis is the lack of recent data on what is occurring in Zimbabwe. Without current data on population numbers and trends, government efforts to manage elephant populations, address human-elephant conflicts and poaching, and the state of the hunting program within the country, it is not possible for the Service to make a positive finding that sport-hunting is enhancing the survival of the species and that imports of trophies would meet the criteria established under the ESA for African elephants. Therefore, at this time, we are unable to find that the killing of elephants intended for import as sport-hunted trophies from Zimbabwe will serve to enhance the survival of the species. The Service will attempt to reestablish better communications with Zimbabwe and look to partners, NGOs, and other entities in an effort to gather additional information to support a positive finding. Until such information can be obtained the Service is unable to make the positive finding required under the ESA and will not allow the import of sport-hunted elephant trophies taken in Zimbabwe after April 4, 2014. Until substantial new information is provided to the Service, U.S. hunters are on notice that, while no import permit is currently required for the import of sport-hunted trophies, such imports cannot occur at this time.

Anon. (2009a). Ministers in illicit rhino horn trade. Zimbabwe Standard, 11 July 2009.
Anon. (2009b). Mnangagwa police docket disappears. Zimeye, 13 July 2009.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA/PRT– 41094C and 41095C

NOV 0 7 2017

Mr. Travis (b) Anderson
(b) (6)
Meridian, ID (b) (6)

Dear Mr. Anderson:

This letter responds to your March 20, 2017 and June 6, 2017, applications to import under the U.S. Endangered Species Act (Act), two personal sport-hunted African elephants (*Loxodonta africana*) trophies taken in Zimbabwe in September 2014 during the 2014 hunting season. After careful review of your request for a permit, and after reviewing all available data and information on activities and circumstances occurring in Zimbabwe at the time you conducted your hunts, your applications are being denied for the reasons outlined below.

The African elephant is listed as threatened under the Act with a special rule under Section 4(d) of the Act[1], which is set forth in regulations found at 50 CFR 17.40 (e)[2]. Under the special rule, issuance of an import permit can only occur if the U.S. Fish and Wildlife Service (Service) finds that the killing of the trophy animal will enhance the survival of the species [50 CFR 17.40(e)(6)(i)(B)], and the trophy is accompanied by a threatened species permit issued under 50 CFR 17.32[3]. To enhance the survival of the species, the importation must be associated with activities that provide a direct or indirect benefit to the species in the wild. In evaluating whether the killing of the trophy animal will enhance the survival of the species, the Service looks at a number of factors. Such factors include: current elephant population estimates in a given country, whether said country has a valid national and/or regional management plan, is the plan currently being implemented and does it contain achievable and measurable objectives, does the plan take an adaptive management approach and how often is it reviewed and/or updated, the designated authorities responsible for overseeing elephant management and how they are funded, the level of human-wildlife conflict taking place and how it is being addressed, any anti-poaching efforts undertaken, habitat conservation measures currently in place, as well as the amount of

1 The text of this Act can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6dd.
2 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6m3.
3 Ibis

revenue generated by elephant hunting and how it is utilized in supporting conservation projects and/or managing the species.

The best available scientific and management data, as well as information provided to the Service by Zimbabwe Parks & Wildlife Management Authority (ZPWMA), Conservation Force, and Safari Club International, was used in our evaluation. In evaluating the available data and information on elephant hunting in Zimbabwe at the time your hunt occurred, the Service was unable to determine that the killing of African elephants in Zimbabwe occurring after May 5, 2014, would enhance the survival of the species. Because your hunts took place after the effective date of the finding, the import of your sport-hunted elephant trophies taken in Zimbabwe in September 2014, cannot be authorized. A copy of the Division of Management Authority's finding for the 2014 hunting season is enclosed for your reference.

As provided in 50 CFR 13.29(a)[4], you may request reconsideration of our decision to deny your application. Such a request must be in writing with the original signature of the person requesting reconsideration or by that person's legal representative, must contain a certification statement as provided at 50 CFR 13.12(a)(5)[5], should refer to your file number, PRT–41094C and PRT-41095C, and must be received in this office within 45 days of the date of this letter. The reconsideration of the decision to deny your request will be based on the information you provided in your original application. As such, your letter requesting reconsideration must address how our decision to deny your application was based on a misinterpretation of the information provided in your application or information available to the Service when making the original denial or it must present clarification of this information. **Should you supply new information that changes the scope of your original application, a new application will need to be submitted to this office before such information can be considered.**

If you have any questions, please contact Senior Biologist Kathleen Moore of this office: Division of Management Authority, Branch or Permits, MS: IA, 5275 Leesburg Pike, Falls Church, VA 22041-3803 (703-358-2104, ext. 2511).

Sincerely,

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority

Enclosure

4 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xYDUk

5 Ibis

Department of the Interior
U.S. Fish and Wildlife Service

JUN 1 9 2017

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Anderson	Christopher	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address, Apartment #, Suite #, or Room #, no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
Meridian	ID	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

CR — 6/06/2017

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit**. If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
  (i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
  (ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
  (iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD,** please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: 9.6.14 | Zimbabwe, Matabeleland North, Farm 37

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

      Ear, tusks

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

      Highveld Taxidermy | Farm 354, Hennopsriver Gauteng, 0023, South Africa (This is also the exporter)

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business	Broker is:
Name: Address:	Oxi Logistics
Address:	Farm 354
City:	Hennopsriver Gauteng, 0023, South Africa
State/Province:	
Country, Postal Code:	

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

   I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

   Taxidermist/Broker's signature:_____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 6/6/17

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, **if** different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

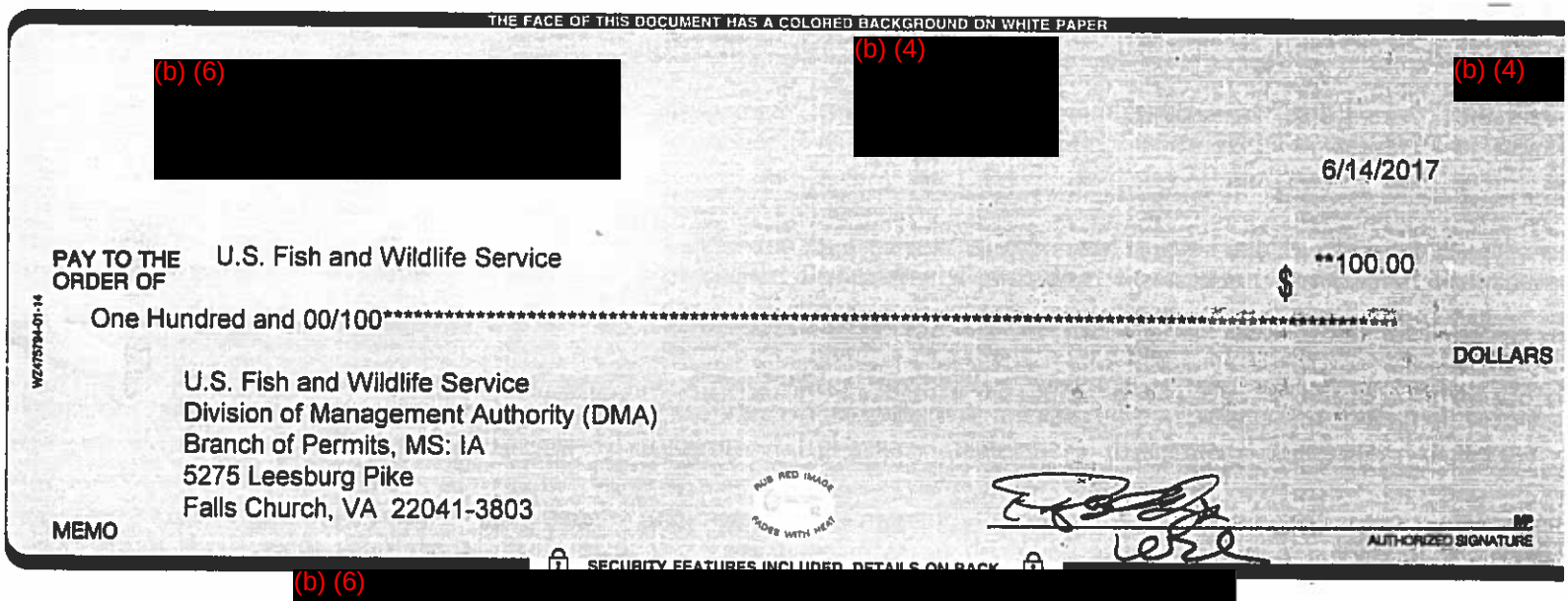
11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Christopher Anderson (b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

JUN 1 9 2017



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(b) (6) [redacted]

(b) (4) [redacted]

(b) (4) [redacted]

6/14/2017

PAY TO THE ORDER OF U.S. Fish and Wildlife Service $ **100.00

One Hundred and 00/100********** DOLLARS

U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803

MEMO

RUB RED IMAGE FADES WITH HEAT

AUTHORIZED SIGNATURE

SECURITY FEATURES INCLUDED. DETAILS ON BACK

(b) (6) [redacted]

WZ475794-01-14

In Reply Refer To:
FWS/AIA/DMA

Memorandum

To: The File

From: Chief, Branch of Permits 4/17/14

Subject: Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe during 2014

[This finding was originally signed on April 4, 2014. It was revised on April 17, 2014, for clarification purposes, to make editorial corrections, and to revise the effective date such that the effective date of the suspension is April 4, 2014. Hunters who hunted an African elephant in Zimbabwe in 2014 prior to April 4 may import their elephant trophy if they can provide adequate documentation to show that the elephant was taken before the effective date of the suspension.]

The African Elephant (Loxodonta africana) is listed as threatened under the U.S. Endangered Species Act with a special rule [50 CFR 17.40(e)]. The special rule gives the requirements for the import of sport-hunted trophies, including marking requirements for ivory. Under paragraph 17.40(e)(3)(iii)(C), in order for the U.S. Fish and Wildlife Service (Service) to authorize the import of a sport-hunted elephant trophy, the Service must make a finding that the killing of the animal whose trophy is intended for import would enhance the survival of the species in the wild. In evaluating the available data on elephant hunting in Zimbabwe, the Service does not have the ability at this time to make a finding that the sport-hunting of African elephants and subsequent imports would meet the enhancement requirements. Therefore, the Service is ***unable to find*** that the killing of an elephant in Zimbabwe during the 2014 hunting season for the purpose of importing into the United States will enhance the survival of the species.

General considerations:

In evaluating whether sport-hunting is contributing to the enhancement of African elephants within a country, the Service looks at a number of factors. The Service evaluates whether a country has a valid national or regional management plan and if the country has the resources and political will to enact the plan. Does the plan have clear, achievable objectives? If there is a plan, what government entities implement the plan and how often is it reviewed and updated? Is there an adaptive management approach within the management plan so that enacting agencies can quickly respond to changing environmental or social issues?

The Service also evaluates the status of the elephant population and trends over time. Particularly, we are interested in population numbers, sex and age-class distribution, and mortality rates (both natural and man-induced). Are standardized surveys being conducted and,

if so, what are the timing, census methodology, and coverage? Since elephant populations can move across international borders, what level of cooperation is there between neighboring countries in management and surveying efforts for shared populations? How is poaching accounted for within survey efforts?

As with any wildlife species, the policies on how the central and regional governments address management efforts, human-elephant conflicts, poaching, and sport-hunting greatly affect the long-term survival of elephant populations. While recognizing that there may be limited resources available for elephant management, the Service considers what national policies are in place to address human-elephant conflicts and problem elephant control. Is there a policy on culling surplus animals and removal of nuisance animals? Is there domestic harvesting of elephants for local consumption or use? The amount of protected area either set aside for elephants or managed for elephant populations and the level of protection provided is also important in the Service's ability to determine whether imports of trophies could be authorized.

Finally, the Service considers how sport-hunting has been incorporated into national/regional management strategies and the effectiveness of implementing hunting programs. Are sufficient funds to address management needs generated through the hunting program? Are the funds dedicated to management efforts or do they go to a general treasury fund? How are hunting quotas distributed? If there are concession areas, how are they managed and allocated?

Basis for Finding for Zimbabwe:

Information received from the Zimbabwe Parks & Wildlife Management Authority (ZimParks), previously Department of National Parks & Wild Life Management (DNPWLM), has been very limited since 1997. Through the CITES Secretariat, we have confirmed that the sport hunting of elephants continues to be authorized for non-commercial purposes. An Elephant Management Plan was provided to the Service in 1997, but we have not been informed of any change, modification, or adaptive management since that date. The Service has sent letters to the Zimbabwe wildlife authorities on several occasions, most recently on March 21, 2007, requesting information on the management plan, population status, hunting policies and regulations, and conservation programs. We received a response consisting of three undated and unsigned papers, which seemed to rely on somewhat dated information. Since 2007, we have received no additional updates. Service representatives have met in person with Zimbabwe representatives at various times in the past 6 years, usually in the context of annual meetings hunting organizations in the United States. Little new or additional information has been provided during those meetings. We have received recent information to indicate that ivory poaching has been taking place in various areas of the country. Most recently, it has been widely publicized in 2013, that over 300 elephants were poisoned and their ivory removed in Hwange National Park leading to a number of arrests. There also appears, based on the media and CITES documentation, to have been an increase in human-elephant conflicts due to an increasing human population and settlement or re-settlement into elephant habitat.

Management Plan: As stated, the Division of Management Authority (DMA) requested an update of the Zimbabwe management plan on March 21, 2007. The information received in response to

through sample counts or dung counts and the remainder guesses. However, until very recently, the government continues to provide population estimates exceeding 100,000 elephants. In recent news articles in September of 2013 ZimParks spokesperson Caroline Washaya-Moyo stated that the country's elephant population was 100,000 strong and becoming too large to manage. Similar statements estimating the population at 120,000 were made by the same individual in interviews related to the Hwange poisoning event.

The summary in the IUCN report indicates that, of recent surveys, only about 1% of the country has been covered by aerial or ground surveys for population estimates, while about 50% was covered by sample counts or dung counts. For a substantial portion of the country, there have been no recent surveys and most estimates are based on 2001 figures. Even problem areas such as Hwange National Park do not appear to have been surveyed since 2001. Several areas that were covered in the current surveys (2006 – 2010) indicate that there has been a substantial decline in the population, whether related to habitat degradation or poaching is unknown.

Figures presented at the 16th Meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora in Bangkok, Thailand, March 3-14, 2013, indicates that, from 2002 – 2010, the percentage of illegally killed elephants (PIKE) in Zimbabwe was circa 24%, whereas in 2011 that number jumped to 67%. While the numbers for 2012 and 2013 are not yet available, the trend would indicate a higher percentage of illegal killings and a population in decline.

Regulations and Enforcement: Under the Parks and Wild Life Act, Zimbabwe has regulations in place that provide substantial penalties for the unlawful possession of or trading in ivory. The first offense carries a minimum of 5 years and a maximum of 15 years in prison. The second offense carries a minimum prison term of 7 years and a maximum of 15 years. If properly enforced, these penalties should be sufficient to reduce the desire for poaching.

In 1993, "Operation Safeguard Heritage" was launched by the President of Zimbabwe which incorporated large numbers of army personnel along with Air Force support, the Zimbabwe Republic Police (ZRP), and ZimParks in a coordinated anti-poaching effort throughout the country. At the time, and possibly now, the overall anti-poaching manpower densities in protected areas stood at one game scout per 76 sq. km. The Investigations branch of the ZimParks was 9 officers and 7 game scouts based in Harare, Bulawayo, Mutare, Kariba, Hwange, and Beitbridge. The ZRP had a support unit of 112 men which assist anti-poaching programs in the districts of Makuti, Mashumbi Pools, Binga, and Hwange. Elephants located in communal lands come under the protection of the CAMPFIRE program. Currently, it is not clear if these numbers have been increased or held steady.

However, based on the limited information the Service currently has, the ZimParks operational budget allocation from the central government has been severely reduced since its inception. In 1997, the law enforcement expenditure was equivalent to $49.00 spent per sq. km on the elephant range, greatly reducing enforcement capabilities. The status of ZimParks changed in January 1996, when the Government of Zimbabwe approved the establishment of the Parks and Wild Life Conservation Fund, a statutory "Fund" responsible for financing operations directly from wildlife revenues. However, only revenues generated through sport-hunting conducted on state and private

lands are used to finance ZimParks and to our knowledge, no other government funding is provided. The 2013 CITES Panel of Experts raised concerns as to the status of ZimParks relating to its weak financial base, lack of management skills, inadequate and old equipment, and poor infrastructure. We have no current information as to the funding level of ZimParks or any indication that the financial base, management skills, equipment, or infrastructure have changed.

At the 15th Meeting of the Conference of the Parties to CITES, a report on the Elephant Trade Information System (ETIS) was presented (CoP15 Doc. 44.1 Annex). In the report, Zimbabwe was specifically identified in regards to management issues and illicit ivory trade. The report noted the existence of organized criminal activities within Zimbabwe, including reports of the involvement of politicians, military personnel, and Chinese nationals in illicit wildlife trade (Anon. 2009a, 2009b). The report goes on to state that the law enforcement effort ratio within the countries grouped for the analysis had dropped to 40%, a decline of 4% from the CoP14 analysis. This declined indicates a less than average performance and was attributed to the situation in Zimbabwe.

Sustainable Use: The CITES Secretariat has provided current documentation that Zimbabwe has established a quota of 500 elephants (1000 tusks) for the 2014 hunting season. These quotas are established each year by ZimParks apparently based upon standardized aerial surveys and analysis of biological data collected from hunts in determining the sustainability of offtake.

There are six categories of offtake monitored by ZimParks which include: Cropping (meat supply to rural communities and live animals to breeders), Natural Mortality (found dead of natural causes), Accidents (killed by trains, landmines, or vehicles), Poaching (illegal take), Problem Animals (elephants destroyed to protect human life and property), Management Offtake (offtake due to other management decisions). Cropping presumably includes sport hunting, though that is not specifically stated in any documents provided.

The principle form of utilization of the elephant in Zimbabwe is sport-hunting. These quotas are set to maximize the sustainable production of high quality trophies without detriment to the population. However, Zimbabwe has not indicated how the quotas are determined and what factors go into these decisions. Clearly, the government's belief that they have a population of 100,000 elephants may result in the over-estimation of the sustainable offtake. Under the CAMPFIRE program, rural communities should benefit from revenue generated by sport-hunting. With increased human-elephant conflicts on Communal lands, sport-hunting may be an important tool which gives these communities a stake in sustainable management of the elephant as a natural and economic resource. However, without current information on how funds are utilized and the basis for hunting off-takes, the Service is unable to confirm this assumption.

CITES Implementation: The Control of Goods (Import and Export) (Wildlife) Regulations of 1982, and the Parks and Wild Life Act of 1975 as amended on August 1, 1990, allow for the implementation of the provisions of CITES in Zimbabwe. All exports of sport-hunted trophies from Zimbabwe should conform with CITES regulations.

Summary: Based on the available survey information publicly available, the elephant population in Zimbabwe has declined from 84,416 elephants in 2007 to 47,366 elephants in 2012. There

appears to have been virtually no annual elephant population surveys for many years, with the government depending on past surveys and anecdotal information to make decisions. We have no current information to indicate how sport hunting quotas are determined, even though Zimbabwe maintains the highest export quota in Africa. The current poaching problem does not appear to be under control or even acknowledged. Finally, the information available to the Service does not indicate that the current offtake of elephants in Zimbabwe is sustainable.

The most significant aspect of our analysis is the lack of recent data on what is occurring in Zimbabwe. Without current data on population numbers and trends, government efforts to manage elephant populations, address human-elephant conflicts and poaching, and the state of the hunting program within the country, it is not possible for the Service to make a positive finding that sport-hunting is enhancing the survival of the species and that imports of trophies would meet the criteria established under the ESA for African elephants. Therefore, at this time, we are unable to find that the killing of elephants intended for import as sport-hunted trophies from Zimbabwe will serve to enhance the survival of the species. The Service will attempt to reestablish better communications with Zimbabwe and look to partners, NGOs, and other entities in an effort to gather additional information to support a positive finding. Until such information can be obtained the Service is unable to make the positive finding required under the ESA and will not allow the import of sport-hunted elephant trophies taken in Zimbabwe after April 4, 2014. Until substantial new information is provided to the Service, U.S. hunters are on notice that, while no import permit is currently required for the import of sport-hunted trophies, such imports cannot occur at this time.

Anon. (2009a). Ministers in illicit rhino horn trade. Zimbabwe Standard, 11 July 2009.
Anon. (2009b). Mnangagwa police docket disappears. Zimeye, 13 July 2009.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA/PRT– 41094C and 41095C

NOV 0 7 2017

Mr. Travis (b) Anderson
(b) (6)
Meridian, ID (b) (6)

Dear Mr. Anderson:

This letter responds to your March 20, 2017 and June 6, 2017, applications to import under the U.S. Endangered Species Act (Act), two personal sport-hunted African elephants (*Loxodonta africana*) trophies taken in Zimbabwe in September 2014 during the 2014 hunting season. After careful review of your request for a permit, and after reviewing all available data and information on activities and circumstances occurring in Zimbabwe at the time you conducted your hunts, your applications are being denied for the reasons outlined below.

The African elephant is listed as threatened under the Act with a special rule under Section 4(d) of the Act[1], which is set forth in regulations found at 50 CFR 17.40 (e)[2]. Under the special rule, issuance of an import permit can only occur if the U.S. Fish and Wildlife Service (Service) finds that the killing of the trophy animal will enhance the survival of the species [50 CFR 17.40(e)(6)(i)(B)], and the trophy is accompanied by a threatened species permit issued under 50 CFR 17.32[3]. To enhance the survival of the species, the importation must be associated with activities that provide a direct or indirect benefit to the species in the wild. In evaluating whether the killing of the trophy animal will enhance the survival of the species, the Service looks at a number of factors. Such factors include: current elephant population estimates in a given country, whether said country has a valid national and/or regional management plan, is the plan currently being implemented and does it contain achievable and measurable objectives, does the plan take an adaptive management approach and how often is it reviewed and/or updated, the designated authorities responsible for overseeing elephant management and how they are funded, the level of human-wildlife conflict taking place and how it is being addressed, any anti-poaching efforts undertaken, habitat conservation measures currently in place, as well as the amount of

1 The text of this Act can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6dd.
2 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6m3.
3 Ibis

revenue generated by elephant hunting and how it is utilized in supporting conservation projects and/or managing the species.

The best available scientific and management data, as well as information provided to the Service by Zimbabwe Parks & Wildlife Management Authority (ZPWMA), Conservation Force, and Safari Club International, was used in our evaluation. In evaluating the available data and information on elephant hunting in Zimbabwe at the time your hunt occurred, the Service was unable to determine that the killing of African elephants in Zimbabwe occurring after May 5, 2014, would enhance the survival of the species. Because your hunts took place after the effective date of the finding, the import of your sport-hunted elephant trophies taken in Zimbabwe in September 2014, cannot be authorized. A copy of the Division of Management Authority's finding for the 2014 hunting season is enclosed for your reference.

As provided in 50 CFR 13.29(a)[4], you may request reconsideration of our decision to deny your application. Such a request must be in writing with the original signature of the person requesting reconsideration or by that person's legal representative, must contain a certification statement as provided at 50 CFR 13.12(a)(5)[5], should refer to your file number, PRT–41094C and PRT-41095C, and must be received in this office within 45 days of the date of this letter. The reconsideration of the decision to deny your request will be based on the information you provided in your original application. As such, your letter requesting reconsideration must address how our decision to deny your application was based on a misinterpretation of the information provided in your application or information available to the Service when making the original denial or it must present clarification of this information. **Should you supply new information that changes the scope of your original application, a new application will need to be submitted to this office before such information can be considered.**

If you have any questions, please contact Senior Biologist Kathleen Moore of this office: Division of Management Authority, Branch or Permits, MS: IA, 5275 Leesburg Pike, Falls Church, VA 22041-3803 (703-358-2104, ext. 2511).

Sincerely,

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority

Enclosure

4 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xYDUk

5 Ibis

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0164
Expires 11/30/2016

Federal Fish and Wildlife Permit Application Form

RCVD JUL 05 2017

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of
Southern African Leopard, African Elephant, and
Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Grieb	Michael		

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6) [redacted]		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6) [redacted]		847-690-0690	laura.durgin@dlchb.com

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6) [redacted]

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
Charlevoix	MI	(b) (6) [redacted]		U.S.A.

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☒ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: 16US05938C/9 No ☐

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Laura Durgin — 03/23/2017

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:
N/A

b. Date wildlife is to be hunted: N/A

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

N/A

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: Chewore North, Mash West, Borrowdale Zimbabwe
   b. Date wildlife was hunted: 07/04/2014
   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks): 2 tusks, panel, tooth & tail
   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]: Chifuti Head Office, 733 Iona Close, Borrowdale, Harare, Zimbabwe
4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business: Safari Air Services t/a Chifuti Safaris
Name: Address: 733 Iona Close
Address:
City: Borrowdale, Harare
State/Province:
Country, Postal Code: Zimbabwe

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: Laura Durgin Date: 03/23/2017

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature:_____ Date: _____

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

Chicago, IL

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

D&L CHB
1500 Midway Ct. Ste W201
Elk Grove Village, IL 60007

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information. N/A

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Laura Durgin
847-690-0690 laura.durgin@dlchb.com

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☒ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

HUNTING RETURN FORM/FEE
APPLICATION FOR HUNTING PERMITS

Serial Number 072916

NATIONAL PARKS AND WILDLIFE CORPS

Name of Operator: Chifuti Safaris
Address: P O Box BW957
BORROWDALE
HARARE

Client's Full Name: MICHAEL GRIEB
Address: [redacted] (b) (6)
CHARLEVOIX
M[redacted] (b) (6)
[redacted] (b) (6)
Country of Issue: U.S.A

Name of Professional Hunter: REX HOETS
Licence Number: 154
Tel: Fax:

Number of Accompanying Guests: NIL
For the family guests declared, prospects: N/A

Are the trophies being exported after training and remaining? No (delete inapplicable)
Are the trophies being exported after primary recovery? No (delete inapplicable)
Name and Address of Proposed Agents or Trophies: CHIFUTI SAFARIS, 733 KWA GOSE BORROWDALE HARARE ZIMBABWE

Name and Address of Shipping Agents: INTERLOW FREIGHT, 31 FLOCTWOOD ROAD, MOX PARK HARARE ZIMBABWE

Value of US Dollars Remitted to the Owners' Bills:
Total Daily Rate: 14700-00
Total Offset Rate: —
Low Consumption: —
Total Fee Payable: 15000-00
Other Fees Payable Rate: 394-00
Grand Total in USD: 30594-00
Amount in ZIMB: (Sworn and bank certified deposit receipt)

Foreign Agent Details:
Name: Safari Classics Productions LLC
DBA Safari Consultants International
Address: 5206 McKinney Ave
Suite 101
DALLAS
Texas 75205
USA

Percentage Commission Charged: RBZ REF: SEP 3269/13
ISSUED 02/05/14

Total Fee Payable in Zimbabwe Dollars
Some money to be paid by the Operator to the Hunter included in the total: $3150-00
Some money to be paid by the Operator to the Hunter included in the total:
Rate Charged:
Rebate Payable:
Note: Payments & detailed reasons any location must be accurate that return of funds remain unpaid

DETAILS OF DEPOSITS
(All Exclusive of the Daily Rate, Trophy Rate, Processing, Handling Charges and any other Fees)

Date of Deposit	A/C Number	Currency	Amount	Bank Stamp & Authorised Signature
15/5/2013	5740012527611	USD	30594-00	CHART OF 499 985-00

Date of Deposit	A/C Number	Currency	Amount	Bank Stamp & Authorised Signature

HUNTING AREAS

CHEWORE NORTH
MASH WEST

Date of Safari From: 31/03/14 13/04/14
Daily Rate Charged Per Big Game USD: $1050 X 14 DAYS ELEPHANT BULL/BUFFALO/PG
Daily Rate Charged Per Lion Game USD: 0
Daily Rate Charged Per Lion Game USD: $150
Authority Issued: 26 / 2 / 14

FOR THE DIRECTOR GENERAL
Date Issued: 26 / 2 / 14
Authority Issued: 7 APR 2014

Species	Sex	Age	Trophy	Hunting Area	Trophy Number	Date of Deposit	Amount	Bank Stamp & Authorised Signature
ELEPHANT	116	M	K	MASH WEST	CHEWORE NORTH	RIV059495	7/4/14	15000-00

TOTAL USD 15000-00

* For Sectional Use LIB Only (Remarks Section)
** Remarks (Not for Issuing)

Comments: Dip & pack $300
CIA 2% Levy $594
TOTAL $594

I, hereby certify that the information contained herein is true and correct.
Signature of Foreign Client: Michael Griebel Date: 13/4/14
Signature of professional hunter: Date: 13/4/14
Signature of sales operator or his legally appointed representative: Date: 15/4/14

CERTIFICATE OF OWNERSHIP OF IVORY AND RHINOCEROS HON

(Issued in terms of section 77 of the Parks and Wildlife (General) Regulations, 1990

Parks and Wildlife Management Authority
MANAGEMENT SERVICES
08 May 2014
IVORY AND SKIN STORES
P.O. Box CY 140 Causeway Harare
Tel. (04) 707826-9

Specified officer's signature and date-stamp

Cert. № 116734

Name Michael Grieb

Address (b) (6)

Charlevoix MI (b) (6) USA

Tusk serial number ZW2014 0023

Tusk mass (kg) 18

Tusk length (metric) 156

Sex . . . . . M

Authority 07/2014 TR2

Signature of holder

Notes

1. This certificate must be returned to the *Director, Department of National Parks and Wildlife Management, P.O. Box CY 140, Causeway*, in the event of the tusk being cut up for manufacturing purposes, lost, stolen or exported.
2. Transfer/sale of ivory or horn is to be done at National Parks offices.

CERTIFICATE OF OWNERSHIP OF IVORY AND RHINOCEROS HORN

(Issued in terms of section 77 of the Parks and Wildlife (General) Regulations, 1990)

Parks and Wildlife Management Authority
MANAGEMENT SERVICES
08 MAY 2014
IVORY AND SKIN STORES
P.O. Box CY 140 Causeway Harare
Tel. (04) 707826-9

Specified officer's signature and date-stamp

Cert. № 116735

Name Michael Grieb

Address (b) (6)

Rd Charlevoix MI (b) (6) USA

Tusk serial number ZW2014 0024

Tusk mass (kg) 18

Tusk length (metric) 158

Sex . . . . . M

Authority 07/2014 TR2

Signature of holder

Notes

1. This certificate must be returned to the *Director, Department of National Parks and Wildlife Management, P.O. Box CY 140, Causeway*, in the event of the tusk being cut up for manufacturing purposes, lost, stolen or exported.
2. Transfer/sale of ivory or horn is to be done at National Parks offices.

CUSTOMS POWER OF ATTORNEY
and
Acknowledgement of Terms and Conditions of Service

Copyright 1995, National Customs Brokers and Forwarders Association of America, Inc.
(Revised 07/04)

✓ appropriate box:
- [x] Individual
- [ ] Partnership
- [ ] Corporation
- [ ] Sole Proprietorship
- [ ] Limited Liability Company

SS# (b) (6) [redacted]

KNOW ALL MEN BY THESE PRESENTS: That, ✓ Michael (b) (6) [redacted] GRIEB doing
(Full name of individual, partnership, corporation, sole proprietorship, or limited liability company) (identify)
business as a ✓ INDIVIDUAL under the laws of the State of ✓ Michigan,
(individual, partnership, corporation, sole proprietorship, or limited liability company) (insert one)
residing or having a principal place of business at ✓ (b) (6) [redacted] Charlevoix, MI, hereby constitutes and
appoints ✓ D & L CHB, its officers, employees, and/or specifically authorized agents, to act for and
(Grantee's Name)
on its behalf as a true and lawful agent and attorney of the grantor for and in the name, place and stead of said grantor, from this date,

in the United States (the "territory") either in writing, electronically, or by other authorized means, to:

Make, endorse, sign, declare, or swear to any customs entry, withdrawal, declaration, certificate, bill of lading, carnet or any other documents required by law or regulation in connection with the importation, exportation, transportation, of any merchandise in or through the customs territory, shipped or consigned by or to said grantor;

Perform any act or condition which may be required by law or regulation in connection with such merchandise deliverable to said grantor; to receive any merchandise;

Make endorsements on bills of lading conferring authority to transfer title; make entry or collect drawback; and to make, sign, declare, or swear to any statement or certificate required by law or regulation for drawback purposes, regardless of whether such document is intended for filing with U.S. Customs and Border Protection;

Sign, seal, and deliver for and as the act of said grantor any bond required by law or regulation in connection with the entry or withdrawal of imported merchandise or merchandise exported with or without benefit of drawback, or in connection with the entry, clearance, lading, unlading or navigation of any vessel or other means of conveyance owned or operated by said grantor, and any and all bonds which may be voluntarily given and accepted under applicable laws and regulations, consignee's and owner's declarations provided for in section 485, Tariff Act of 1930, as amended, or affidavits or statements in connection with the entry of merchandise;

Sign and swear to any document and to perform any act that may be necessary or required by law or regulation in connection with the entering, clearing, lading, unlading, or operation of any vessel or other means of conveyance owned or operated by said grantor;

Authorize other Customs Brokers duly licensed within the territory to act as grantor's agent; to receive, endorse and collect checks issued for CBP duty refunds in grantor's name drawn on the Treasurer of the United States; if the grantor is a nonresident of the United States, to accept service of process on behalf of the grantor;

And generally to transact Customs business, including filing of claims or protests under section 514 of the Tariff Act of 1930, or pursuant to other laws of the territories, in which said grantor is or may be concerned or interested and which may properly be transacted or performed by an agent and attorney;

Giving to said agent and attorney full power and authority to do anything whatever requisite necessary to be done in the premises as fully as said grantor could do if present and acting, hereby ratifying and confirming all that the said agent and attorney shall lawfully do by virtue of these presents;

This power of attorney to remain full force and effect until revocation in writing is duly given to and received by grantee (if the donor of this power of attorney is a partnership, the said power shall in no case have any force or effect in the United States after the expiration 2 years from the dates of its execution);

Grantor acknowledges receipt of ✓ D & L CHB Terms and Conditions of Service governing all transactions between the Parties.
(Grantee's Name)

If the Grantor is a Limited Liability Company, the signatory certifies that he/she has full authority to execute this power on behalf of the Grantor.

IN WITNESS WHEREOF, the said ✓ Michael (b) (6) [redacted] GRIEB
(Full name of company)
caused these presents to be sealed and signed: (Signature) ✓ Michael H Grieb

(Capacity) ✓ N/A Date: 18 July 2016

Witness: (if required) N/A

If you are the importer of record, payment to the broker will not relieve you of liability for CBP charges (duties, taxes or other debts owed CBP) in the event the charges are not paid by the broker. Therefore, if you pay by check, CBP charges may be paid with a separate check payable to "U.S. Customs and Border Protection" which shall be delivered to CBP by the broker. Importers who wish to utilize this procedure must contact our office in advance to arrange timely receipt of duty checks.

APPERSON PRINT MANAGEMENT SERVICES • NCBFAA-3 • WHSE. NO. 03540

D&L CHB, LLC
1500 MIDWAY CT. W201
ELK GROVE VILLAGE, IL 60007

BANK ONE
CHICAGO, IL 60670
2-1-710

DATE	CHECK NUMBER
06/27/17	(b) (4) [redacted]

PAY
**********100DOLLARS&00CENTS

CHECK AMOUNT
$100.00**

PAY TO THE ORDER OF:

FISH & WILDLIFE

IL

(b) (6) [redacted]

ELEPHANT IMPORT FROM ZIMBABWE

Permit Number: MA42547C-0

Effective: 08/24/2017 Expires: 08/23/2018

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

CHIEF, BRANCH OF PERMITS, DMA

Permittee:

MICHAEL GRIEB
(b) (6)
CHARLEVOIX, MI (b) (6)
U.S.A.

Authority: Statutes and Regulations: 16 USC 1539 (a); 50 CFR 17.40 (e).

Location where authorized activity may be conducted:
IMPORT THROUGH ANY PORT LISTED IN 50 CFR 14.12

Reporting requirements: Not applicable

Authorizations and Conditions:

A. Authorized to import the sport-hunted trophy of one African elephant (*Loxodonta africana*), taken in Zimbabwe for the purpose of enhancement of the survival of the species.

B. Specimen may not be sold or transferred for any financial remuneration.

C. U.S. Threatened Species: tusks must be marked as per [50 CFR 17.40(e)]. In accordance with the African Elephant Conservation Act, raw ivory, including sport-hunted trophies that are wholly or partially ivory, may not be re-exported from the U.S.

D. **Trophy must have been taken on April 7, 2014.**

E. Trophy must be accompanied by a valid Convention on International Trade in Endangered Species (CITES) Appendix II Export permit issued by the Management Authority of Zimbabwe.

F. General conditions set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

G. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local, tribal, or other federal law. **This permit can be photocopied.**

H. Valid for use by permittee named above.

I. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Permit Conditions" (copy attached).

Moore, Mike <mike_moore@fws.gov>

RE: Application for the import of a personal sport-hunted African elephant trophy taken in Zambia in 2011, PRT-71502B.

1 message

Jan M. Allmeyer (b) (6) Wed, Dec 9, 2015 at 8:05 AM
To: "Moore, Mike" <mike_moore@fws.gov>, (b) (6) (b) (6)

Mr. Moore – please see the attached document you requested. Here are the tusk markings:

ZM 11 / 25 / 16.5 LP T1

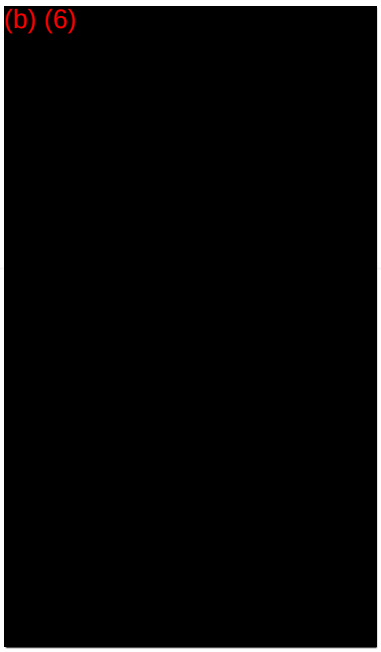
ZM 11 / 26/ 25 LP T2

Many thanks! Jan

Jan Allmeyer, CUSECO

Manager, Global Trade Compliance

(b) (6)



We all Live Downstream

From: Moore, Mike [mailto:mike_moore@fws.gov]
Sent: Thursday, December 03, 2015 9:45 AM
To: Jan M. Allmeyer; (b) (6)
Subject: Application for the import of a personal sport-hunted African elephant trophy taken in Zambia in 2011, PRT-71502B.

Dear Mr. Ryan,

We are in receipt of your application requesting a permit under the U.S. Endangered Species Act (ESA) and the Convention on International Trade in Endangered Species (CITES) to import your personal sport-hunted African elephant trophy taken in Zambia in the 2011 hunting season. We apologize for the delay in responding to your request. However, additional information is needed in order to complete our review of your application.

Please provide copies of any licenses and/or permits issued to you by the Government of Zambia, granting you authorization to take an elephant in Zambia during the 2011 hunting season. In addition, for each tusk you intend to import, please provide the marking information under the marking and registration system established by Zambia. This marking is done on the lip mark area of the tusk by means of punch-dies and contains the following information: Country of origin represented by the two-letter code established by the International Organization for Standardization followed by the registration number assigned to the last two digits of the year of registration, and the weight of the raw ivory to the nearest kilogram.

When sending the requested information and/or documentation, be sure to include this email with your response. This will ensure that it is received by me for further processing.

If the requested information is not received by this office within 45 days of the date of this email, your application will be abandoned and administratively closed. Once a file is closed, you will need to submit a new application and all required fees for the Service to consider your proposed activity.

If you have any question, please feel free to contact me directly.

Best regards,

Michael Moore

Supervisory Policy Specialist

Division of Management Authority

Branch of Permits

J RYAN Non Resident Hunting License.pdf

226K

REPUBLIC OF ZAMBIA

The Zambia wildlife Act
(*Act No 12 of 1998)*

LFZAWA Form 2

The Zambia Wildlife (Licences and fees) Regulations, 2007

NON RESIDENT HUNTING LICENCE 13276

(Regulation 3 (2))

Station of issue Chilanga Date of issue 26/08/11

DETAILS OF LICENSEE

Full Name Jimmie Ryan NRC/Passport No (b) (6)

Nationality American Tel/Fax

Address (b) (6)

Full Name of Safari company Hwichata Saf

Company Cert. Incorporaton No Date of incorporation

Postal Address P.O. Box 35225 Lsk

Residential Address

Firearm Licence/Tourist's Firearm import No Caibre of Firearm(s) Bow & Arrow

Type of Hunt Midi Hunting Block Lower Lupande

Bait

The above named Safari company and its bona fide Clients are authorised by this licence under the Guidance of a Professional hunter to hunt the following Game or Protected animals within the Game Management Area or hunting block Specified hereunder and for the specifies period and upon payment of the fees specified below

Species of animal	Number	Sex	Hunting Area	Hunting Period	
Elephant	1st	M	Lower Lupande	2011	
			Concession fee		
One Elephant Killed.					

Total Animals Fees	
Concession Fees	
Grand TOTAL	

Note:

Original copy to be retained by the Licencee

Duplicate copy to be forwarded to the Director - General or to an agent

Triplicate to be retained in the book

Date 26/08/11

26 AUG 2011

Director General

Moore, Mike <mike_moore@fws.gov>

Application for the import of a personal sport-hunted African elephant trophy taken in Zambia in 2011, PRT-71502B.

1 message

Moore, Mike <mike_moore@fws.gov> Thu, Dec 3, 2015 at 10:45 AM
To (b) (6) [redacted]

Dear Mr. Ryan,

We are in receipt of your application requesting a permit under the U.S. Endangered Species Act (ESA) and the Convention on International Trade in Endangered Species (CITES) to import your personal sport-hunted African elephant trophy taken in Zambia in the 2011 hunting season. We apologize for the delay in responding to your request. However, additional information is needed in order to complete our review of your application.

Please provide copies of any licenses and/or permits issued to you by the Government of Zambia, granting you authorization to take an elephant in Zambia during the 2011 hunting season. In addition, for each tusk you intend to import, please provide the marking information under the marking and registration system established by Zambia. This marking is done on the lip mark area of the tusk by means of punch-dies and contains the following information: Country of origin represented by the two-letter code established by the International Organization for Standardization followed by the registration number assigned to the last two digits of the year of registration, and the weight of the raw ivory to the nearest kilogram.

When sending the requested information and/or documentation, be sure to include this email with your response. This will ensure that it is received by me for further processing.

If the requested information is not received by this office within 45 days of the date of this email, your application will be abandoned and administratively closed. Once a file is closed, you will need to submit a new application and all required fees for the Service to consider your proposed activity.

If you have any question, please feel free to contact me directly.

Best regards,

Michael Moore
Supervisory Policy Specialist
Division of Management Authority
Branch of Permits

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

MAR 30 2011

MEMORANDUM

To: Chief, Division of Management Authority

From: Chief, Division of Scientific Authority Rosemarie Gnam

Subject: General Advice on Import of Sport-hunted Trophies of African Elephant from Zambia for the Calendar Year 2011

This responds to your request for a CITES finding on permit applications that you have or might receive for the import of sport-hunted trophies of African elephants (*Loxodonta africana*) from Zambia for calendar year 2011.

Please be advised that, with the information available, we are able to find that the import of sport-hunted trophies of African elephants from Zambia will be for purposes that are not detrimental to the survival of the species. This General Advice applies only to African elephant sport-hunted trophies lawfully taken in Zambia during calendar year 2011 (i.e., January 1 through December 31), provided that they are to be imported by the persons who hunted them for personal use or personal display.

If new information becomes available that suggests that this General Advice is no longer valid, said Advice would be suspended and reconsidered by the Division of Scientific Authority (DSA). If, after reconsideration, DSA believes that the General Advice is no longer valid, we will issue a new General Advice or require that subsequent permit applications be considered on a case-by-case basis. If it is not rescinded beforehand, this General Advice will be reviewed prior to the end of calendar year 2011, and a new finding issued for the next calendar year.

Please be advised that a significant amount of information relevant to this General Advice was made available at the Fifteenth Meeting of the CITES Conference of the Parties (CoP15), including Zambia's proposal to transfer its population of African elephants from Appendix I to Appendix II (CoP15 Prop. 5), in addition to the Report of the Panel of Experts on Zambia's proposal (CoP15 Doc. 68, Annex 6b). Much of the information used in making the current finding was derived from these sources, as noted below.

BASIS FOR ADVICE:

Conservation and Management

1. African elephants are distributed in seven sub-regions throughout Zambia, including the Luangwa Valley, Mid/Lower Zambezi, Kafue, Mosi oa Tunya, Sioma - upper Zambezi, Bangweulu, Nsumbu – Mweru wa Ntipa, Lusenga –Tanganyika, and West Lunga (CoP15 Prop. 5). Zambia's CoP15 proposal notes that each sub-region exceeds 10,000km^2 in area, and the total area far exceeds 200,000 km^2. Zambia's Protected Area (PA) network covers 30% of the country (224,075 km^2) and falls under the responsibility of the Zambia Wildlife Authority. This includes 19 National Parks covering 63,587 km^2 (28%) and 32 Game Management Areas covering 160,488 km^2, or 72% of the country's PA network (Nyirenda, *et al.*, 2008 and IUCN 1987, as cited in CoP15 Doc. 68 Annex 6b). Most GMAs are inhabited by rural farmers and either surround National Parks or are adjacent to them (CoP15 Doc. 68 Annex 6b).

2. In Zambia, the Ministry of Tourism, Environment, and Natural Resources has jurisdiction over its wildlife. The Zambia Wildlife Act No.12 of 1998, which is the country's primary legislation for wildlife protection, established the Zambia Wildlife Authority (ZAWA). ZAWA is responsible for establishing, controlling, and managing Zambia's National Parks and Game Management Areas (GMA), and for the licensing of hunting and control of the processing, sale, import, and export of wild animals and trophies. The Act also provides the mechanism for implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CoP15 Doc. 68 Annex 6b).

3. In 2005, Zambia produced a National Strategy for Elephant Management in Zambia, which established the following goal and objectives:

Goal: "Conservation of elephants at population level which promote conservation of biodiversity while providing for sustainable utilization."

Objective 1. To mitigate human – elephant conflicts
Objective 2. To reduce poaching levels
Objective 3. To establish and maintain a comprehensive ivory management system
Objective 4. To provide for sustainable elephant utilization

Management Plans for specific areas (e.g. Lower Zambezi) provide management objectives, activities, and guidelines (CoP15 Doc. 68 Annex 6b; letter dated June 24, 2005, from Hapenga Monty Kabeta, Director General, ZAWA). In the Report of the Panel of Experts on Zambia's CoP15 proposal, the Panel noted that a number of actions within the National Strategy's objectives had been implemented. (CoP15 Doc. 68 Annex 6b).

4. In Zambia, sport hunting of elephants is regulated by the Zambia Wildlife (Elephant) (Sport Hunting) Regulations, 2005. These regulations establish the hunting season, minimum trophy size, annual quota, post-hunt reporting, trophy registration, marking, export, and revenue sharing (CoP15 Doc. 68 Annex 6b). Currently, the only areas authorized for sport hunting are LZAMU (Chiawa and Rufunsa Game Management Areas) and SLAMU (Lupande Game Management Area). Section 2C(3) of the Zambia Wildlife Act states that half of the quota is given equitably to safari outfitters within Chiawa, Rufansa, and Lupande Game Management Areas. According to *Statutory*

Instrument 40 of 2005, the other half of the quota is issued to outfitters operating outside the GMA who will be authorized to hunt elephants in the GMAs only (letter dated June 24, 2005, from Hapenga Monty Kabeta, Director General, ZAWA).

5. A Fund is operational in Zambia whereby income from elephant trophy hunting is deposited and then shared between ZAWA and the respective communities on a 50 – 50% basis in accordance with the provision of the Zambia Wildlife Act, No. 12 of 1998 (CoP15 Prop. 5). The Panel of Experts noted that ZAWA's income from fees charged (hunting, concessions, park entrance, tourists, etc.) has almost doubled, from approximately USD 6 million (M) in 2005 to USD 10.7 M in 2009. In addition ZAWA has received a number of grants to support its work but, over the same period, these funds have dropped from USD 5.7 M in 2007 to USD 1.7 M in 2009. Concurrently, ZAWA's expenditure has grown from USD 10.8 M to USD 16.1 M. Therefore, in order to maintain its level of activity, ZAWA needs to meet its current shortfalls. The Government of Zambia has provided about USD 1 M a year to ZAWA to meet shortfalls in 2009 and 2010. Moreover, ZAWA is implementing a number of innovations to seek further funding for its conservation work, such as offering large areas of national parks to investors as concessions for non-consumptive wildlife use (CoP15 Doc. 68 Annex 6b).

Population Status and Trends

6. The first country-wide population survey of elephants in Zambia was conducted in 2008. In this survey, both stratified sample and total counts (Norton-Griffiths 1978 as cited in CoP15 Doc. 68 Annex 6b) estimated that the elephant population comprised 26,382±4,405 (95%CL1) animals over 166,713 km^2, which is approximately 70% of the protected area network (Simukonda, 2009 as cited in CoP15 Doc. 68 Annex 6b). Due to time and funding constraints, the survey did not cover West Lunga (CoP15 Doc. 68 Annex 6b).

7. The Panel of Experts noted that according to the African Elephant Database in 1995, 1998, 2002 and 2007 (Said *et al.* 1995, Barnes *et al.* 1998, and Blanc *et al.* 2002 as cited in CoP15 Doc. 68 Annex 6b; Blanc *et al.* 2007), total population estimates for elephants in Zambia indicate a population that is between a minimum of 16,562 definite elephants and a maximum of 29,229 (the sum of probable, possible and speculative estimates) and does not indicate a clear overall population trend. The Panel pointed out, however, that the 2008 estimate of approximately 26,000 elephants is the highest figure reported to date over this period. Based on this information, the Panel of Experts concluded that the present population can be considered stable and viable (especially the Luangwa and Kafue subpopulations), and possibly increasing (CoP15 Doc. 68 Annex 6b).

Sustainability of Off-Take

8. The Panel of Experts evaluated the sustainability of the total levels of off-take from the elephant population in Zambia. In Zambia such off-take includes problem-animal control (PAC) (defence of human life and property), natural mortalities, sport hunting, and illegal killing. According to the Panel's analysis, the overall level of elephant off-take from all legal and illegal causes is estimated to be a minimum of 208 annually (66 control operations + 47 natural mortalities + 16 unknown + 20

sport-hunting quota + 59 poached), which is equivalent to 0.8% of the 2008 elephant population estimate (26,382). The Panel notes that even if this value were substantially increased, allowing for undetected natural mortalities and poached elephants, it would still fall within the expected rate of increase of the elephant population (approximately 3-5% annually). Therefore, the Panel concluded that the overall elephant off-take can be considered as sustainable at the national level, especially given the seemingly stable and possibly increasing overall elephant population since 2002. The Panel of Experts noted that on a regional level, the off-take data indicate a likely decline in the Lower Zambezi, where the 2008 census confirmed both a population decline since 2005 and the highest carcass ratio in the country. The Panel of Experts noted that levels of illegal activity in the Lower Zambezi need to be reduced as a first priority (CoP15 Doc. 68 Annex 6b).

9. The Panel of Experts also evaluated the sustainability of legal sport-hunting. An annual quota of 20 animals has been maintained since the elephant sport-hunting in Zambia began in 2005; however the Panel of experts' analysis took into account a potential increase in the sport-hunting quota to 120 animals, as proposed in Zambia's Cop15 proposal. By examining data from the ivory management database, the Panel's analysis also took into account the number of trophy-quality males removed from the population by other causes. In total, the Panel considered a potential total off-take of 131 trophy-quality animals a year, which is equivalent to 0.5% of the 2008 total elephant population estimate. The Panel concluded that this level falls within the range 0.5-1% that is widely considered to be the limit to sustainable hunting of trophy-quality males in a healthy elephant population (Martin, 1986).

10. The Panel of Experts also assessed whether the hunting of trophy quality males in Zambia is sustainable. The Panel's analysis of ZAWA records showed a steady decline in average tusk weight from 23.1 kg in 2005 to 19.6 kg in 2009. As such, the Panel raised some concern that 2009 trophies are the smallest on record in terms of maximum weight, average weight and length, despite being above (on average) the minimum legal requirements. While the Panel concluded that the legal hunting of trophy quality males is sustainable, it underscored the importance of ongoing monitoring of trophy quality, especially in locations where illegal off-take is relatively high. The Panel also noted that the accumulation of 112 trophy-quality tusks from natural mortality, PAC, and confiscations from 2005 to 2009 represented a large increase from 68 during the years 2000-2004 and that this highlights why such off-take should be factored into quota setting (CoP15 Doc. 68 Annex 6b).

11. With the information currently available, we believe that the status of the African elephant population in Zambia and management efforts are adequate to ensure that the sport hunting of African elephants as administered by ZAWA do not adversely affect the status of the species in Zambia.

12. Therefore, for calendar year 2011, we find that the import of sport-hunted trophies of African elephants taken in Zambia will be for purposes that are not detrimental to the survival of the species.

CONCERNS:

Although we are able to make the current non-detriment finding, we have several concerns that were noted by the Panel of Experts (CoP15 Doc. 68, Annex 6b).

1. The Panel of Experts noted that the greatest risk to the elephant population in Zambia is in the Lower Zambezi, where the Panel believes a further decline in the elephant population would affect sustainable use and probably affect both elephants and communities negatively. Although we recognize, based on the Panel of Experts' report, that Zambia has greatly improved its anti-poaching activities, we agree with the Panel of Experts that levels of illegal activity need to be reduced as a first priority, and we will continue to monitor this situation.

2. The Panel of Experts recognizes that ZAWA is strongly committed to the need for good long-term monitoring, however, it notes that ZAWA's current financial situation does not guarantee the needed resources to adequately and efficiently monitor its elephant population. We recognize that ZAWA has been seeking further funding for its conservation work through innovative means, and we encourage ZAWA in these efforts. In future non-detriment findings, we will evaluate ZAWA's ability to continue to adequately monitor its elephant population.

REFERENCES:

Blanc, J.J., R.F.W. Barnes, G.C. Craig, H.T. Dublin, C.R. Thouless, I. Douglas-Hamilton, and J.A. Hart. 2007. *African Elephant Status Report 2007: An Update from the African Elephant Database*. IUCN/SSC African Elephant Specialist Group. IUCN, Gland, Switzerland. Available online at: http://www.african-elephant.org/aed/pdfs/aesr2007.pdf.

CoP15 Doc. 68 Annex 6b). 2010. Report of the Panel regarding the proposal of Zambia. Available online at: http://www.cites.org/eng/cop/15/doc/E15-68A06b).pdf.

CoP15 Prop. 5. 2010. Transfer the population of African elephant (*Loxodonta africana*) of Zambia from Appendix I to Appendix II with an annotation. Available online at: http://www.cites.org/eng/cop/15/prop/E-15-Prop-05.pdf.

Martin, R.B. 1986. *Establishment of African ivory export quotas and associated control procedures*. Report to CITES Secretariat.

RCVD JUL 8 2015

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0093
Expires 05/31/2017

Federal Fish and Wildlife Permit Application Form

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
RYAN	JIMMIE	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6)			(b) (6)

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address, Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
ALABASTER	AL	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country
(b) (6)				USA

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue _____ No ☑

3. Certification. I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I un(b) (6) any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature (in blue ink) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 6/23/15

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for trophy/trophies that you did not use, please **return the unused original permit**. If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: The U.S. FWS has determined that a trophy consists of raw or tanned parts of a specimen taken by a hunter during a sport hunt for personal use. It may include the bones, claws, hair, head, hide, hooves, horns, meat, skull, teeth, tusks, or any taxidermied part, including, but not limited to, a rug or taxidermied head, shoulder, or full mount. It does not include articles made from a trophy, such as worked, manufactured, or handicraft items for use as clothing, curios, ornamentation, jewelry, or other utilitarian items. If you wish to import such products, please contact the Division of Management Authority for the proper application form.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy. If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: 0 (Limited to the import of two per calendar year)

African elephant (*Loxodonta africana*) Quantity: 1 (Import permit is not required for trophies harvested in Botswana, Namibia, South Africa, or Zimbabwe). **Note: once imported, ivory cannot be re-exported.**

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: 0 (An import permit is not required for trophies harvested in South Africa or Swaziland. If you are looking to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: ZAMBIA, LOWER LUPANDE

   b. Date wildlife was hunted:
   8-22-2011 TO 9-5-2011

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

MALE ELEPHANT - SKIN, SKULL, AND TUSKS

d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

KWALATA SAFARIS
PLOT No 6980, HEAVY INDUSTRIAL AREA, KATANGA ROAD
LUSAKA, ZAMBIA

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name:	KWALATA SAFARIS
Business Name:	
Address:	PLOT No 6980
Address:	HEAVY INDUSTRIAL AREA, KATANGA ROAD
City:	LUSAKA
State/Province:	ZAMBIA
Country, Postal Code:	AFRICA

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year (if applicable). In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: _____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year (if applicable). In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ (b) (6) _____ Date: 6-23-15

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, **if** different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

JAN ALLMEYER, (b) (6) [redacted]

12. **Disqualification Factor**. A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

RCVD JUL 8 2015

(b) (6)

JOHN (b) (6) MORRIS
(b) (6)

GREAT SOUTHERN
GreatSouthernBank.com
80-7332-2865

6/30/2015

PAY TO THE ORDER OF U.S. Fish and Wildlife Service $ **100.00

One Hundred and 00/100********** DOLLARS

MEMO (b) (6)

AUTHORIZED SIGNATURE

FORM 3-201A (1/97)

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

IMPORT PERMIT

Page 1 of 1

1. Original Permit/Certificate No.
15US71502B/9

2. Valid
12/10/2016

3. Permittee (name and address, country)
JIMMI[redacted] RYAN
[redacted]
ALABASTER, AL[redacted]
U.S.A.

4. Consignee (name and address, country)
KWALATA SAFARIS
PLOT NO. 6980
HEAVY INDUSTRIAL AREA, KATANGA ROAD
LUSAKA
ZAMBIA

5. Special Conditions

MUST COMPLY WITH ATTACHED GENERAL PERMIT CONDITIONS.

SPECIMEN MAY NOT BE SOLD OR TRANSFERRED FOR ANY FINANCIAL REMUNERATION.

MUST IMPORT THROUGH A DESIGNATED PORT LISTED IN CONDITION 10.

U.S. THREATENED SPECIES: TUSKS MUST BE MARKED AS PER [50 CFR 17.40(e)]. IN ACCORDANCE WITH THE AFRICAN ELEPHANT CONSERVATION ACT, RAW IVORY, INCLUDING SPORT-HUNTED TROPHIES THAT ARE WHOLLY OR PARTIALLY IVORY, MAY NOT BE RE-EXPORTED FROM THE U.S.

TROPHY MUST HAVE BEEN TAKEN DURING 2011 HUNTING SEASON

5a. Purpose of Transaction
H

6. U.S. Management Authority
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

U.S. CITES Management Authority

12/11/2015
Issuing Date

United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

-May not be used for commercial purposes. For live animals, only valid if the transport conditions comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport, with IATA Live Animals Regulations.

7/8. Common Name and Scientific name (genus and species) of Animal or Plant	9. Description of Part or Derivative, including identifying marks or numbers (age/sex if live)	10. Appendix No. and Source
A. Common Name: AFRICAN ELEPHANT Scientific Name: LOXODONTA AFRICANA	9. IMPORT PERSONAL SPORT HUNTED TROPHY (shipment may contain bones, hair, hide, tusks, teeth, or any taxidermied part, as well as worked, manufactured, or handicraft items such as curios, jewelry, or other utilitarian items.)	10. 1 W 11. Quantity (including units): 1 NO 12. Country of Origin: ZAMBIA
B. Common Name: Scientific Name:	9.	10. 11. Quantity (including units) 12. Country of Origin
C. Common Name: Scientific Name:	9.	10. 11. Quantity (including units) 12. Country of Origin
D. Common Name: Scientific Name:	9.	10. 11. Quantity (including units) 12. Country of Origin
E. Common Name: Scientific Name:	9.	10. 11. Quantity (including units) 12. Country of Origin

547843

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

FEB - 4 2002

MEMORANDUM

To: Chief, Division of Management Authority

From: Chief, Division of Scientific Authority

Subject: General advice for permit renewals and amendments

This general advice supersedes the memorandum on "Scientific Authority review of permit amendments and renewals" issued by our office (then Office of Scientific Authority) on February 14, 1983.

The Division of Management Authority (DMA) receives a large number of requests for renewals and amendments of CITES import and export permits, as well as Certificates of Scientific Exchange (COSE), for which the Division of Scientific Authority (DSA) has previously issued non-detriment findings.

In the case of permits for which DMA has used a general advice from DSA, we have determined that no additional advice from DSA will be necessary provided that the renewal or amendment request still meets the conditions contained in the general advice.

In the case of permits for which DSA has issued permit-specific non-detriment findings, no additional advice from DSA will be needed provided that the renewal or amendment request involves activities affecting the species in question in a way that was contemplated in our original advice. However, additional DSA advice will be needed when:

1) there is a change in sender or recipient;
2) there is a change in purpose of the activity (e.g., from display to captive breeding purposes in the case of live animals; from research to commercial purposes in the case of tissue

specimens);

3) there is a change in number[1] or source (i.e., captive versus wild) of specimens covered under the original finding, location where specimens are collected (e.g., country, region within a country), or method of acquiring the specimens;

4) permit conditions have not been complied with (e.g., submission of annual reports); or

5) the basis for the original DSA finding on the permit was controversial or involved elements of uncertainty that continue to be an issue with the permit involved and have the potential to result in a reversal of our previous finding (e.g., export of live American alligators, import of confiscated or "problem" wild animals).

DMA permit biologists should use their judgement in deciding whether this is the case and should contact us via e-mail when in doubt.

---

[1] Refers only to increases beyond the total number of specimens authorized in the original finding (e.g., applicant was authorized to import 500 specimens in a given year and now wishes to import an additional 500 the following year). No additional advice is needed if applicant is simply trying to import/export specimens left over from an expired permit (e.g., applicant was originally authorized to import 500 specimens, but imported only 250 prior to expiration date of permit; now wishes to import the remaining 250 under a renewed permit).

FORM 3-201A (1/97)

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

IMPORT PERMIT

Page 1 of 1

1. Original Permit/Certificate No.
17US71502B/9

2. Valid
01/05/2018

3. Permittee (name and address, country)
JIMMIE (b) RYAN
(b) (6)
ALABASTER, AL (b) (6)
U.S.A.

4. Consignor (name and address, country)
KWALATA SAFARIS
PLOT NO. 6980
HEAVY INDUSTRIAL AREA, KATANGA ROAD
LUSAKA
ZAMBIA

5. Special Conditions
MUST COMPLY WITH ATTACHED GENERAL PERMIT CONDITIONS.

SPECIMEN MAY NOT BE SOLD OR TRANSFERRED FOR ANY FINANCIAL REMUNERATION.

MUST IMPORT THROUGH A DESIGNATED PORT LISTED IN CONDITION 10.

U.S. THREATENED SPECIES: TUSKS MUST BE MARKED AS PER [50 CFR 17.40(e)]. IN ACCORDANCE WITH THE AFRICAN ELEPHANT CONSERVATION ACT, RAW IVORY, INCLUDING SPORT-HUNTED TROPHIES THAT ARE WHOLLY OR PARTIALLY IVORY, MAY NOT BE RE-EXPORTED FROM THE U.S.

TROPHY MUST HAVE BEEN TAKEN DURING 2011 HUNTING SEASON

THIS RE-ISSUES AND REPLACES 15US71502B/9 ISSUED 12/11/2015.

5a. Purpose of Transaction
H

6. U.S. Management Authority
Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

U.S. CITES Management Authority

-May not be used for commercial purposes. For live animals, only valid if the transport conditions comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport, with IATA Live Animals Regulations.

01/06/2017
Issuing Date

United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

7/8. Common Name and Scientific name (genus and species) of Animal or Plant	9. Description of Part or Derivative, including Identifying marks or numbers (age/sex if live)	10. Appendix No. and Source
A. Common Name: AFRICAN ELEPHANT Scientific Name: LOXODONTA AFRICANA	9. IMPORT PERSONAL SPORT HUNTED TROPHY (shipment may contain bones, hair, hide, tusks, teeth, or any taxidermied part, as well as worked, manufactured, or handicraft items such as curios, jewelry, or other utilitarian items.)	10. 1 W 11. Quantity (including units) 1 NO 12. Country of Origin ZAMBIA
B. Common Name: [redacted] Scientific Name: [redacted]	9. [redacted]	10. [redacted] 11. Quantity (including units) [redacted] 12. Country of Origin [redacted]
C. Common Name: [redacted] Scientific Name: [redacted]	9. [redacted]	10. [redacted] 11. Quantity (including units) [redacted] 12. Country of Origin [redacted]
D. Common Name: [redacted] Scientific Name: [redacted]	9. [redacted]	10. [redacted] 11. Quantity (including units) [redacted] 12. Country of Origin [redacted]
E. Common Name: [redacted] Scientific Name: [redacted]	9. [redacted]	10. [redacted] 11. Quantity (including units) [redacted] 12. Country of Origin [redacted]

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0093
Expires 05/31/2017

Federal Fish and Wildlife Permit Application Form

RCVD DEC 15 2016 LB

Return to: U.S. Fish and Wildlife Service
(Enter address from pages 5 and 6 of application)

Type of Activity:
REISSUANCE, RENEWAL, OR AMENDMENT OF A PERMIT
(For this application, all permits, registrations, and certificates are referred to as a permit.)

Complete Sections A or B, C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	(b) (6) iddle name or initial	1.d. Suffix
Ryan	Jimmie		

2. Date of birth (mm/dd/yyyy) (b) (6) redacted	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)

6.a. Telephone number (b) (6) redacted	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address (b) (6) redacted

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes) (b) (6) redacted

1.b. City	1.c. State	1.d. Zip code/Postal code:	1.e. County/Province	1.f. Country
Alabaster	AL	(b) (6) redacted		US

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code:	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount indicated on pages 6 and 7.** Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☑ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: 15US71502B9 No ☐

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Atty in fact — 12/14/16

Signature (**in blue ink**) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

E. REISSUANCE, RENEWAL, OR AMENDMENT OF A PERMIT (For this application, all permits, registrations, and certificates are referred to as a permit.)

NOTE 1: If you are renewing your Designated Port Exemption permit, use form 3-200-2 (http://www.fws.gov/forms/3-200-2.pdf) and submit to appropriate Office of Law Enforcement address. If you are renewing your Import/Export license (required for commercial activities), use form 3-200-3 (http://www.fws.gov/forms/3-200-3.pdf) and submit to appropriate Office of Law Enforcement address.

NOTE 2: This form **cannot** be used for lost or damaged permit. If you need to replace a lost or damaged permit, please use form 3-200-66, http://www.fws.gov/international/pdf/permit-application-form-3-200-66-replacement-document.pdf. The application **must** be submitted to the office that issued the initial permit. Lost or damaged permit

NOTE 3: Some activities, such as all master files for multiple shipments, Certificate of Scientific Exchange (COSE), circus/traveling exhibits, and artificially propagated plants, can only be re-issued, renewed, or amended by submitting a new application for permits for those activities. Please refer to http://www.fws.gov/international/permits/by-form-number/index.html to determine if another application form would be more appropriate or contact the Division of Management Authority for more information.

1. **Permit number.** Enter the permit number to be reissued/renewed/amend 15US71502B9.

2. Submit the original permit with this application.

3. **Past activities.**
   a. Provide copies of all cleared documents and form 3-177 (FWS declaration of wildlife) associated with this permit.
   b. Provide a summary detailing activities conducted under this permit, as well as a brief statement of why you are seeking reissuance/renewal.

4. **Annual Report.** If required by your permit, provide an annual report as conditioned (Please disregard if you have already submitted your annual report.)

5. **Sport-hunted trophies:** If you did not hunt during the hunting season stated in your original application, you are not eligible for a renewal. Please submit a new application form.

6. **Certification** - Complete one of the statements below and supply any additional documentation requested: (original signature is required)

a. For **NO CHANGES** to original application:

I certify that the information submitted in support of my original application for the permit indicated above has not changed and is still currently correct. I hereby request reissuance or renewal of this permit.

Permittee's signature: _____ Date: 12/14/16

b. For **CHANGES** to original application:

On an attached page(s), provide a complete description of any changes (e.g., change in principal officer, personnel, address, location of activities, types of activities). Please sign each attached page. Also note that we need to request additional information regarding the changes after reviewing your initial request.

I certify that the information submitted in support of my original application for the permit indicated above is still currently correct EXCEPT for the changes noted on the attached, signed page(s). I hereby request re-issuance or renewal of this permit with the indicated changes.

Permittee's signature: _____ Date: _____

7. All international shipment(s) must be through a designated port, unless otherwise authorized. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact either the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2) or the Division of Management Authority.

8. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):
Genus Logistic[redacted] Jamaica NY[redacted] included FedEx

9. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☑ If a permit is issued, please send it via a courier service to the address on page 1 or question 8. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Matt Mayers Genus Logistics 718 790 0216 matt@genuslogistics.com

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. [50 CFR 13.21(c)]. Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

FORM 3-201A (1/97)

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

IMPORT PERMIT

Page 1 of 1

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15US71502B/9

2. Valid
12/10/2016

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JIMMIE (b) RYAN
(b) (6)
ALABASTER, AL (b) (6)
U.S.A.

4. Consignee (name and address, country)
KWALATA SAFARIS
PLOT NO. 6980
HEAVY INDUSTRIAL AREA, KATANGA ROAD
LUSAKA
ZAMBIA

Original, Unused Permit Returned

5. Special Conditions

MUST COMPLY WITH ATTACHED GENERAL PERMIT CONDITIONS.

SPECIMEN MAY NOT BE SOLD OR TRANSFERRED FOR ANY FINANCIAL REMUNERATION.

MUST IMPORT THROUGH A DESIGNATED PORT LISTED IN CONDITION 10.

U.S. THREATENED SPECIES: TUSKS MUST BE MARKED AS PER [50 CFR 17.40(e)]. IN ACCORDANCE WITH THE AFRICAN ELEPHANT CONSERVATION ACT, RAW IVORY, INCLUDING SPORT-HUNTED TROPHIES THAT ARE WHOLLY OR PARTIALLY IVORY, MAY NOT BE RE-EXPORTED FROM THE U.S.

TROPHY MUST HAVE BEEN TAKEN DURING 2011 HUNTING SEASON

5a. Purpose of Transaction
H

6. U.S. Management Authority
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

U.S. CITES Management Authority

-May not be used for commercial purposes. For live animals, only valid if the transport conditions comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport, with IATA Live Animals Regulations.

12/11/2015
Issuing Date

United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

7/8. Common Name and Scientific name (genus and species) of Animal or Plant	9. Description of Part or Derivative, including identifying marks or numbers (age/sex if live)	10. Appendix No. and Source
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B. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
C. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
D. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
E. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin

547843

POWER OF ATTORNEY

Matthew Mayers d/b/a Genus Logistics
76 Albany Blvd. Atlantic Beach N.Y. 11509
Office: (718) 790-0216 Fax: (516) 400-9787 Email: matt@genuslogistics.com

Customs Rules on Discharge of Importers Liability for Duties

The U.S. Customs Service has issued a final amendment of the regulations to provide an alternative procedure for an importer record to pay duties on imported merchandise through a licensed customhouse broker. Present rules provide for the payment of duties to Customs by a broker on behalf of the importer. Under the alternative procedure, the importer may elect to submit to the broker a separate check or bank draft for the duties payable to the "U.S. Customs Service". The broker would then deliver the importer's check or bank draft to Customs. The new rule also requires brokers to provide written notification to their clients, advising that if a the client is an importer of record, payment to the broker will not relieve the client of liability for Customs charges in the event that the charges are not paid by the broker. Brokers will be required to provide this notification to all active clients annually during the month of February. Additionally, brokers will be required to provide such information on a power of attorney executed on or after the effective date of the new rule. These amendments are effective as of September 27, 1982.

BELOW IS A POWER OF ATTORNEY FORM WHICH IS REQUIRED BY U.S. CUSTOMS. TO ALLOW US TO TRANSACT U.S. CUSTOMS CLEARANCE ON YOUR BEHALF

Department of the Treasury
U.S. Customs Service Individual
141.32. C.R.

Social Security # (b) (6) [redacted]

Delivery 30th Norfolk GRP 0483P

CUSTOMS POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That, JIMMIE (b) (6) [redacted] RYAN (Full Name)

Residing at, (b) (6) [redacted] ALBASTY AL. (b) (6) [redacted]

hereby constitutes and appoints each of the following persons Matthew Mayers dba Genus Logistics

may act through any of its offices or any employees with Power of Attorney on file with this licensed broker as required by the Regional Commission of Customs as a true and lawful agent and attorney of the grantor named above for and in the name, place, stead of said grantor from this date and in all Customs Districts, and in no other name, to make, endorse, sign, declare, or swear to any entry, withdrawal, declaration, certificate, bill of lading, or other document required by law or regulation in connection with the importation, transportation, or exportation of any merchandize shipped or consigned by or to said grantor; to perform any act or condition which may be required by law or regulation in connection with such merchandize; to receive any merchandize deliverable to said grantor.

To make endorsements on bills of lading conferring authority to transfer title, make entry or collect drawback, and to make, sign, declare, or swear to any statement, supplemental statement, schedule,, supplemental schedule, certificate of delivery, certificate of manufacture, certificate, and delivery abstract of manufacturing records, declaration of proprietor on drawback entry, declaration of exporter on drawback entry, or any other affidavit or document which may be required by law or regulation for drawback purposes, regardless of whether such bill of lading, sworn statement, schedule, certificate, abstract, declaration, or other affidavit or document is intended for filing in any customs district.

To sign, seal, and deliver for and as the act of said grantor any bond required by law or regulation in connection with the entry or withdrawal of imported merchandise or merchandise exported with or without benefit of drawback, or in connection with the entry, clearance, lading, unlading or navigation of any vessel or other means of conveyance owned or operated by said grantor, and any and all bonds which may be voluntarily given and accepted under applicable laws and regulations, consignee's and owners declarations provided for in section 485, Tariff Act of 1930, as amended, or affidavits in connection with the entry of merchandise;

To sign and swear to any document, and to perform any act that may be necessary or required by law or regulation in connection with the entering, clearing, lading, unlading, or operation of any vessel or other means of conveyance owned or operated said grantor.

To authorize other Customs Brokers to act as grantor's agent; to receive, endorse and collect checks issued for Customs duty refunds in grantors name drawn on the Treasurer of the United States if the grantor is a nonresident of the United States to accept service of process on behalf of the grantor

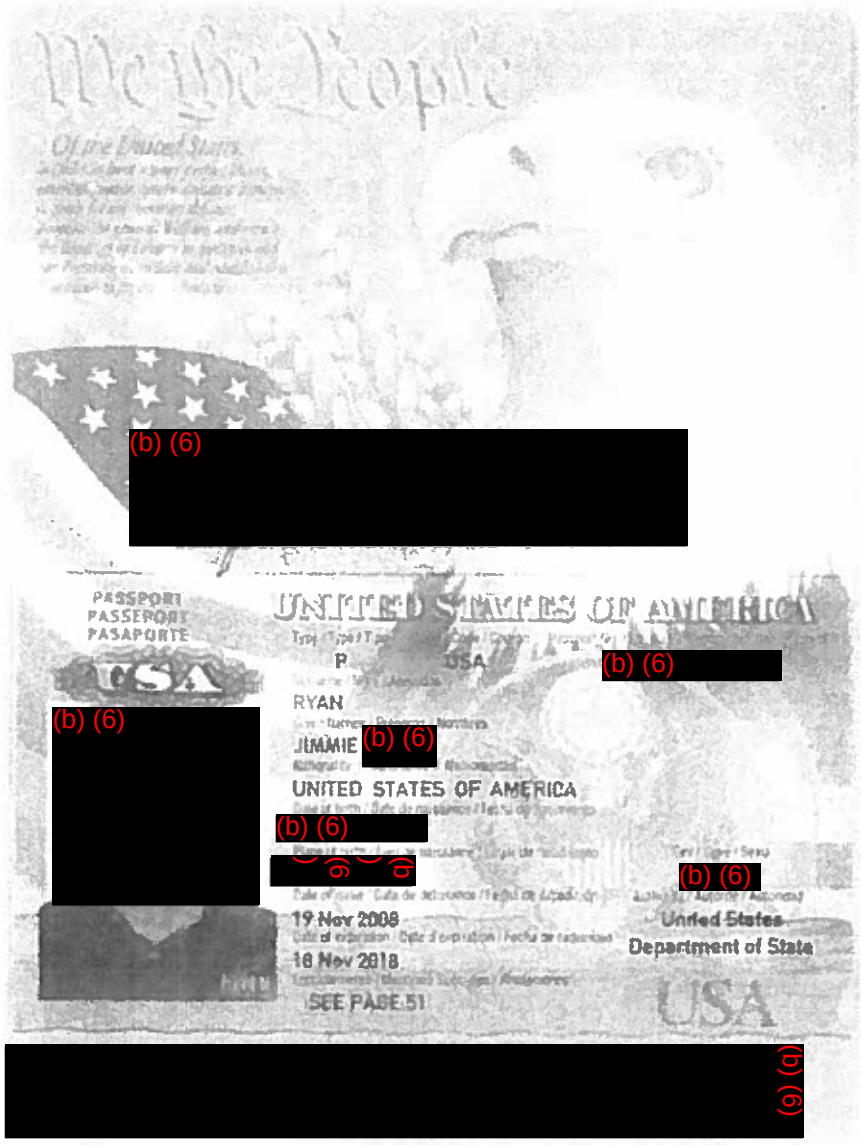
And generally to transact at the customhouses in said district any and all customs business, including making, signing, and filing of protests under section 514 of the Tariff Act of 1930 in which said grantor is or may or may be concerned or interested and which may properly be transacted or performed by an agent and attorney, giving to said agent attorney full power and authority to do anything whatever requisite and necessary to be done in the premises as fully as said grantor could do if present and acting, hereby ratifying and confirming all that the said agent and attorney shall lawfully do by virtue of these presents; the forgoing power of attorney to remain in full force and effect until notice of revocation in writing is duly given to and received by the District Director of customs of the district aforesaid. If the donor of this power of attorney is a partnership, the said the power shall in no case have any force or effect after the expiration of 2 years from the date of its execution.

Pursuant to 19 CFR 111.35(a), election is made waiving the right to receive invoices, supporting documents and correspondences from Matthew Mayers dba Genus Logistics, who is directed to forward all documents and inquiries concerning our imports to their customs brokerage services, to our freight forwarder, who will pay Matthew Mayers dba Genus Logistics, for duties, and services performed on our behalf, it is understood the right to revoke said waiver is continuing.

IN WITNESS WHERE OF, the said (Print Name): JIMMIE (b) (6) [redacted] RYAN

has caused these presents to be sealed and signed: (Signature): (b) (6) [redacted] Date: 9-02-15

WITNESS: Jim D Pearson Date: 9-02-15


We the People
Of the United States
(b) (6)
PASSPORT
PASSEPORT
PASAPORTE
USA
UNITED STATES OF AMERICA
P USA
(b) (6)
RYAN
JIMMIE (b) (6)
UNITED STATES OF AMERICA
(b) (6)
(b) (6)
19 Nov 2008
18 Nov 2018
SEE PAGE 51
(b) (6)
United States
Department of State
USA
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RCVD DEC 15 2016

Genus Logistics
718-790-0216

(b) (4)

PAY TO THE ORDER OF USFW

DATE 12/14/16

1-2/210

One Hundred 00/100 $ 100.00

DOLLARS

CHASE
JPMorgan Chase Bank, N.A.
www.Chase.com

OR EXPORT PERMIT JIMMY

(b) (6)

MP

Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0093
Expires 05/31/2017

Federal Fish and Wildlife Permit Application Form

RCVD JUN 15 2016

LB

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
FORMAN	WALTER	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
(b) (6)			

6.a. Telephone number	6.b. Alternate telephone number	6.c. Fax number	6.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address, Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
Tequesta	FL.	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☐ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: _____ No ☑

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Walter (b) (6) Forman — 06/08/2016

Signature (**in blue ink**) of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy)

Please continue to next page

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for trophy/trophies that you did not use, please **return the unused original permit**. If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: The U.S. FWS has determined that a trophy consists of raw or tanned parts of a specimen taken by a hunter during a sport hunt for personal use. It may include the bones, claws, hair, head, hide, hooves, horns, meat, skull, teeth, tusks, or any taxidermied part, including, but not limited to, a rug or taxidermied head, shoulder, or full mount. It does not include articles made from a trophy, such as worked, manufactured, or handicraft items for use as clothing, curios, ornamentation, jewelry, or other utilitarian items. If you wish to import such products, please contact the Division of Management Authority for the proper application form.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy. If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity: _____ (Limited to the import of two per calendar year)

African elephant (*Loxodonta africana*) Quantity: 1 Tusk (Import permit is not required for trophies harvested in Botswana, Namibia, South Africa, or Zimbabwe). **Note: once imported, ivory cannot be re-exported.**

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity: _____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you are looking to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

   b. Date wildlife is to be hunted:

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild: Zimbabwe Matetsi 1 Camp Victoria Falls
   b. Date wildlife was hunted: July 20, 2015

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

1 Tusk

d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

Trophy Consultants International
4 Josiah Chinamano Rd Belmont
Bulawayo, Zimbabwe

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Carol Bulling
Business Name: Trophy Consultants International
Address: 4 Josiah Chinamano Rd Belmont
Address:
City: Bulawayo
State/Province:
Country, Postal Code: Zimbabwe

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year (if applicable). In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature: _____ Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year (if applicable). In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: [redacted] Date: 06/08/2016

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

ATLANTA, GA.

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

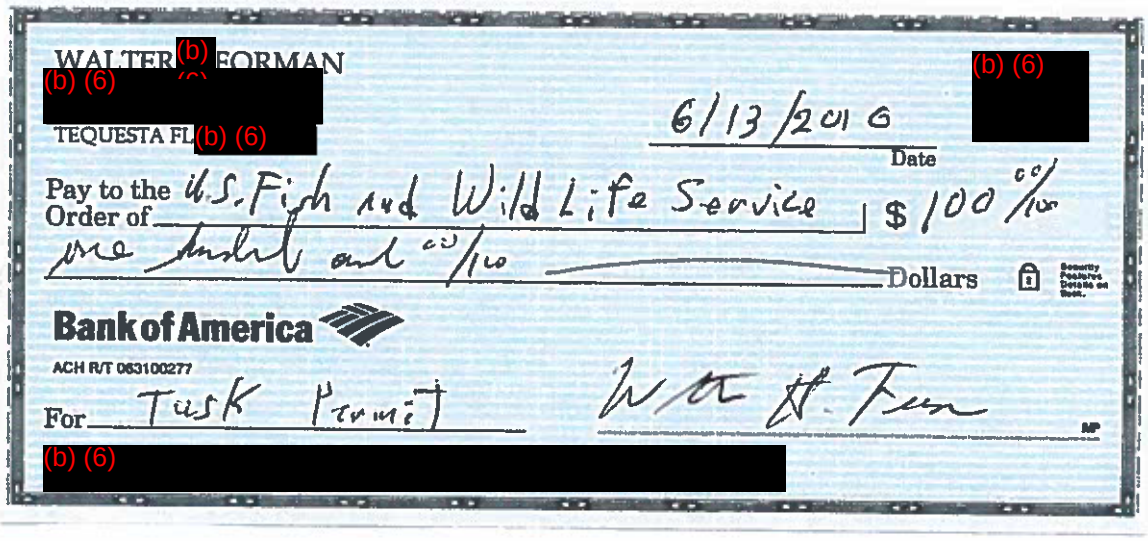
Walter Forman (b) (6) [redacted]

(b) (6) [redacted]

12. **Disqualifica[redacted]** for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

RCVD JUN 15 2016



WALTER (b) FORMAN
(b) (6)
TEQUESTA FL (b) (6)

(b) (6)

6/13/2016
Date

Pay to the Order of U.S. Fish and Wild Life Service $ 100 00/100

one hundred and 00/100 Dollars

Bank of America
ACH R/T 063100277

For Tusk Permit

Walter H. Forman

(b) (6)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

In Reply Refer To:
FWS/AIA/DMA/PRT– 99567B

FEB 2 3 2017

Mr. Walter (b) Forman
(b) (6)
Tequesta, Florida (b) (6)

Dear Mr. Forman:

This letter responds to your June 8, 2016, application to import under the U.S. Endangered Species Act (Act), a personal sport-hunted African elephant (*Loxodonta africana*) trophy taken in Zimbabwe during the 2015 hunting season. After careful review of your request for a permit, and after reviewing all available data and information on activities and circumstances occurring in Zimbabwe at the time you conducted your hunt, your application is being denied for the reasons outlined below.

The African elephant is listed as threatened under the Act with a special rule under Section 4(d) of the Act[1], which is set forth in regulations found at 50 CFR 17.40 (e)[2]. Under the special rule, issuance of an import permit can only occur if the U.S. Fish and Wildlife Service (Service) finds that the killing of the trophy animal intended for import would enhance the survival of the species [50 CFR 17.40(e)(6)(i)(B)], and the trophy is accompanied by a threatened species permit issued under 50 CFR 17.32[3]. To enhance the survival of the species, the importation must be associated with activities that provide a direct or indirect benefit to the species in the wild. In evaluating whether the killing of the trophy animal intended for import into the United States contributes to the enhancement of African elephant populations within a given country, the Service looks at a number of factors. Such factors may include: current elephant population estimates in a given country, whether said county has a valid national and/or regional management plan, is the plan currently being implemented and does it contain achievable and measurable objectives, does the plan take an adaptive management approach and how often is it reviewed and/or updated, the designated authorities responsible for overseeing elephant management and how they are funded, the level of human-wildlife conflict taking place and how it is being addressed, any anti-poaching efforts undertaken, habitat conservation measures currently in place, as well as the amount of revenue generated by elephant hunting and how it is utilized in supporting conservation projects and/or managing the species.

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1 The text of this Act can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6dd.

2 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6m3.

3 Ibis

The best available scientific and management data, as well as information provided to the Service by Zimbabwe Parks & Wildlife Management Authority (ZPWMA), Conservation Force, and Safari Club International, was used in our evaluation. In evaluating the available data and information on elephant hunting in Zimbabwe at the time your hunt occurred, the Service was unable to determine that the killing of African elephants in Zimbabwe, whose trophies are intended for importation into the United States, would enhance the survival of the species. Therefore, the import of sport-hunted elephant trophies taken in Zimbabwe during the 2015 hunting season cannot be authorized. A copy of the Division of Management Authority's finding for the 2015 hunting season is enclosed for your reference.

As provided in 50 CFR 13.29(a)[4], you may request reconsideration of our decision to deny your application. Such a request must be in writing with the original signature of the person requesting reconsideration or by that person's legal representative, must contain a certification statement as provided at 50 CFR 13.12(a)(5)[5], should refer to your file number, PRT–99567B, and must be received in this office within 45 days of the date of this letter. The reconsideration of the decision to deny your request will be based on the information you provided in your original application. As such, your letter requesting reconsideration must address how our decision to deny your application was based on a misinterpretation of the information provided in your application or information available to the Service when making the original denial or it must present clarification of this information. **Should you supply new information that changes the scope of your original application, a new application will need to be submitted to this office before such information can be considered.**

If you have any questions, please contact Supervisory Policy Specialist Michael S. Moore of this office: Division of Management Authority, Branch or Permits, MS:IA, 5275 Leesburg Pike, Falls Church, VA 22041-3803 (703-358-2104, ext. 1983).

Sincerely,

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority

Enclosure

4 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xYDUk
5 Ibis

RCVD JUL 18 2016

OMB No. 1018-0164
Expires 11/30/2016

Department of the Interior
U.S. Fish and Wildlife Service

Federal Fish and Wildlife Permit Application Form

RCVD JUL 18 2016

LS

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
Import of Sport-hunted Trophies of Southern African Leopard, African Elephant, and Namibian Southern White Rhinoceros

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual

1.a. Last name	1.b. First name	1.c. Middle name or initial	1.d. Suffix
Harms	George	(b) (6)	

2. Date of birth (mm/dd/yyyy)	3. Occupation	4. Affiliation/ Doing business as (see instructions)
(b) (6)		

5.a. Telephone number	5.b. Alternate telephone number	5.c. Fax number	5.d. E-mail address
(b) (6)			

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution	1.b. Doing business as (dba)

2. Tax identification no.	3. Description of business, agency, Tribe, or institution

4.a. Principal officer Last name	4.b. Principal officer First name	4.c. Principal officer Middle name/ initial	4.d. Suffix

5. Principal officer title	6. Primary contact name

7.a. Business telephone number	7.b. Alternate telephone number	7.c. Business fax number	7.d. Business e-mail address

C. All applicants complete address information

1.a. Physical address (Street address, Apartment #, Suite #, or Room #; no P.O. Boxes)
(b) (6)

1.b. City	1.c. State	1.d. Zip code/Postal code	1.e. County/Province	1.f. Country
Brielle	NJ	(b) (6)		USA

2.a. Mailing Address (include if different than physical address; include name of contact person if applicable)
(b) (6)

2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country
(b) (6)				USA

D. All applicants MUST complete

1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE **in the amount of $100, nonrefundable processing fee**. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee – ***attach documentation of fee exempt status as outlined in instructions.*** (50 CFR 13.11(d))

2. Do you currently have or have you ever had any Federal Fish and Wildlife permits?
Yes ☑ If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: 10US20568A/9 No ☐

3. Certification: I hereby certify that I have read and am familiar with the regulations contained in ***Title 50, Part 13 of the Code of Federal Regulations*** and the other ***applicable parts in subchapter B of Chapter I of Title 50***, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.

Signature of applicant/person responsible for permit (No photocopied or stamped signatures) — Date of signature (mm/dd/yyyy): 7/12/16

Please continue to next page

NOTICE OF REPRESENTATION

This is a notice to the U.S. Fish and Wildlife Service that I have named, constituted and appointed John J. Jackson, III, Conservation Force, 3240 S. I-10 Service Rd. W., Suite 200, Metairie, Louisiana, 70001, telephone (504) 837-1233, FAX (504) 837-1145, jjw-no@att.net as my attorney and legal representative for all matters concerning my elephant import permit application.

This authority is all inclusive, including, but not limited to permit filing, permit supplementation, reconsideration, administrative appeal and request for time delays or extensions.

I also request that John J. Jackson, III be copied with all correspondence, acknowledgements, notices and decisions concerning my permit during its processing and during any and all steps in its administrative reconsideration or appeal.

George Harms

8/1/2016

DATE

E. IMPORT OF SPORT-HUNTED TROPHIES OF SOUTHERN AFRICAN LEOPARD, AFRICAN ELEPHANT, AND NAMIBIAN SOUTHERN WHITE RHINOCEROS

Note 1: If you hold an import permit for a trophy/trophies that you did not use, please **return the unused original permit.** If you are requesting reissuance of a permit because you have taken a trophy, but were unable to import it prior to the expiration of the permit, please use the renewal form (3-200-52; http://www.fws.gov/international/permits/by-form-number/index.html) and return your original permit with that form.

Note 2: *Sport-hunted trophy* is defined at 50 CFR 23.74 as follows: *Sport-hunted trophy* means a whole dead animal or a readily recognizable part or derivative of an animal specifically identified on the accompanying CITES document that meets the following criteria:

(1) Is raw, processed, or manufactured;
(2) Was legally obtained by the hunter through hunting for his or her personal use;
(3) Is being imported, exported, or re-exported by or on behalf of the hunter as part of the transfer from its country of origin ultimately to the hunter's country of usual residence; and
(4) Includes worked, manufactured, or handicraft items made from the sport-hunted animal only when:
(i) Such items are contained in the same shipment as raw or tanned parts of the sport-hunted animal and are for the personal use of the hunter;
(ii) The quantity of such items is no more than could reasonably be expected given the number of animals taken by the hunter as shown on the license or other documentation of the authorized hunt accompanying the shipment; and
(iii) The accompanying CITES documents (export document and, if appropriate, import permit) contain a complete itemization and description of all items included in the shipment.

Note 3: Certain hunting trophies, including leopard, elephant, and rhinoceros hunting trophies, are subject to restrictions on their use after import into the United States. Please see 50 CFR 23.55 for more information or contact the Division of Management Authority.

Please provide the following information. Complete all questions on the application. Mark questions that are not applicable with "N/A". If applying for more than one trophy, be sure to answer questions 2 and 3 for each trophy.

If importing trophies from more than one country, you must submit a separate application for each shipment in order to obtain separate import permits.

1. ENTER the quantity next to the name of the species you are applying to import (you may apply to import specimens of more than one species provided they have been/are being hunted in the same country):

Leopard (*Panthera pardus*) Quantity:_____(Import is limited to two per hunter per calendar year)

African elephant (*Loxodonta africana*) Quantity:__1__(Import is limited to two per hunter per calendar year)
Note: once imported, ivory cannot be re-exported.

Southern white rhinoceros (*Ceratotherium simum simum*) from Namibia Quantity:_____ (An import permit is not required for trophies harvested in South Africa or Swaziland. If you wish to import from a different country, please use form 3-200-37).

2. **IF ANIMAL IS CURRENTLY LIVING IN THE WILD**, please enter the following:
a. Country and place (area, region, GIS coordinates, ranch AND nearest city) where wildlife is to be taken from the wild:

N/A

b. Date wildlife is to be hunted:

N/A

c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horns, tusks).

N/A

3. **IF THE ANIMAL IS DEAD**, please enter the following:
   a. Country and place (area, region, GIS coordinates, ranch, and/or AND nearest city) where trophy was removed from the wild:

   b. Date wildlife was hunted: Sijariar Camp, Binga, Zimbabwe, Jimba Safaris 7/24/2014

   c. Description of the trophy and parts you intend to import (e.g., skin, skull, shoulder mount, life size mount, claws, horn, tusks):

   ZW 2014 24074 10: ZW 2014 24073 10

   d. The current location of the trophy (address and country) [the U.S. import permit will identify this country as the country of export/re-export and must match with the export/re-export document]:

   Universal Trophy Services, Plot 114, Bashewa
   Pretoria, 0056, South Africa

4. Complete name and address of overseas person or business shipping the trophy to you. If you are applying to import a trophy directly from Namibia, you **must** provide the name and address of the professional hunter listed on your Namibian hunting permit [this name will appear on the face of the export permit].

Name: Business Name: Address:	Mr George Robert Harms
Address:	PO Box 817
City:	Farmingdale
State/Province:	New Jersey
Country, Postal Code:	07727 USA

5. Please be aware that the U.S. Fish and Wildlife Service may need to make a finding that your activities will enhance or benefit wild populations of the species involved. If you have any information that could support this finding (e.g., how the funds from license/trophy fees will be spent, what portion of the hunting fee will support conservation), please submit such information on a separate page with your application.

Please use information from Conservation Force and Zimparks.

CERTIFICATION STATEMENT (original signature must be provided for either 6 or 7 below)

6. **If you are a broker or taxidermist applying on behalf of a foreign national,** provide documentation to show you have a **Power of Attorney** to act on your client's behalf and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by my client and is being imported only for my client's personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that my client may only import two leopard trophies in one calendar year. I understand that my client may only import two African elephant trophies in one calendar year. In addition, I have advised my client that raw ivory, once imported into the United States, cannot be re-exported.

Taxidermist/Broker's signature:_____Date: _____

7. **If you are the hunter applying to import your own trophy**, please read and sign the following statement.

I acknowledge that the sport-hunted trophy/trophies to be imported has been/will be personally hunted by me and is being imported only for my personal use (i.e., **not for sale, transfer, donation, or exchange that is reasonably likely to result in economic use, gain, or benefit**). I understand that I may only import two leopard trophies in one calendar year. I understand that I may only import two African elephant trophies in one calendar year. In addition, I understand that raw ivory, once imported into the United States, cannot be re-exported.

Applicant's signature: _____ Date: 7/12/16

Be aware that there may be additional permitting or approval requirements by your local or state governments, as well as required by other Federal agencies or foreign government to conduct your propose activity. While the Service will attempt to assist where possible, it is your responsibility to obtain such approval.

8. All international shipment(s) must be through a designated port. A list of designated ports (where an inspector is posted) is available from http://www.fws.gov/le/designated-ports.html. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

9. Name and address where you wish the permit to be mailed, if different from page 1 (All permits will be mailed via the U.S. Postal Service, unless you identify an alternative means below):

George Harms, (b) (6) [redacted]

10. If you wish the permit to be delivered by means other than USPS regular mail, provide an air bill, pre-paid envelope, or billing information. If you do not have a pre-paid envelope or air bill and wish to pay for a courier service with your credit card, please check the box below. Please DO NOT include credit card number or other information; you will be contacted for this information.

☐ If a permit is issued, please send it via a courier service to the address on page 1 or question 9. I understand that you will contact me for my credit card information once the application has been processed.

11. Who should we contact if we have questions about the application? (Include name, phone number, and email):

Michael Kreig (b) (6) [redacted]
Karen Connelly (b) (6) [redacted]

John Jackson, Legal Representative
cf@conservationforce.org jjw-no@att.net
504-837-1233

12. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☑ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

FORM 3-201A (1/97)

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

IMPORT PERMIT

Page 1 of 1

1. Original Permit/Certificate No.
10US20568A/9

2. Valid until
12/02/2011

Not Needed

3. Permittee (name and address, country)
GEORGE (b) HARMS
(b) (6)
BRIELLE, NJ (b) (6)
U.S.A.

4. Consignor (name and address, country)
LUAWATA CONSERVTION LTD.
P.O. BOX 103
MFUWE
ZAMBIA

5. Special Conditions
MUST COMPLY WITH ATTACHED GENERAL PERMIT CONDITIONS

SPECIMEN MAY NOT BE SOLD OR TRANSFERRED FOR ANY FINANCIAL REMUNERATION.

U.S. THREATENED SPECIES [50 CFR 17.40(i)].

MUST IMPORT THROUGH A DESIGNATED PORT LISTED IN CONDITION 10. PERMITTEE MAY ONLY IMPORT TWO LEOPARD TROPHIES PER CALENDAR YEAR.

EACH LEOPARD SKIN MUST HAVE SELF-LOCKING TAG ATTACHED TO IT WHICH INDICATES THE STATE OF EXPORT, THE NUMBER OF THE SPECIMEN IN RELATION TO THE ANNUAL QUOTA, AND THE CALENDAR YEAR TO WHICH THE QUOTA APPLIES. THE EXPORT PERMIT (OR RE-EXPORT CERTIFICATE) MUST CONTAIN THE TAGGING INFORMATION AS OUTLINED ABOVE

TROPHY MUST HAVE BEEN TAKEN DURING 2010 HUNTING SEASON

5a. Purpose of Transaction
H

6. U.S. Management Authority

DIVISION OF MANAGEMENT AUTHORITY
U.S. FISH AND WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR
WASHINGTON, D.C. 20240
UNITED STATES OF AMERICA

-May not be used for commercial purposes. For live animals, only valid if the transport conditions comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport, with IATA Live Animals Regulations.

12/03/2010
Issuing Date

U.S. CITES Management Authority
United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

7/8. Common Name and Scientific name (genus and species) of Animal or Plant	9. Description of Part or Derivative, including identifying marks or numbers (age/sex if live)	10. Appendix No. and Source
A. Common Name LEOPARD Scientific Name PANTHERA PARDUS	9. IMPORT PERSONAL SPORT HUNTED TROPHY (shipment may contain bones, claws, hide, skull, teeth, or any taxidermied part. DOES NOT include worked, manufactured, or handicraft items such as curios, jewelry, or other utilitarian items.)	10. 1 W 11. Quantity (including units) 1 NO 12. Country of Origin ZAMBIA
B. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
C. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
D. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin
E. Common Name Scientific Name	9.	10. 11. Quantity (including units) 12. Country of Origin

301155

RCVD JUL 18 2015

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George Harms
(6) (6)
Farmingdale, NJ (6) (6)

(6) (6)

(6) (6)

6/8/2016

PAY TO THE ORDER OF US Fish & Wildlife Service $*100.00

One Hundred Only******

DOLLARS

US Fish & Wildlife Service
4401 N. Fairfax Drive
Room 212
Arlington, VA 22203

MEMO Elephant from South Africa

(6) (6)

MP

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NOTICE OF REPRESENTATION

This is a notice to the U.S. Fish and Wildlife Service that I have named, constituted and appointed John J. Jackson, III, Conservation Force, 3240 S. I-10 Service Rd. W., Suite 200, Metairie, Louisiana, 70001, telephone (504) 837-1233, FAX (504) 837-1145, jjw-no@att.net as my attorney and legal representative for all matters concerning my elephant import permit application.

This authority is all inclusive, including, but not limited to permit filing, permit supplementation, reconsideration, administrative appeal and request for time delays or extensions.

I also request that John J. Jackson, III be copied with all correspondence, acknowledgements, notices and decisions concerning my permit during its processing and during any and all steps in its administrative reconsideration or appeal.

George Harms

8/1/2016

DATE

Picozzi, Debra <debra_picozzi@fws.gov>

CITES 01899C

1 message

Picozzi, Debra <debra_picozzi@fws.gov> Mon, Aug 1, 2016 at 11:18 AM
To: John Jackson <JJW-NO@att.net>

Dear Mr. Jackson,

I am processing Mr. Harms CITES import permit for 1 elephant. However, the application is missing some information needed for me to continue. Please provide the following information in writing:

1.#2a on page 3 of application asks, "Description of the trophy parts you intend to import." He answered "NA". This is applicable and is required.

2.#3c on page 3 asks, "Description of the trophy and parts you intend to to import. He answered, "zw 2014 24074 10: zw 2014 24073 10" This is not a description either.

3. #3d on page 3 asks "the current location of the trophy". He answered Pretoria, South Africa. Please provide a copy of the import permit from South Africa from Zimbabwe.

4. #4. Complete name and address of the overseas person or business shipping the trophy to you. He answered, "George Harms, Farmington, N.J."

Thank you very much for your cooperation.

Respectfully,

Debra Picozzi, M.S.
Legal Instruments Examiner
Management Authority
International Affairs
U.S. Fish & Wildlife Service
5275 Leesburg Pike, MS:IA
Falls Church, Virginia 22041
703 358 1797
debra_picozzi@fws.gov

Picozzi, Debra <debra_picozzi@fws.gov>

CITES PERMIT 01899C

1 message

Picozzi, Debra <debra_picozzi@fws.gov> Fri, Jul 29, 2016 at 1:12 PM
To: (b) (6) , JJW-NO@att.net, CF@conservationforce.org

Dear Mr. Harms,

I have been assigned to process your application in the subject line. I have several questions before I can proceed.

Your application directs me to three individuals, one being your legal representative, with my questions. However, without a Power of Attorney signed by you I am unable to discuss your application with anyone.

Please provide an email where you can receive questions or forward a Power of Attorney for someone else.

I am unable to proceed until I receive additional information from you.

Please provide the information and documentation indicated. **Any response must be in written form.**

If we do not receive the information requested above within **45 days** from the date of this e-mail your application will be abandoned and administratively closed. Once the file is closed, you would need to submit a new application, supplemental documentation and all required fees.

If you have questions, you may contact me at debra_picozzi@fws.gov or my supervisor Jorge_ Villavicencio@fws.gov or at : Division of Management Authority, Branch of Permits, MS:IA, 5275 Leesburg Pike, Falls Church, Virginia 22041-3803, (telephone number 1-800-358-2104, ext. 1797 or 2483, facsimile transmission number 703-358-2281). Please reference your file number, PRT-.01899C.

Thank you,

Debra Picozzi, M.S.
Legal Instruments Examiner
Management Authority
International Affairs
U.S. Fish & Wildlife Service
5275 Leesburg Pike, MS:IA
Falls Church, Virginia 22041
703 358 1797
debra_picozzi@fws.gov

United States Department of the Interior

FISH AND WILDLIFE SERVICE

International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA/PRT– 01899C

Mr. George (b) (6) Harms
(b) (6)
Brielle, New Jersey (b) (6)

JUL 27 2017

Dear Mr. Harms:

This letter responds to your July 12, 2016, application to import under the U.S. Endangered Species Act (Act), a personal sport-hunted African elephant (*Loxodonta africana*) trophy taken in Zimbabwe in July 2014 during the 2014 hunting season. After careful review of your request for a permit, and after reviewing all available data and information on activities and circumstances occurring in Zimbabwe at the time you conducted your hunt, your application is being denied for the reasons outlined below.

The African elephant is listed as threatened under the Act with a special rule under Section 4(d) of the Act[1], which is set forth in regulations found at 50 CFR 17.40 (e)[2]. Under the special rule, issuance of an import permit can only occur if the U.S. Fish and Wildlife Service (Service) finds that the killing of the trophy animal will enhance the survival of the species [50 CFR 17.40(e)(6)(i)(B)], and the trophy is accompanied by a threatened species permit issued under 50 CFR 17.32[3]. To enhance the survival of the species, the importation must be associated with activities that provide a direct or indirect benefit to the species in the wild. In evaluating whether the killing of the trophy animal will enhance the survival of the species, the Service looks at a number of factors. Such factors include: current elephant population estimates in a given country, whether said country has a valid national and/or regional management plan, is the plan currently being implemented and does it contain achievable and measurable objectives, does the plan take an adaptive management approach and how often is it reviewed and/or updated, the designated authorities responsible for overseeing elephant management and how they are funded, the level of human-wildlife conflict taking place and how it is being addressed, any anti-poaching efforts undertaken, habitat conservation measures currently in place, as well as the amount of revenue generated by elephant hunting and how it is utilized in supporting conservation projects and/or managing the species.

1 The text of this Act can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6dd.
2 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xr6m3.
3 Ibid

The best available scientific and management data, as well as information provided to the Service by Zimbabwe Parks & Wildlife Management Authority (ZPWMA), Conservation Force, and Safari Club International, was used in our evaluation. In evaluating the available data and information on elephant hunting in Zimbabwe at the time your hunt occurred, the Service was unable to determine that the killing of African elephants in Zimbabwe occurring after April 4, 2014, would enhance the survival of the species. Because your hunt took place after the effective date of the finding, the import of your sport-hunted elephant trophy taken in Zimbabwe in July 2014, cannot be authorized. A copy of the Division of Management Authority's finding for the 2014 hunting season is enclosed for your reference.

As provided in 50 CFR 13.29(a)[4], you may request reconsideration of our decision to deny your application. Such a request must be in writing with the original signature of the person requesting reconsideration or by that person's legal representative, must contain a certification statement as provided at 50 CFR 13.12(a)(5)[5], should refer to your file number, PRT–01899C, and must be received in this office within 45 days of the date of this letter. The reconsideration of the decision to deny your request will be based on the information you provided in your original application. As such, your letter requesting reconsideration must address how our decision to deny your application was based on a misinterpretation of the information provided in your application or information available to the Service when making the original denial or it must present clarification of this information. **Should you supply new information that changes the scope of your original application, a new application will need to be submitted to this office before such information can be considered.**

If you have any questions, please contact Supervisory Policy Specialist Jorge D. Villavicencio of this office: Division of Management Authority, Branch or Permits, MS:IA, 5275 Leesburg Pike, Falls Church, VA 22041-3803 (703-358-2104, ext. 2483).

Sincerely,

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority

Enclosure

4 The text of this regulation can be found by using the search bar at the top of the following web page: http://Go.USA.Gov/xYDUk
5 Ibid

MAPP MONTLY RETURNS FOR DECEMBER 2015

Cases Reported	Number Reported	Suspects Arrested	Cases Referred to Court	Cases Finalised at Court	Sentence
C/FORWARD from October 2015 Hunt or Kill an Animal (Zebra)	1	1	1	Pending trial at Karoi Court.	Axxd: Joe Siyamawere
Possess Ivory (10,5kg)	1	4	1	Finalised on 24/12/2015 at Kariba Court	Axxd: (1) Nyasha Musariri (29) 1590 Kuwadzana 1, Harare **Sentence**: Found not guilty and acquitted. Axxd: (2) Alexio Chinzara (34) 275 47th Crescent, Kuwadzana **Sentence**: Found not guilty and acquitted Axxd: (3) Macdonald Mutsvairo (24) Mutsvairo Vge, Chief Mangwende Mrewa. **Sentence**: 9 years imprisonment with labour Axxd: (4) Munyaradzi Muchena (32) 376 Kuwadzana, Harare **Sentence:** Found not guilty and acquitted

Possess 200 x 26m twine nets without a permit	1	2	1	Finalised at Kariba Magistrate Court.	Axxd: (1) George Goto (2) Prosper Nyoni **Sentence:** $100-00 / 30 Days imprisonment with labour.
Possess raw ivory	1	2	1	Finalised at Kariba Magistrate Court.	Axxd: (1) William Chikwasha (2) Munyaradzi Kampira **Sentence:** 9 years imprisonment with labour
Found in Possession of .303 rifle Serial Number 34C6088	1	-	-	Still pending arrest	Axxd: Oliver Shumba of Shonhai Vge Chief Siamuchembo, Gokwe North
Fishing Without a Permit	1	1	-	Deposited Fine	Axxd: Muzhinji Mukondo of Musamba Fishing Camp **Sentence:** Deposited $20-00 Fine Z69j 0094873 23 Kg Fresh recovered. 1 Dingy Boat recovered.
Fishing Without a Permit	1	1	-	Issued ticket number 0094874	Axxd: Paul Dzapasi of Musamba Fishing Camp **Sentence**: $20-00 Fine
Fishing Without a Permit	1	1	-	Issued ticket number 0094875	Axxd: Tapiwa Nyamasoka of Musamba Fishing Camp **Sentence**: $20-00 Fine 13kg Fresh Fish recovered. 1 Dingy boat recovered
Fishing Without a Permit	1	1	-	Issued ticket number 0094873	Axxd: Takesure Siazemba of Musamba Fishing Camp **Sentence**: $10-00 Fine

Fishing Without a Permit with 400M twine Nets	1	1	-	Issued ticket number 0094877	Axxd: Tonderayi Munhezhu of 23 Chalala Fishing Camp **Sentence**: $20-00 Fine 13Kg fresh fish recovered
Fishing Without a Permit	1	1	-	Issued ticket number 0094878	Axxd: Knowledge Samuel of 23 Chalala Fishing Camp **Sentence**: $20-00 Fine

Crime Appreciation

Two new cases involving ivory were dealt with by Police with the direct assistance from Mapp and National Parks. Two groups of poachers were arrested and a total of three accused persons were convicted and sentenced to 9 year jail terms each.

Two accused persons were arrested for possession of 200 x 26m twine nets in contravention of section 91(b) of the parks wildlife Act. The accused were rightfully taken to Kariba Magistrate court where they were properly convicted and sentenced. Another accused was also arrested by a patrol team but unfortunately he was not referred to court and was made to pay $20-00 fine which is not deterrent considering that he had 400 metres of twine nets.

A total of six cases of illegal fishing in Lake Kariba were dealt with and all the cases were dealt with at Police station level. The accused were made to pay deposit fines and left free. One case of illegal possession of a .303 was dealt with but accused is still outstanding. The firearm was recovered from accused's home while he was away. It had no valid licence and a bridge block was missing. Accused is a known poacher and could have been using the firearm. The Police are investigating for further links to other crimes through ballistics.

Stakeholders responded positively this month by answering to my plea for returns so that we capture all relevant information. The crimes are projected to escalate considering the state of affairs economically and the prevailing drought. More patrols are called for since more people are resorting to poaching to augment their food supplies.

The cooperation that we are getting from Kariba Magistrate Court cannot go without special mention. The Kariba Court team is awesome and dedicated to their duty to an extent of foregoing their lunch break in order to complete these poaching cases. Simpler cases are taking long to complete in other courts which I think is being attributed to by less visits to those courts due to distance and transport. However the solution

to this problem would be to utilise the Kariba court more. I am pleased to advise you that most cases of interest are being referred there where the results speak for themselves**, convictions, convictions and less acquittals**.

RECOVERIES

IVORY	FIREARMS	FISH	TWINE NETS	BOATS	OTHERS
23.5 KG	1 X .303 RIFLE	57 KGS	600 METRES	3 DINGHIES	1200 M NYLON NETS

WISHING YOU ALL A HAPPY AND PROSPEROUS NEW 2016

Best regards.

Enock Muziringa.

From:	John J. Jackson, III
To:	Tim Vannorman; Bryan Arroyo - FWS; Dan Ashe; Rosemarie Gnam; Craig_Hoover@fws.gov
Subject:	Fwd: Update from MAPP
Date:	Tuesday, January 05, 2016 10:45:34 AM
Attachments:	MAPP MONTLY RETURNS FOR DECEMBER.docx Attached Message Part.txt tti4.gif Attached Message Part.txt

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FYI

-------- Forwarded Message --------
Subject: Update from MAPP
Date: Tue, 5 Jan 2016 14:22:57 +0200
From: Lynne Taylor <lynne@thetashingainitiative.org>
To: John J. Jackson III <jjw-no2@att.net>, John J. Jackson, <cf@conservationforce.org>
CC: Marco Pani (b) (6), Regina Lennox <regina.lennox@conservationforce.org>

Dear John,

MAPP have recently been asking Zambezi Elephant Fund for support to fund Enock Muziringa, ex Prosecutor from Kariba who has taken on the work of collation of all the results from the action in the field. This is it.

This is for one month only, and a very fine start.

I have by email advised Kevin Higgins that USD500.00 is available to the key informant which led to the arrest of the ivory poacher from Conservation Force.

This is a very good start to 2016.

I do not know to whom Kevin has sent this onto at Parks and will leave that to him to conclude.

Best wishes
Lynne

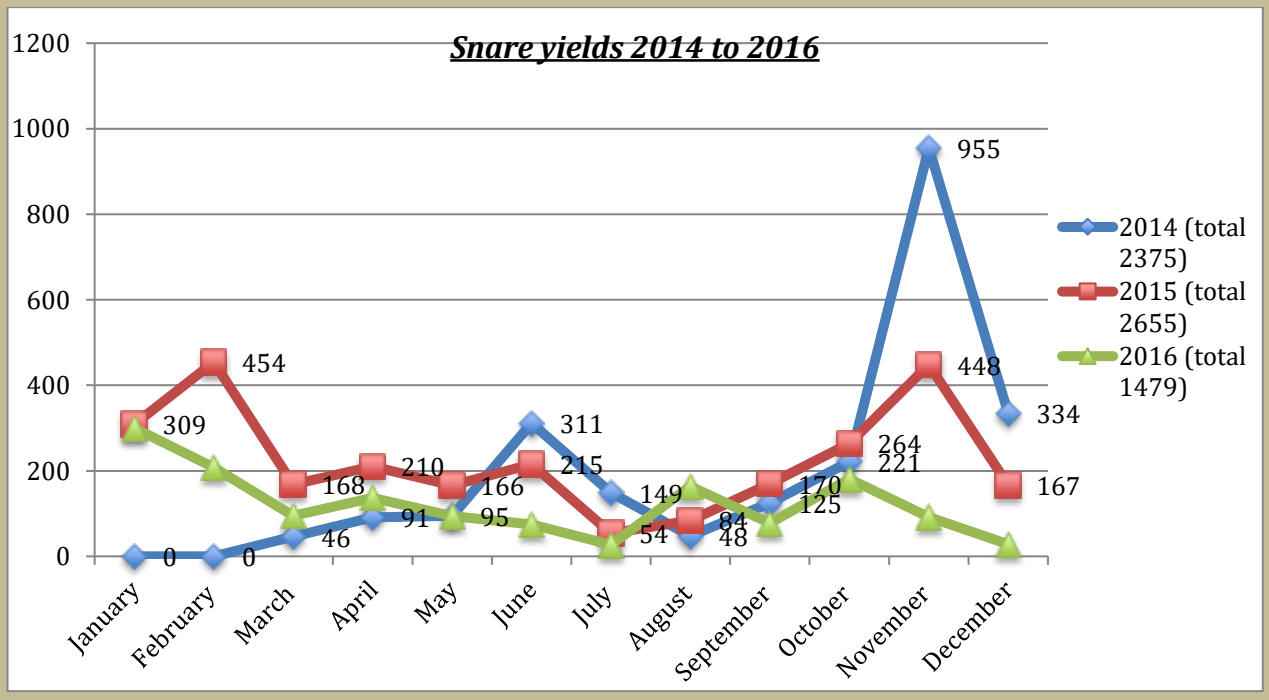
DAPU
DANDE ANTI POACHING UNIT

End of year 2016

Dear Friends,

We have had a good 2016 – in fact after 7 years of running in DAPU Buzz and I can finally say for the first time we have really noticed the positive effects of our efforts. Every patrol report and every hunter or visitor is reporting more and more game. We estimate that we have consistently in excess of 2000 resident buffalo now – up from the 1200 in 2010 so the population has increased over 60% in 7 years (nearly 10% per annum).
With the exception of waterbuck it is safe to say that all game populations have increased nicely – so in theory, our year on year gains now should really accelerate as the math is finally on our side!

Snaring & general poaching.
We have long used "snaring" as an index with which to measure our general poaching, and we are happy to report that in 2016 our total snare yield of 1479 snares was 60% less than the 2375 snares found in 2014. Bongi and his teams have managed to really keep on top of their patrols.



****One can clearly see from the above graph the peak in snaring in the dry season****

2016 DAPU summary (12 months).

Month	No. of snares	Dogs shot	Meat Poachers convicted	Elephant poachers	Weapons retrieved	Rewards paid
January	300	0	3	0	0	US$821
February	208	0	0	2	0	US$978
March	95	0	0		0	US$97
April	137	0	1	0	2	US$321
	740	**0**	**4**	**2**	**2**	**US$2,217**
May	94	0	5	0	4	US$1,310
June	75	0	0	0	0	US$83
July	27	0	0	0	2	US$67
August	164	1	0	0	0	US$254
	360	**1**	**5**	**0**	**6**	**US$1,714**
	-	-	-	-	-	-
September	78	0	0	0	1	US$97
October	181	0	1	0	1	US$447
November	92	0	2	0	0	US$442
December	28	0	0	0	0	US$532
	379	**0**	**3**	**0**	**2**	**US$1,518**
Total 2016	**1479**	**1**	**12**	**2**	**10**	**US$5,449**

**** It is clear to see the decline in poaching during the hunting season and also … the impending increase in poaching activity as hunting slows down and we head towards Christmas. ****

****DAPU call sign posing proudly with "their" poacher and "his" warthog! ****

**** A typical haul of snares****

****Third time offender – kudu cow****

Elephant poaching.

Dande North and East (180,000 ha/ 462,000 acres) total loss for 2016 was 7 elephants. It is still too high a number but a fraction of those suffered by our surrounding areas (including Mana Pools National Park). There is most certainly a gang still operating in Dande and surrounding areas that we have failed to account for.

National Parks had a lucky break on Friday 25th November at 2250 hours when they arrested a gentleman with "1.8kgs of cyanide at Dande River Bridge. The accused was en route to Angwa where the cyanide was to be bought by a poaching syndicate and to be used on elephants for their ivory"

**** The accused with his Cyanide****

**** poached bull found by DAPU on neighbouring concession October 2017 – what a waste.****

Year	No. of Elephant Carcasses
2010	40
2011	36
2012	16
2013	4
2014	9
2015	4
2016	7

Pushing the boundaries.

Now that the core areas of Dande North and East are much better controled and managed we have started "pushing the boundaries" which basically means DAPU along with National Parks has begun to conduct offensive partols in:

1. *Our neighbouring (Zim) concessions South of us and*
2. *Along the Zambezi river from Kanyemba way up into Chewore – and area that has been to long neglected. Considering that 75% of elephant poachers and ivory trade originates in Zambia – it only makes sense. Squirrel Merredith of Masau camp has been the driving force behind the initiative and DAPU/ CMS assisted with $500.00 which was used for rewards. DAPU will continue to be involved and help grow in this initiative .*

Area	*Meters of nets*	*Dugouts*	*Banana boats*	*Arrests*
Tunsa (Chewore)	*600*	*0*	*4*	*2*
DDF Kanyemba	*1200*	*2*	*0*	*2*

*** Haul of nets – Tunsa river mouth, Chewore***

lioness and kudu remains – neighboring concession

Horror scene

53 dead buffalo – in Mozambique close to our Zim border. An entire village turned out and chased the buffalo into the mud then killed them.

Problem Animal Control.

Duties for DAPU scouts also include attending to Problem Animal reports (PAC).

a. Elephant – There were not many serious reports in 2016 mostly because of the drought. Bongi and crew managed to successfully chase all elephant's out of crops and avoided shooting any which was great.

b. Lions – No loss of life reported in 2016 but a fair number of cattle were killed. No lions shot.

c. Buffalo – One man was seriously injured in the East in April, another killed in Kanyemba on the 14th August by a dagga boy and a second person injured by the same bull two weeks prior. As the buffalo population increases so there is more and more conflict.

d. Crocodiles – One person killed 2016.

e. Snake bites – One person killed 2016.
f. Hyenas – there are consistent and accurate reports of hyenas killing livestock especially in the East. It is a problem that is going to be addressed in 2017.

"Patrol Kit"

In the previous newsletters we mentioned that we were expecting some boots from the USA. Well they have arrived and have been issued so we have VERY happy Scouts!!! There is a second shipment expected with still more boots, handcuffs and water bottles. A HUGE thank you to Duke McCall who single handedly organized this!!!

Goals for 2016	*Completed?*
1. Continue with anti-poaching patrols.	Yes
2. Replace scouts that are not performing.	Yes
3. Early burning	Yes
4. Repair firearms where possible or replace	No
5. New boots and patrol kit.	Yes

Cost savings.

One of our biggest costs is obviously, vehicles, which are all but irreplaceable. In order to optimize our DAPU vehicle mileage we have had satellite-tracking units fitted to AAX 9832 as well as ABK 7074. The tracking units were both sponsored and fitted by "Trackit" – so a huge thank you to Richard Tennant and Hannes Scholtz of Trackit for their extremely valuable and useful donation.
If any of you are interested in specifically sponsoring one of these vehicles we will supply you with the login details and you can track the vehicle live!

Outreach work and general improvements.

In addition to our normal annual social programs, CMS drilled 7 boreholes in 2016 – of which 3 were successful and consequently equipped. The best of them was at Sende Village in the East and it will improve immeasurably the quality of life for those folk. One borehole was in the DSA for game. We are constantly looking for ways to improve Dande – ultimately the better managed the area is, and the more it yields then clearly it is easier to:

1. *Better afford anti poaching efforts.*
2. *Easier to push home long-term arguments to continue to protect the environment.*
3. *Easier to push forward long-term arguments to look after the animals – as they are worth looking after.*

**** Sende Village 30,000 liters/ hr.****

****Bongi at pumped pan in DSA – water is life****

The year behind us – 2016.

As I mentioned earlier 2016 has been our best year to date. The poaching trend has continued to decline and game populations have really started to improve quite quickly now. Elephant poaching trends continue to be stable. As DAPU has managed to really get on top of our local poaching, so they have begun to build momentum with offensive external patrols. In the end it is not enough for only Dande to be safe and healthy – we need our neighbors to be in the same state!

Massive thankyous to

Buzz and I would like to extend our eternal gratitude to so many well wishers, without whose help - none of what DAPU has achieved would have been possible. Our company sales have been down 40% since 2014 (thanks to USFWS) BUT we still to met our own annual commitments to DAPU and thanks entirely to the generosity of folk listed below actually received $15,000.00 more than we anticipated allowing us to exceed our budget by 18% (or … $15,000!).

The list seems endless and includes but is not limited to:
Safari club International, The National Capital Chapter of Safari Club, The Chisholm Trail Chapter of Safari Club, The Sylvarnus Charitable Trust, Trackit, Flying for Wildlife,
Jytte Merjentsen, Juel Granum, Barry Shaw, Ike Ikeguchi, William Shores, Carl Frederick Nagel, Robert Keeler, Duke McCall, Mike Core, Bob Keeler, David Adams, Jerry Jurena, Marty Vick, Morten Skarra, Jerry Beardmore and Bob Schofield.

And every client that hunted with us in 2016 – they all contributed generously.

Special mention to three young Zimbabwean farmers, Charl Grobbelar, Pieter Greytenbach and Pip Madinson – who have helped suppliment rations and fuel. We know how tough it is for them so that makes their help even more special and shows the broad support DAPU has earned for itself.

Artsits. Gareth Hook and Peter Stewart who donated stunning work to be auctioned – proceeds to DAPU.

We must not forget National Parks and the DAPU Scouts, who are the ones that are actually out there, often in dangerous and uncomfortable conditions. Not only do they run the risk of being hurt by poachers but also by the wildlife.

Lastly a big thank you to Bongani Ndebele – aka "Bongi" who is a true leader and is responsible in no small part for the success. Bongi was deputized by Muno and Alfa both of whom made very positive impacts in their own way.

The year ahead 2017.

Bongi will continue to lead DAPU and our mission is to continue to improve our patrols and their effectiveness to help ensure the long-term viability of Dande North and East (.46% of Zimbabwe's total area!). With DAPU's help we are well on the way to making Dande the Zimbabwean flagship model for responsible sustainable use conservation.

All the very best for 2017.

Buzz and Myles

DAPU Income and Expenses 2016 - End of Year.

Income

Safari Club International	**US$8,900.00**
National Capital Safari Club	**US$1,500.00**
Chisolm trail Chapter of Safari Club	**US$500.00**
Sylvarnus Trust	**US$6,000.00**
Clients and Individual donations	**US$33,671.20**
Total.	**US$50,571.20**
C.M.S s	**US$44,435.05**
Total Income	**US$95,006.25**

Expenses

 # 1 Wages, rewards and rations.

	Game Scouts	Bongi Muno & Alfa	Rations	Rewards	Total
January	US$1,100	US$1,605	US$770	US$821	US$4,296
February	US$1,100	US$1,605	US$770	US$978	US$4,453
March	US$1,100	US$1,605	US$770	US$97	US$3,572
April	US$1,100	US$1,605	US$770	US$321	US$3,796
	US$4,400	US$6,420	US$3,080	US$2,217	**US$16,117**
May	US$1,100	US$1,605	US$770	US$1,310	US$4,785
June	US$1,100	US$1,605	US$770	US$83	US$3,558
July	US$1,100	US$1,605	US$770	US$67	US$3,542
August	US$1,100	US$1,605	US$770	US$254	US$3,729
	US$4,400	US$6,420	US$3,080	US$1,714	**US$15,614**
September	US$1,100	US$1,605	US$770	US$97	US$3,572
October	US$1,100	US$1,605	US$770	US$447	US$3,922
November	US$1,100	US$1,605	US$770	US$442	US$3,917
December	US$2,200	US$3,210	US$770	US$532	US$6,712
	US$5,500	US$8,025	US$3,080	US$1,518	**US$18,123**

 # 2 2016 DAPU equipment expenses

DAPU Ammunition - National Cartridges	US$362.00
DAPU tents - Mabels Canvas	US$2,242.50
Uniform downsizing	US$330.00
Uniforms	US$1,078.00
Dapu # 1Toyota Land Cruiser AAX 9832 - Grease Junky	US$2,230.75
Dapu # 1Toyota Land Cruiser AAX 9832 - Tineo Enterprises	US$1,078.00
Dapu # 2 ABK 7074 - Alpine panel beaters	US$1,437.00
DAPU # 2 ABK 7074 Burj Auto	US$1,425.00
DAPU # 2 ABK 7074 Grease Junky	US$3,974.00
DAPU # 2 ABK 7074 Windscreen	US$60.00
DAPU # 2 ABK 7074 injector pump Geribran services	US$720.00
	US$14,937.25

 # 3 Vehicles (2).

Mileage ABM 5149 Jan - April 3400 +10297 km,s = 13697 x $.5/ km	US$6,849
Mileage AAX 9832/ABK 7074 january - April = 8000+ 6783 = 14,783 *.5/km	US$7,392
Mielage AAX 9832 May - December 2016 = 17350 kms * $.05/km=	US$8,675
Mileage ABK 7074 May- December 2016 = 14,600km *$.5/km =	US$7,300
	US$30,215

Total expenses		**US$95,006**
Total Income	**US$95,006**	
Shortfall		**US$0**

DAPU actual 2016 BUDGET and proposed 2017.

	2017 Budget	% Variance	2016 actual	2016 (proposed)	2015 (actual)	2014 (actual)
Reciepts						
From Sylvarnus Trust, SCI & clients	US$50,571	48%	US$50,571	US$34,056.00	US$34,956.00	US$35,904.00
Charlton McCallum Safaris	US$44,435	-5%	US$44,435	US$46,653.00	US$49,756.70	US$36,064.00
	US$95,006	**18%**	**US$95,006**	**US$80,709**	**US$84,713**	**US$71,968**
Less Expenses						
Wages (scouts)	US$14,300	0%	US$14,300	US$14,300.00	US$14,300.00	US$13,075.00
Management	US$20,865	15%	US$20,865	US$18,200.00	US$18,200.00	US$18,200.00
Rations (from January x 22 scouts).	US$9,240	0%	US$9,240	US$9,240.00	US$9,240.00	US$7,980.00
Rewards	US$5,449	-43%	US$5,449	US$9,582.00	US$9,582.00	US$9,602.00
Equipment	US$14,937	76%	US$14,937	US$8,500.00	US$2,603.00	US$6,861.00
Landcruiser opperating costs	US$30,215	45%	US$30,215	US$20,888.00	US$20,888.00	US$16,250.00
	US$95,006	**18%**	**US$95,006**	**US$80,710.00**	**US$74,813.00**	**US$71,968.00**
Shortfall	**US$0**	**0%**	**US$0**	**-US$1.00**	**US$0.00**	**US$0.00**

*** Thanks to extra income we were able to go 18% over budget and we spent that money on deployments and vehicles***

*** We hope to be able to achieve in 2017 exactly what we were able to in 2016 hence our budget is same as 2016 actual***

From:	Regina A. Lennox
To:	Vannorman, Tim
Cc:	Bryan Arroyo; Vargas, Darcy; John J. Jackson, III
Subject:	Enhancement information for lion and elephant permit applications -- DAPU Report
Date:	Wednesday, January 18, 2017 11:06:57 AM
Attachments:	DAPU end of year 2016(2).pdf

Dear Tim,

Please see the attached Dande Anti-Poaching Unit (DAPU) end of year report. Please consider this information in making an enhancement finding for the import of elephant and lion trophies from Zimbabwe, including but not limited to the permit applications PRT 86473B, 86471B, etc. (lion), submitted on January 26 of last year; the permit applications PRT 94868B, 94870B, etc. (lion), submitted on April 20 of last year; and the permit applications PRT 03369C, 03902C, etc. (elephant), submitted in August of last year.

As the attached report demonstrates, all wildlife populations have increased in this area due to the committed anti-poaching efforts of Charlton McCallum Safaris and DAPU. For example, buffalo have increased to over 2,000, at a rate of almost 10% per year. Poaching is greatly decreased. In 2015, DAPU picked up 2,375 snares. But in 2016, they only had to collect 1,479. That is almost a 40% decline in snaring.

Charlton McCallum invests extensively in the Mbire community and runs the company as a joint venture with the community. (We provided details of their community programs in our January 19, *2015* letter providing enhancement information for the elephant.) As the attached report explains, in 2016, they drilled additional boreholes for the community to help relieve pressure from the continued drought.

However, it is an open question how long this success will last, with the decline in U.S. clients due to the suspension of elephant imports and the non-issuance of lion permits. Charlton McCallum Safaris' sales are down 40% since 2014. DAPU and the company's community programs are expensive (see page 9, showing $80,000+ in expenditures for 2016 and the proposed $95,000+ for 2017). We hope the FWS will act to issue permits before another of the best and most involved operators is irreparably damaged by the continued suspension of trophy imports.

Regina A. Lennox
Conservation Force
3240 S I-10 Service Road W, Suite 200
Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

---------- Forwarded message ----------
From: **John Jackson** <jjjiii@att.net>
Date: Tue, Jan 17, 2017 at 11:06 AM
Subject: Fwd: DAPU end of year report
To: Regina Lennox <regina.lennox@conservationforce.org>, Office <JJW-NO@att.net>, Marco Pani <(b) (6) [redacted]>, Chrissie Jackson <cjindian@bellsouth.net>,

matt.boguslawski@conservationforce.org, Shane Mahoney <shane@conservationvisions.com>, Philippe Chardonnet <igf@fondation-igf.fr>, Bert Klineburger (b) (6)

-------- Forwarded Message --------
Subject: DAPU end of year report
Date: Tue, 17 Jan 2017 11:48:39 +0000
From: CM Safaris <buzzandmyles@cmsafaris.com>
To: John J. Jackson, III <jjj@conservationforce.org>

ZIMBABWE

All correspondence should be addressed
To "THE SECRETARY"
Telephone : Tel: +263 4 700596 - 8
www.environment.co.zw

MINISTRY OF ENVIRONMENT, WATER AND CLIMATE
Private Bag 7753
Causeway
HARARE

Ref: G/21

08 November 2016

Chief Branch of Permits
U.S. Fish and Wildlife Service
Division of Management Authority
Washington D.C 20240
USA
Attention: *Mr Timothy J. Van Norman*

ZIMBABWE'S ELEPHANT MANAGEMENT PLAN PRIORITIES (2015 - 2020)

We would like to thank you for granting us an opportunity to meet at the recent CITES CoP17 and we hope that you travelled safely to your home country.

Further to previous correspondence regarding prioritising implementation of our Elephant Management Plan and to our discussion during CITES COP 17, which meeting also included Hon Minister and Mr B Arroyo and Mr D Arshe, we hereby wish to submit our supplementary Elephant Management Plan.

This plan prioritises activities identified in the National Elephant Management Plan to fully utilise the budget allocated to elephant management in Zimbabwe. These priorities listed herewith constitute those activities and actions that we believe, given the limited budgets, we are able to curtail poaching and illegal trade of elephants and ivory.

We hope that the information provided will suffice in responding to your enquiry. We welcome your commitment to lift the suspension on imports of hunted trophies of elephants from Zimbabwe. For any further clarifications do not hesitate to contact the undersigned.

MIN. OF ENVIRONMENT, WATER & CLIMATE
0 8 NOV 2016
11th Floor, Kaguvi Bld, Harare
Tel: 04 701681-2 / 701691 - 3
PERM. SECRETARY

P. Mupazviriho
SECRETARY FOR ENVIRONMENT, WATER AND CLIMATE

THE ZIMBABWE NATIONAL ELEPHANT SUPPLEMENTARY MANAGEMENT PLAN (2015 – 2020)

Introduction and Background

The supplementary Elephant Management Plan (EMP) is a supplement that has been developed from the Zimbabwe National Elephant Management Plan (2015 – 2020). This supplementary plan looks at all the deliverables from this plan and highlights the priorities for the successful implementation of the plan. The supplement also highlights the progress that has been made towards the successful implementation of the EMP from the time it was adopted in 2015.

It was noted that the EMP was an ambitious plan and it required the cooperation of all internal and external stakeholders in order to achieve its obligations. The urgency that was placed upon well-equipped men on the ground to combat illegal killing of elephants, improved monitoring and research, and the provision of incentives to maintain and if possible increase the elephant range, requires huge resources.

This supplementary EMP recognises that the implementation of the Zimbabwe Elephant Management Plan (2015 – 2020) requires adequate and sustainable funding and provision of other resources to effectively protect the elephant and to curb illegal trade in elephant products. Thus there is need to fully resource all the components of this plan in order to successfully manage Zimbabwe's elephant population.

Resources are being mobilized from within ZPWMA, from its own business ventures, by the private sector, and by intergovernmental and nongovernmental organizations. Partnerships between ZPWMA and other stakeholders are also in place to secure some of the resources for elephant conservation. There is a need for the Government to provide additional support to the conservation of elephants given the present poaching crisis affecting the species continentally.

This supplementary elephant management plan recognises the work and the resource allocation that has made towards full implementation of the plan, and provides detail of the milestones achieved and work covered. It also prioritises the major areas of the EMP into immediate areas that are meant to arrest poaching and illegal trade in elephants. However, it details the impressive extent to which most of the structures have been set up and some of the innovations that have been put in place to attempt to bridge the funding gap.

Resources Available

An audit has been conducted of the implementation of the EMP to date and resources have thus far been channelled into the following areas.

Table 1: Financial resources deployed up to August 2016

BUDGET (USD)					
Item	**North West Matabeleland**	**Sebungwe**	**Mid Zambezi Valley**	**South East Lowveld**	**Total Current**
Law Enforcement	158,948	113,920	244,650	318,000	835,518
Monitoring	31,000	-	8,155	15,500	54,655

Investigations	-	-	16,500	8,000	24,500
Training	12,548	-	30,124	23,000	65,672
Community Relations	4,854	-	9,770	15,000	29,624
Total (USD)	205,350	113,920	309,199	379,500	1,009,969

Table 2: Other Non-Financial Resources

Item	**North West Matabeleland**	**Sebungwe**	**Mid Zambezi Valley**	**South East Lowveld**	**Total Current**
Summary Stats					
Area (Km^2)	24,989	15,529	16,014	8,835	**65,367**
Rangers	212	90	160	77	
Rangers/Km^2	0,01	0,01	0,01	0,01	**0,01**
Total Staff	271	123	181	142	**717**
NGO/Private Sector Anti-Poaching	Painted Dog Conservation, Bhejane Trust	Matusadonha Anti Poaching P	Zambezi Society, The Tashinga Initiative	-	
Vehicles					
4 WD Parks	12	4	8	10	**34**
4 WD Other	-	2	-	-	**2**
2 WD Parks	4	-	-	-	**4**
2 WD Other	1	-	-	-	**1**
5 Ton Trucks	1	6	2	2	**11**
Tractors	9	3	3	5	**20**
Graders	5	-	2	1	**8**
Boats	2	3	1	2	**8**
Motor Cycles	-	4	-	4	**8**
Micro light			1		**1**
2 Seater Helicopter	1		1		**2**
4 Seater Helicopter	1				**1**
Communications					
Repeater station	7	2	2	3	**14**
Mobile handsets	118	53	82	60	**313**
GPS	46	-	36	60	**142**
Operating Database	10	-	1	1	**12**

Progress towards Implementation of the Elephant Management Plan (2015 – 2020)

Several milestones stated in the Elephant Management Plan have already been achieved which include the following:

a. Appointment of the Elephant Manager as in section 4.5 of the Zimbabwe Elephant Management Plan (2015 – 2020).

b. Getting a basic agreement of implementation in the 4 relevant regions.
c. Some work towards Law Enforcement, Monitoring, Investigations, Training and Community Relations. As of August 2016, more than USD 1million had been spent on these activities. Table 1 above. More detailed breakdown of how this was spent see Annexes 1.0, 2.0, 3.0 and 4.0.

Constraints and Challenges

One of the major challenges regarding implementation of the EMP is with regards to the adoption of stricter domestic measures by the United States of America. This has had the net effect of further reducing the revenue from hunting into the Authority, which therefore affects the budget allocated to resource protection, in particular the elephant in this case.

One of the key impediments towards the full and comprehensive implementation of the Elephant Management Plan is the limited resources. However, Zimbabwe is at an advanced stage in the development of resource mobilisation strategies. These strategies include partnering with both local and international institutions in resourcing and financing aspects of the programme.

Priorities

Due to the fact that Zimbabwe is experiencing some funding constraints with respect to the full implementation of the Elephant Management Plan, which means therefore that it will not be possible to fully implement every aspect of the plan at the same time, we have developed a set of priorities (all drawn from the plan), that we feel are implementable and enable the work of conservation to proceed smoothly.

1. Law Enforcement
   Law enforcement continues to be one of the most critical aspects of this strategy. From the perspective of the EMP, it has also to date been allocated the biggest budget (Table 1). While strategic gaps still exist with respect to the law enforcement capacity (the numbers of rangers on the ground are still in need of improving to effectively cover that Parks Estate, more patrol kits and equipment are still required to improve enforcement capacity). In order to effectively combat poaching and illegal trade the Law enforcement capabilities are top priority.
2. Monitoring
   Biological monitoring and management, with respect to the priorities for this plan would come in as a second priority. This enables monitoring programmes and research to support science based adaptive management of elephants in this action plan. The resource allocation to this activity needs to be dramatically improved, although innovations have had to be put in place to manage that insufficient resource allocation. Rangers on patrol also carry out significant monitoring activities which feed into the biological monitoring and management of the elephants.
3. Investigations/Intelligence
   The investigations capacity (together with training) are critical components of this action plan. To date of the available resources, allocations to investigations have been minimal. Innovations have also been developed in this area, for support from various private players, institutions and state institutions in the investigative processes.

Assistance with areas like crime scene attendance have been improved through the assistance of the Zimbabwe Republic Police involvement.

4. Appointment of Elephant Manager

   While the appointment of the National Elephant Manager has been concluded (April 2016) to enhance implementation, monitoring and evaluation of the Action Plan, funding constraints still exists. Some funding for the activities of the Elephant Manager have been unlocked through cooperation with stakeholders in the monitoring and evaluation activities of the office. This includes setting up of the Regional Elephant Management Committees and funding their activities.

ANNEX 1.0 Northwest Matabeleland Action Plan – *Status and progress report Aug - 2016*

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants documented	- Collaborations with other stakeholders (e.g. WWF, Government of the People's republic of China) in law enforcement efforts was done were equipment such as camping tents, GPSs, vehicles, road maintenance equipment (graders, tipper trucks, lorries) were sourced - Training was done in Spatial Monitoring and Reporting Tool (SMART). 4 Officers and 40 Ranger were trained - New recruitment and recruitment drive for rangers initiated - Database on elephant illegally killed is maintained and updated
1.2 Informer network, investigation and intelligence system strengthened / established and operating	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	- 5 cases based on information from intelligence were attended to. No recruitment of investigators and training done 6 calls to whistle blowing systems resulted in effective follow up 10 incursions reported on by local communities and reacted to by ZPWMA/ZRP under the joint operations initiative

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines in collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	- The SOP for Joint Operations with ZRP and other law enforcement agencies not available - 100 % proportion of arrests leading to prosecution - 95 % proportion of successful prosecutions
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	- Database is available at station levels feeding into the Regional and National levels. - Reporting protocols in place
1.5 Joint law enforcement operations within the NWM region	- Conduct joint operations - Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing)	- Number of joint operations leading to arrests and successful prosecutions - Number of meetings held per year - Number of successes from shared wildlife crime information	5 joint operations leading to arrests and successful prosecution were done 16 meetings have been done to date Have been successful on all shared information wildlife crime
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the NWM	Enhanced data collection and collation of returns for quota setting implemented
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the NWM that are settled has not increased, or has declined, from 2015 levels	There are no increases or decreases in settlements within protected areas. It should be noted however, that there is illegal grazing in Hwange National Park from the communities in the Tsholotsho area.

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	There are no agreed SOP for cross border law enforcement operations 5 cases of joint operations leading to arrests and successful prosecution

9.4.2. Biological Monitoring and Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations, forest areas, and RDCs in NWM - Introduce ranger-based monitoring across all stations in NWM - Analyze the data and report on trends - Annual water hole count continued	- Information on trends in elephant numbers, structure and mortality analysed and available	Analysis data is based on the national survey of elephants and large herbivore done in 2014, road count data and from waterhole counts which are done yearly.
2.2 Impacts of elephants on selected habitats, selected indicator plant and animal species, and water use and supplies monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands - Measure and assess water use and its sustainability	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported Sustainability of water use completed	Permanent vegetation plots are monitored regularly for the effects of elephants and the data analysed. The effect of elephants on indicator plants species is monitored. Research is ongoing on their effects on major herbivores. A study on the effects of drawing on underground water to water elephants is about to be initiated
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, and HWC in the region - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research reports completed - PCP consultation results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	A study looking at changes in vegetation has recently been completed in collaboration with WWF, data is yet to be analysed Adaptive management is exercised through adopting results from research work within the park

9.4.2. Biological Monitoring and Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	More boreholes have been drilled to ensure there is enough water for other animals and to relieve pressure on some areas.
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Age, sex and tusk sizes for all elephant killed recorded Elephant trophy quality is maintained or improved in relation to the stipulated desired age and trophy size.	A database with information on elephants killed is maintained Trophy quality is maintained through the policing of the hunting industry and record keeping and adaptive management of quotas.
2.6 Elephant range defined and managed to maintain (and/or recover) habitats and elephant populations, and connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	13% of land in Zimbabwe is maintained for wildlife Corridors are being resuscitated such as the Hwange Sanyati Biological corridor which is being maintained in collaboration with WWF.
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Done at National level. However through our normal reporting system we feed in with the related information

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in NWM adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	HSBS, KAZA, CAMPFIRE, save Australia are some of the joint venture operations adopted and being implemented in NWM
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	There is need to review the benefit-sharing frameworks of CAMPFIRE and other schemes. There is little involvement of traditional leadership in revenue sharing There are no audits and accountability is minimum for revenue from wildlife
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	There are distinct land use regimes governed through government statutes and policies. Decline on human-wildlife conflicts is evident. For example data shows that lion conflicts have reduced by 50%
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	100%

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for NWM - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in NWM - Proportion of schools within or neighbouring elephant areas receiving and using information provided	There is little information distributed on elephants to communities. Distribution is largely done by private organisations such as painted dogs The proportion is low

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- Value of funding and support in kind for conservation of elephants in NWM realised each year	There is high value in funding of elephant conservation (WWF HSBC, WEZ, Friends of Hwange and Other Stakeholders)…funding coming in in terms of drilling of boreholes, vehicles, camping equipment, solar panels, fuels radio communication, roads and fire guards
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	Was done and is being implemented through HSBC
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the NWM - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify and provide needed equipment - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for NWM developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	Research strategy is under development 1 done by University of Zimbabwe Under review n/a 3 No publications have been done

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
			None
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. of communities trained and implementing elephant management programmes d) No. of elephant management campaigns conducted	No modules developed as yet - - - About 10 elephant management campaigns were conducted.
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the NWM developed	- Rebuild / refurbish all main access and internal roads within NWM wildlife areas - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the NWM - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	- Roads, bridges, airstrips refurbished and maintained as planned - Feasibility study of required field stations completed by June 2016 - Identified infrastructure requirements prioritised and required developments undertaken and completed by 2018	2 airstrips were refurbished and 1650km of roads were graded The list has been produced and is included in the Hwange Management Plan

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the NWM (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational secure communications system in place and being maintained	The communication system has been improved, however more is required in relation to the repeater links

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	- Timely minutes of each bi-annual meeting produced and circulated - Number of committee resolutions and actionable points initiated and acted upon	N/A N/A
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA & FC	- Functional team established - Technical support provided in keeping with TORs and planned activities implemented	N/A N/A
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA and FC - Establish terms of reference and recognition as a formal entity - Establish effective engagement with RDCs, and Traditional Leaders in NWM and neighbouring communities	- Formal recognition by ZPWMA / FC achieved - Meetings held - Effective engagement with neighbours	Quarterly stakeholder meetings There is effective engagement with neighbours…working with RDCs, KAZA, communities in law enforcement, human wildlife conflicts
5.4 Links with neighbouring Botswana, Namibia and Zambia to confer on the management of shared elephant populations established / strengthened	- Establish links with Botswana, Namibia and Zambia to confer on cross border elephant management issues	- Links established and operating	The KAZA forum allows for the mentioned countries to tackle cross border management issues

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	- At least one awareness campaign conducted each year - Annual progress reports produced - Number of briefs / news releases on major developments or progress released - Funds raised to support elephant conservation	This is yet to be done

ANNEX 2.0 **Sebungwe Action Plan** - *Status and progress report Aug - 2016*

9.5.1 Protection and Law Enforcement (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1. Joint operation reaction team established and existing base renovated at Bumi Hills old ZRP Camp as primary base. Followed by 3 others (Binga, Siabuwa, Old Chizarira Lodge/ Sengwa Wildlife Research Institute) *Manpower* *Vehicles* *Aircrafts* *Communication – eg radios* *Equipment eg firearms, boats* *Training* *Central database* *Intelligence networks*	**Manpower** – Draw up 20 man reaction team from law enforcement agencies and other stakeholders from the whole Sebungwe sub-region. (Prioritise Bumi, Sengwa) **Refurbish main base** **Training** – Initial database training Refresher course **Transport and Equipment** Procurement of 3 vehicles (land cruisers) Procurement of 3 boats (speedboats – 1 mothership and 2 patrol boats) **Communications** – establish an independent inter-agency communication network	- Number of arrests - Number of cases detected - Number of recoveries made (eg ivory, firearms etc) - Number of patrols conducted - Number cases finalized (convictions) - Number of carcasses detected - Number of joint operations carried out - Number of refresher courses carried out - Number of failed cases	The Sebungwe Region whose greater part is under the jurisdiction of Central has stations which include Sengwa Wildlife Research Area, Chirisa Safari Area, Chizarira National Park, Chete Safari Area and Matusadona National Park. During the reporting period of August 2016 we had a total of 22 incursions with the highest incursions happening in Chirisa Safari Area while the least was in Chete Safari Area. We had a total of 5 visual contacts with poachers but all were unarmed contacts. No ivory was recovered, no fire arms were recovered. 203 wire snares were removed. 8 people were arrested however all the arrests were not ivory cantered. No refresher course was conducted in the Region. Joint operations were conducted by our investigations section with MBCU, the police and MAPP. A total of 6 elephant carcasses were discovered of which 2 were natural mortalities in Matusadona, 1 was poached in Matusadona, 2 were poached in Chete and 1 was poached in Chizarira.
1.2 Informer network, Investigation and intelligence system strengthened	- Recruit informers and contacts - Maintain hotline for whistle-blowers - Procurement of 2 vehicles and 2 motorbikes - Recruit investigators (6) and deploy strategically - Train investigators - Constant liaison with informers - Rewards to informers standardized	- Number arrests and successful convictions based on information from intelligence system - Number of incursions reported on/reacted to by local communities - Number of informer reports per informer leading to arrests and convictions	From the month of August to date 2016,based on information given through informer network assisted in arresting two persons found in possession of a pangolin in Sengwa,Gokwe Davison Goredema and Batau Murambiwa Both were sentenced to 9 years effective each.On the 14th of September 2016 One suspect was arrested for possessing approximately 5kgs of ivory.The case is still pending in court.Approximately 8 ivory deals have been reported through informer network and are still being worked on for reaction.10 deposit fine tickets were also issued for separate offences .

9.5.1 Protection and Law Enforcement (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.3 Zambezi Valley deployment tactics revisited and implemented	- ZV deployment tactics revised - Identification of OP sites, crossing points etc - Identification and procurement of specialized equipment (eg night vision) - Provision of dry rations for operations - Introduction of aerial surveillance flights	- Resource books - Number of successes on detections - Number of contacts - Number of recoveries - Patrol effort (surveillance)	MAPP assisted in deployments for Matusadona both in the Lake with a boat and in the land with a vehicle. MAPP also assisted in joint operations and following up information from informers within the Gokwe and Nyaminyami districts. Recoveries and surveillances were made by our Investigations team together with the informers, MBCU and sometimes with the duty uniform ZRP
1.4 Ranger patrols strengthened	- Establish effective patrolling force of deployable rangers - Establish (or review) standard operating procedures (SOP) - Establish well-equipped reaction teams - Honorary Officer system re-established to support ranger patrols - Increase support for establishing/ improving dedicated APU for every concession.	- Number of deployable rangers at any one time - Total man-days spent on patrol - SOPs in place - Area patrolled each month - Reaction time to incidents - Number of APUs established	A total of 90 rangers were deployable and a total of 1099 man-days were spent on patrol during the month of August 2016
1.5 Training of staff enhanced	• Establish regular training and retraining schedule (includes training on weaponry, bushcraft, tracking, information gathering, crime scene management, Judiciary procedures etc • Training on standard operation procedures (harmonization)	• Number of training and retraining sessions carried out	8 rangers went for a refresher course at Head Office with the Army training them in drilling movements during the month.
1.6 Conviction rates improved	• Judiciary sensitization (incl. workshops) • Formulation of proper charges, indictment and summons • Gathering all evidence available using legal means • Completion of dockets timeously, submission and concluding cases in a reasonable time • Creation of a district sub-committee on elephant and wildlife issues • Hold workshops to share information on wildlife issues	• Number of successful prosecutions • Decrease in number of crimes committed • Number of workshops or meetings held	From August 2016 to date one case of ivory possession was successfully finalized and one for ivory is still pending trial.Generally poaching seem to have decreased as compared to the other years due to deterrent sentences being given by the courts,Conviction of ring leaders,changing of area of operation and current economic challenges which are also hitting the market on acquiring the us dollar.One workshop was held at Midlands black Rhino Concervancy with the judiciary to address challenges being faced .

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Viable population, geographical distribution, and habitat connectivity targets established.	- Establish TPC for all areas to set viable population target. - Collect spatial data (livestock densities, human population densities, forest cover, and agricultural cover) to map potential geographic distribution of elephants - Identify potential connectivity areas and promote wildlife-based land uses in those areas.	- Viable population target of minimum 5,000 for the region with minimum and maximum thresholds in different land categories - Updated geographical distribution map and spatial datasets - Number of conservancies approved/ green-lighted by communities	There are no private conservancies in the Sebungwe Region, however the 4 Rural District Councils within the Region are very active in conservation and also CAMPFIRE is active. The 4 RDCs are Gokwe North, Gokwe South, Nyaminyami and Binga RDC.
2.2 Monitoring system for population trends, habitat, and impacts designed and implemented.	- Establish regional database for data on population, habitat, HEC, patrolling, poaching, and trophies (for trophies, see also Output 5). - Design and adopt standardized reporting formats. (i.e. MOMS) - Report to the regional management committee to review data and decide on management actions. - Conduct annual aerial surveys for the "core area" (to be defined).	- Regional database operational - Number of reporting formats designed and distributed - Number of persons, patrols, and sectors submitting data - Quarterly reports - Quarterly reviews	We have formats for different reports which start from Incidental reports, Daily reports, Weekly reports, Monthly reports, Quarterly reports and Annual reports. The reports come from the stations and are consolidated at the Regional Office before they are sent to HQ.
2.3 Direct and indirect causes of decline (2006-2014) researched.	- Causes of mortality quantified using the regional database. - Gather information from local communities and experts. - Examine potential socio-economic factors related to decline - Research habitat changes. - Publish research in scientific publication.	Data and analyses	For the month of August 2016, the Sebungwe Region lost a total of 6 elephants, 2 of them died of natural causes in Matusadona National Park, 1 was poached in Matusadona, 2 were poached in Chete Safari Area and 1 was poached in Chizarira National Park. A long term elephant research programme to be launched in Matusadona National Park in conjunction with a private partner

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.4 Viable population, geographical distribution, and habitat connectivity achieved and maintained.	- Establish wildlife-based land-use system (not a land use plan) with community conservancies acting as corridors between protected areas - Reduce human-elephant conflict to acceptable levels. - Implement responsible habitat management (with regard to fires, REDD+, mining, illegal and legal settlement) - Conduct integrated land-use planning. - Support extension of REDD initiative	- Number of operational conservancies/ corridors - Elephant Population data - Number of elephants and people involved in "serious HEC incidents" - Effective, non-lethal elephant deterrents in place - Regional land-use plan - Number of stakeholders, meetings in planning process - Utilization of corridors by elephants	The Authority is supporting efforts to establish conservancies in the Region and we have approved the setting up of a conservancy in the Gatshe Gatshe Area. The Chirisa-Sengwa excision area is also planned to be established as a community conservancy
2.5 Sustainable offtakes established through participatory quota setting and monitored through adaptive management.	- Establish a database of offtakes, trophy qualities, and age classes (See Output 2, Activity 1). - Using participatory quota setting following best practices, set optional quotas based on scientific survey data, with no more than 0.5% of the estimate as the elephant quota for the region. - Revisit quota system and establish optional quotas as opposed to fixed quotas - Set minimum trophy size and a variable trophy fee with large increments based on size - Identify and enforce best hunting practices through a code of conduct incorporated in lease agreements and hunting permits.	- Trophy quality improving - Record of hunting practice transgressions	Quotas for the Nyaminyami District and the Sebungwe Region as a whole have been greatly reduced and all elephant hunts are now being monitored by Parks

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.6 Robust and comprehensive research program enhanced and maintained.	- Research the impact of decline on population dynamics. - Investigate migration hypothesis. - Develop applied research projects, especially interdisciplinary and multidisciplinary research. - Establish research oversight body, building on existing approval processes.	Publications, particularly with management guidance	A long term elephant research programme to be launched in Matusadona National Park in conjunction with a private partner

9.5.3 Social, Economic and Cultural Framework (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Transparent and equitable distribution of benefits established	- Develop an instrument to increase elephant revenues at the ward level. - Instrument to provide for traditional leaders to be involved in management and distribution of elephant related benefits. - Revise CAMPFIRE guide lines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodic auditing of the revenue sharing system.	- Instrument approved. - CAMPFIRE guidelines revised and approved - Revenue accountability system established - Number of audits	The Zimbabwe Elephant Nursery to establish a community outreach program that will provide community educational and developmental projects and activities in the region
3.2 Economic management of consumptive and non-consumptive tourism of elephants in Sebungwe improved.	- Preventing human settlement in protected areas - Review length of concession leases to encourage greater investment. - Rehabilitate the depleted Safari areas - Promote PPCPs	- Number of eviction notices issued. - Number of reviewed leases - Number of safari areas under proper management/concessions - Record of PPCPs established.	Mokore safaris is currently operating in Sengwa Wildlife Research Area and the lease is under proper management, Statunga Safaris has also got the Chirisa hunting lease and will start operating in the year 2017. Chete Safri Area is currently still open however there are applicants who may take it at anytime.
3.3 Land use strategies to mitigate human elephant conflicts (HEC) established	- Review of human elephant conflict measures (consultancy) - Increase sense of ownership of wildlife as a mitigation measure to HEC (review) - Traditional leaders to set up a compensation scheme for land holders directly affected by HEC. - Support review and development of land –use plans to optimize agricultural livestock and farming activities	- Reports - Link with activity 1 and 2 output1(benefits) - Compensation scheme functioning and record of HEC in place. - Land use plans supported	Established a Problem Animal Control Committee in Nyaminyami and Gokwe that includes all stakeholders to assist in the effective coordination of all PAC issues

9.5.3 Social, Economic and Cultural Framework (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.4 Investment of wildlife revenue in income generating community products established	- Revitalize technical support services to communities/ community initiatives - Participatory business plan at community level. - Explore micro financing opportunities - Explore markets for community projects related to elephant conservation	- Technical support services established through proper instrument. - Participatory business plan adopted.	There is a strong move to promote the development of aquaculture projects to enhance food security
3.5 Relationship and communication mechanism established	- Sebungwe WG to include Traditional leaders and RDCs - Methodologies for regular communication with communities and their leaders established	- Traditional leaders and RDC included in the WG - Communication strategy developed	
3.6 Education on elephant conservation in the community increased	- Information campaign explaining reasons for quota decrease (see Biological Component for cross check) - Explain what trophy hunting means and how it links to benefits - Share census results and explain implications - Extend conservation education to Sebungwe wards (NGOs?)	- Number of Outreach meetings with Traditional leaders / Wards/ RDC including the 4 key activities	The Zimbabwe Elephant Nursery to establish a community outreach program that will provide educational and developmental projects and activities in the region

9.5.4 Building Conservation Capacity Component (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Capacity needs for elephant management in Parks and CAMPFIRE areas analysed and identified	- Draw up TOR - Appoint consultant	Report produced	Still outstanding
4.2 Training provided	- Analyse training needs - Prioritise and develop training curricula if not already available - Implement in-service training and re-training	Numbers of people trained and certified	Still outstanding
4.3 Best practice standards for elephant management in place	- Standards defined by and through National Elephant Policy and CAMPFIRE Principles and Guidelines - Define clear objectives for elephant management in the Sebungwe - Support CITES MIKES site(s) and application of SMART and RBM	- MIKES PIKE database - SMART database	Nyaminyami RDC is a MIKE site and efforts are needed to adopt the SMART database system in th region
4.4 Research and monitoring capacity strengthened	- Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring systems - Identify equipment needs, source and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- 2 persons trained per annum - 5+ people in mentoring system each year - Equipment procured and in place - Active community research programme underway - Event Book System functional and operationalised	Still outstanding
4.5 Funding secured	- Complete Sebungwe Elephant Management Plan and disseminate for funding purposes - Development of funding proposals for each of the components, if necessary - Identify donors (e.g. bilateral, WB GEF, NGO, other) - Submit proposals - Develop Sebungwe branding and marketing campaign	Number of successfully funded proposals	Still outstanding
4.6 Infrastructure refurbished and functioning	- Roads rehabilitation: Parks and CL - Karoi-Binga road - Airstrips	- 2,000 km repaired to standard - Airstrips registered and functioning	Still outstanding

9.5.4 Building Conservation Capacity Component (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.7 Communications	- Procure and install radio communications systems	System installed and operational	Still outstanding

9.5.5 Coordination and Programme Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1. Sebungwe Management Committee with an Elephant Working Task Force and Project Coordinator established	-Identify committee members, select WTF and appoint Coordinator -ToR for each institution (from national plan)	Committee meeting twice yearly; WTF meets quarterly, identifies priority activities and oversees implementation by Coordinator	Still outstanding
5.2. Coordination and communication between Traditional Authorities, their communities and the elephant management programme and plan strengthened	-Address the community through CAMPFIRE and traditional leadership -Introduce elephant management plan in easily understandable format – maps and graphs – and disseminate through all levels/actors in Sebungwe	• Management plan documents for dissemination	Still outstanding
5.3. Coordination between Sebungwe safari operators and implementation of the elephant management plan strengthened	-SOAZ, ZPHGA appoint liaison officer for Sebungwe elephant management plan -Encourage non-members of associations to participate in plan implementation	Liaison officer appointed and operating and non-members of associating participating in implementation of the action plan	Still outstanding
5.4. Links with neighbouring states established – shared elephant management	-Establish relationship with KAZA Secretariat -Establish links and synergies with transboundary natural resource mgmt -Bilateral JOC to focus on illegal wildlife trade and trade routes -Establish links with TRAFFIC	• KAZA Secretariat aware of Sebungwe elephant management plan • TBNRM established and functional • Reduced illegal trade	Still outstanding

ANNEX 3.0 Lower Zambezi Valley Action Plan - *Status and progress report Aug - 2016*

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)			
Output	**Activities**	**KPIs**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants	-
1.2 Informer network, investigation and intelligence system established	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	5 informers were recruited, one more investigator was recruited. 10 calls were received indicating poachers coming in from the local community and 3 calls indicating foreign poachers coming in. Since January 2016, 4 foreigners have been arrested from tip offs and one local person. A total of 32 incursions were recorded whereby the majority of them were recorded during the first quarter of the year.
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines on collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering) - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	Of all the five arrested poachers, all were sent for prosecution and were all convicted and sentenced

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)			
Output	**Activities**	**KPIs**	**Narrative Report on Progress in Implementation**
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	The current data base in place is the MIKE data base system where one Senior Ranger and two rangers were trained to manage the input of information into that system. Recording starts from the time the callsign are deployed using patrol briefing form, patrol details will then record information of their findings onto the ground patrol data form whilst out on patrol; on return, a report is then reproduced which will be used together with the ground data form to then enter the information onto the MIKE system data base.
1.5 Joint law enforcement operations within the LZV	- Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) - Conduct joint operations	- Number of meetings held per year - Number of successes from shared wildlife crime information - Number of joint operations leading to arrests and successful prosecutions	One liaison meeting conducted with our Zambian counter parts, 3 community outreach programs with the Nyamakate and Chundu community. -
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the LZV	Implementation of the LZV Action plan is in progress with
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the LZV settled has not increased, or has declined, from 2015 levels	
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations and RDCs in LZV - Introduce ranger-based monitoring (SMART, MIKE, ETIS) across all stations in LZV - Analyze the data and report on trends	- Information on trends in elephant numbers, structure and mortality analysed and available	-According to the 2014 Aerial Survey report, Mana Pools has 2984 elephants. From 2009 to 2016, Mana Pools has lost 95 elephants to poaching of which 16 were recorded this year. The report states that there was 40% reduction in elephant populations from the 2001 survey. Causes of reduction include natural deaths, migration and poaching.
2.2 Impacts of elephants on selected habitats and selected indicator plant and animal species monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported	-Elephant damage has been observed and recorded on woody species on the flood plain where they are greatly concentrated. Impacts shown were ring barking and uprooting of woody species such as *Combretum spp* and, *Fidherbia albida.* The impacts have resulted in weakening of the tree species, making them susceptible to diseases and mistletoes. -These species also do not have recruitment due to impacts of elephants. -Introduction of enclosures are at initial stages to monitor the impacts and enhance recruitment.
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, HWC, in the LZV - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research report completed - Survey results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	-Recommendations have been submitted to release pressure on the Mana Pools national park through stopping hunting on the Sapi Safari Area flood plain.
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	-Sapi Safari Area turned hunting in the process of being stopped, and the area to promote photographic safaris instead of hunting.

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Elephant trophy quality is maintained or improved in relation to the stipulated desired trophy size.	Non-trophy hunting area. Mana Pools being a non-hunting areas, the sizes of trophies hunted from management quota and those picked from natural deaths, trophy sizes are more constant.
2.6 Current elephant range defined and management to recover habitats and elephant populations and maintain connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range and maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	Elephants aggregation on the flood plain during the dry season has resulted in a lot of pressure being exerted on the area. Changing of management system of Sapi's flood plain could contribute to recovery of the habitat on the floodplain once animals disperse.
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Situational reports involving poaching of elephants have been submitted in time. MIKE Data Base is also being maintained. A record of recovered of all ivory obtained is kept and the recovered tusks are constantly submitted to Head Office where they are again reweighed and recorded as well.

9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in the LZV adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	A number of organisations have come aboard in support of conservation through Joint Ventures and Memorandum of Agreements such organisations like: Zambezi Society, Tashinga Initiative, Animal Wildlife Fund Foundation, Sino Zimbabwe Wildlife Foundation Fund, and Kariba Animal Wildlife Fund Foundation, these have formalised they assistance to Mana Pools which vary from Anti-Poaching assistance to treatment of injured animals.
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	Benefits from wildlife utilisation are channelled through CAMPFIRE program through the local Rural District Council.
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	Only one case of Human Wildlife Conflict has been recorded since January where one person was attacked by a hippo but survived the attack. Cases of Wildlife encroachment onto the communities on the southern boundary are dealt with by the CAMPFIRE because of the buffer zone between the southern boundary of the park and the community.
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	Of the 16 located elephant carcass, six elephant carcasses were recovered from two contacts. Note that 22 other elephant carcass were recovered in Chirundu again from a contact but we cannot directly link them to the elephants poached in mana Pools though there is a very high possibility of having the elephants poached in Mana Pools as well or in Marongora or Sapi..

9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for the LZV - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in the LZV - Proportion of schools within or neighbouring elephant areas receiving and using information provided	2014 Elephant Survey Report

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- No of project proposals developed, submitted and funded - Value of funding and support in kind for conservation of elephants in LZV realised each year	A proposal was submitted by Tishinga Initiative for the establishment of the Nyakasikana Anti-poaching Base and has been funded and near completion. See section 9.6.3.1
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the LZV - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify equipment needs and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for the LZV developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	Mana Pools has one Ecologist

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. communities trained and implementing elephant management programmes	Training modules are guided as per the Mushandike College of Wildlife Management at the organisation training institute. The station has 8 staff members who have undergone training at Mushandike College of Wildlife Management in various fields from Accounting, Certificate in Wildlife Management, Diploma in Wildlife Management, and IT courses
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the LZV developed	- Rebuild / refurbish all main access roads to the LZV (c.150 km) - Repair, clear, grade where necessary some 600 km of internal roads and several bridges - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the LZV - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	Roads, bridges, airstrips refurbished and maintained as planned Feasibility study of required field stations completed by June 2016 Identified infrastructure requirements prioritised and required developments undertaken and completed	New operational roads are in the process of being opened, existed roads were maintained, the Mana Main Airstrip was renovated this year 2016 Of priority was to establish an anti-poaching base at Nyakasikana which I now near completion
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the LZV (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational communications system in place and being maintained	New operational radios, repeater links and potable GPS systems have been secured.

9.6.5 Coordination, Collaboration and Programme Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	Timely minutes of each meeting produced and circulated Committee resolutions and actionable points initiated and acted upon	
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA	Functional team established Technical support provided in keeping with TORs and planned activities implemented	A technical person has been seconded to Mana Pools by AWF to assist in Anti-poaching
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA - Establish terms of reference and recognition as formal entity - Establish effective engagement with RDCs, and Traditional Leaders in the LZV and neighbouring communities	Formal recognition by ZPWMA achieved Meetings held Effective engagement with neighbours	In 2016, 1 Meeting has been held between ZIMPARKS officers and the Chief (Chief Chundu) together with his village heads. Another meeting has also been held between Mana Pools Officers and Safari Operators to discuss their support in conservation.
5.4 Links with neighbouring Zambia and Mozambique to confer on the management of shared elephant populations established / strengthened	- Establish links with Zambia and Mozambique to confer on cross border elephant management issues	Links established and operating	There is cordial communication with ZAWA counterparts.
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	At least one awareness campaign conducted each year Annual progress reports produced Briefs / news releases on major developments or progress released Funds raised to support elephant conservation	Funds have been raised by Non-Governmental organisations through provision of camping equipment, availing vehicles for use in Anti-poaching, assisting in opening up of roads, developing of base camp for rangers and training

ANNEX 4.0 South East Lowveld Action Plan - *Status and progress report Aug – 2016*

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units strengthened	– Appoint anti-poaching coordinator (for region and/or separate areas) – Recruit staff – Train staff – Procure vehicles and equipment – Deploy unit – Support existing units	Trained and fully equipped units established and operating with relevant security agency by June 2016	Five units were established in Gonarezhou National Park, trained and fully equipped. Three new Lancruiser vehicles were procured to augment the existing patrol fleet. -Two candidates identified with one to be elected for the post of antipoaching coordinator for the Region. - 35 Cadet rangers recruited by the Gonarezhou Conservation Project to boost the existing staff compliment. Cadet Rangers trained in basic paramillitary skills by the Gonarezhou Conservation Project -A Gonarezhou Antipoaching Reaction Unit established and operating throughout the Gonarezhou Nationa Park. -Out of the 20 properties in Save Valley Conservancy, 8 properties have 2X call signs of 3 rangers each who are highly trained and able to carry out combined operations with security agencies in addition to the15scouts also highly trained with AggressiveTracking Specialist a security private company assisting in the protection of rhinos and elephants in SEL.
1.2 Informer and intelligence systems established and/or strengthened	– Identify and recruit informers – Establish and implement incentive protocols – Set up, implement hotline for anonymous reports and communicate it to the public – Analyse and use information – Ensure information is included in database outlined in Output 1.6	An active informer system/network operating within the SEL by Jan. 2016 Hotline widely advertised and operational by Jan 2016	-Informer network is being established and had a number of informer lead success. Awareness of the hotlines began in September 2016 by Regional team. -Informers recruited by the Gonarezhou Conservation Project. -A hotline set up for Gonarezhou and Save Valley Conservancy. -Data being analysed and a data base in place and being mantained at the Regional Office. -Hotline facility fully advertised through the Parks Investigations Branch.
1.3 Investigation of wildlife crime improved	– Implement training programmes for investigation personnel – Ensure collaboration between Parks, ZRP and intelligence officers	At least two law enforcement staff trained in scene of crime collection and preservation of	-3 Investigations officers trained in scene of crime collection and preservation of exhiits course

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
	– Recruit more investigators – Put in place Investigator incentive system – Collaborate with forensic scientists and ballistic experts, as well as agencies such as EMA and approved universities (e.g. Chinhoyi University of Technology, University of Zimbabwe, National University of Science and Technology)	evidence, ballistics evidence, etc. in SEL. Percentage of investigations resulting in successful prosecutions in SEL greater than in 2014	-1 investigations officer trained in Wildlife, Pestcide and Forensic Crime Scene Investigation Course. -Collaboration with other law enforcement agencies satisfactorily yielding results. -Collaboration with other agencies strengthened -plans are underway to recruit more investigators and to open an investigations office in Chiredzi. -Some stakeholders have pledged to assist the investigators with some incentives. -In Save Valley Conservancy one trained personnel is dealing with wildlife crimes and is based at Humani Ranch. - The % of successfulness on investigated cases is now higher than 2014, and the current % is estimated to be 60% after lobbying with the Judiciary Services
1.4 Prosecution of wildlife crimes improved	– Train prosecutors on legislation and processes available to deal with wildlife crimes – Conduct awareness / outreach programs with Prosecution, Judiciary – Utilize ancillary laws, such as those dealing with economic crime, organized crime, money laundering, – Communicate status of prosecutions to the public via ZPWMA website – Clear backlog of wildlife cases – Explore the possibility of appointing dedicated wildlife crime prosecutors at Regional and National level	Monthly liaison sessions on wildlife crime and law enforcement held with members of the judiciary Relevant legislation available and being used Wildlife crime prosecutors available and being used in SEL	-Liaison with the Judiciary, Courts and the Prosecuting Authority on wildlife crimes conducted. -Relevant legislation available and referred to in dealing with wildlife crimes -Wildlife Crime Prosecutors not available from the Wildlife Authorities but Public Prosecutors being used to deal with wildlife crimes to which they may not be well versed with certain technical wildlife issues. -No wildlife crime prosecutors appointed. - Inadequate resources of transport and fuels to fully implement monthly liaison.

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.5 Law enforcement in collaboration with communities enhanced [Links to Component 3]	– Engage and collaborate on curbing wildlife crimes (ZRP & Communities) – Establish anti-poaching clubs/ community natural resource monitors that collaborate with ZPWMA and ZRP – Lobby support from Chiefs to deal with local poachers – Hold workshops with Chiefs and communities about wildlife and wildlife crimes – Establish incentives for communities to provide information	Incentive schemes that encourage the public and members of rural communities to contribute to law enforcement (e.g. through informer hotline) established in SEL Increasing number of incidents of community contribution to law enforcement (e.g. whistle blowers) by Dec. 2017	Trained community rangers from Sengwe area, four passed and ready to carry out ant poaching operations within the Sengwe area. Several meetings on wildlife issues were held with Chief Sengwe. - Collaboration with ZRP and Communities strengthened and yielding results. -We have opened a hotline and fliers facility that we distributed through the Save Valley Conservancy, Gonarezhou and surrounding areas and information is coming in. -All stakeholders workshop on wildlife issues is planned soon -Some stakeholders have pledged to incentivize the whistle blowers -In Save Valley Conservancyseveral education awareness campaigns have been carried out in all areas bordering wildlife protected areas. -meetings with chiefs have been maintained regarding protection of wildlife. - Resource monitors have been selected by the communites. -The surrounding communities are benefitting from meat obtained from problem animal control and trophy hunting.
1.6 Local wildlife law enforcement database established	– Set up database, as per national database – Ensure inclusion of prosecution status in database – Implement national data recording protocols – Train data entry staff and crime analysts	Local database established and operating Illegal activities recorded and analyzed	Spatial Monitoring And Reporting Tool is being used in Gonarezhou and all captured data can be easily analysed.The SMART approachaims at improving conservation effectiveness and tracking of wildife crimes. -No SMART use in Save Valley Conservancy - A poaching database from when the crime is committed up to the final court outcome is in place. -A database of poachers and their modus operandi in place -Crime Registers being mantained.
1.7 Illegal settlements / grazing in wildlife areas reduced	– Liaise with RDC, Traditional Leaders and ZRP, DA's Office – Conducted Education programmes – Regular updated satellite mapping	Illegal settlements reduced to less than 5% of wildlife areas by 2020 (i.e. state protected areas, conservancies and community wildlife areas)	Illegal settlement in the park is still very low no other settlement after 2000 (Chitsa communities). Grazing of cattle in the park is under control in the GonarezhouT National Park. -The Southern part of the Save Valley Conservancy 85 % settled.An inter ministerial committee set up to look at the possibilities of fencing out the settlers and also there

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
[Links to activities on land use mapping and planning in Component 2 – Output 2.2 and incentivization / alternative livelihood activities in Component 3]			are proposals to remove some of the settlers from some of the properties to pave way for a game corridor and allow free movement of game within. -Local authority currently working out on orderly settlement in the Save Valley Conservancy. - Fencing of the Save Valley Conservancy is also expected to assist in reduced human and domestic animal movements.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1Research programme to understand temporal and spatial drivers of elephants established [Links to Component 4]	– Create enabling opportunities and environment for research – Prioritise research needs – Conduct localised case studies and research projects – Monitor and evaluate poaching and other drivers - hunting, water, food, human disturbance – Explore possibility of GLTFCA flagship research programme for elephants [linked to Component 5] – Carry out ground surveys to monitor distribution and density	Research programme that enables local and international researchers, and links with the GLTFCA research programme, in place and producing reports	-Ten elephants were collared to monitor elephant movement in Gonarezhou.
2.2Current elephant range defined and options for extending range and maintaining connectivity between fragmented populations explored	– Define elephant range use, and existing and potential connectivity – Identify priority corridors and human land use barriers – Conduct spatial analyses to inform land use planning – Advocate land use planning to facilitate connectivity and reduce human wildlife conflict – Explore options for translocating elephants to under-stocked areas	Identified priority corridors for elephant connectivity within SEL, between SEL and other areas in Zimbabwe, and with neighbouring countries	-Research is in progress in the Gonarezhou National Park - Elephant corridors are known in Save Valley Conservancy but because of illegal settlements the problem of understanding this is still far from reality.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.3Elephant population numbers, structure, mortality and trends monitored, quotas adjusted, and desired levels of trophy quality maintained	– Undertake standardised, regular, aerial and ground surveys of the elephant range – Explore methods to monitor elephant presence and abundance in Mozambique (to Zinave) and up to the Chimanimani range – Undertake trend analysis – Define elephant age and sex structures and extract birth and death rates – Establish annual monitoring plans – Record and analyse elephant mortalities (all causes e.g. poaching, PAC, natural, hunting, etc.) – Monitor trophy quality and age – Develop and implement an age-based and size-based trophy quota	Elephant range surveyed at regular intervals Demographic data available and analysed Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers and used in quota setting	-Biannual aerial survey carried in Gonarezhou and surrounding. Last survey in September 2016. Could not get authority to survey in Mozambique. Elephant's mortalities recorded in park security registers -Elephant survey in Save Valley Conservancy done 2013 -Quota setting being a wild life management tool is implemented annually - taking cognisance of research data -PAC , hunting etc information is kept
2.4Elephant impacts on their habitats and selected indicator species of biodiversity monitored	– Establish annual monitoring plans – Measure vegetation indicators such as woodland cover – Measure other functional biodiversity indicators e.g. bird responses to structural changes to woodlands – Measure ecosystem functions – Relate desired impact to measures of elephant abundance and spatial use – Research other drivers of ecological impact (climate change, change in land use, water provision, and fencing, amongst others) – Use research findings, expert opinion and informed public opinion to establish thresholds of potential concern (TPC or limits to change) to initiate management action in respect of elephant impacts in protected areas and effects in communal land – Identify areas with key vegetation communities that are utilized by elephants	Annual monitoring plans defined and implemented for selected indicator species of biodiversity TPC's established Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	-Annual monitoring through sightings when conducting hunts and patrol is in place.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.5Costs and benefits of elephants to local and national economy monitored and costs of elephants to local communities reduced	– Monitor and evaluate extent and costs of human-wildlife conflict incidents – Relate human-wildlife conflict to elephant abundance and spatial use – Understand drivers and social and economic consequences of human-wildlife conflict – Evaluate the direct and indirect contribution (financial, economic and social) and the direct and indirect costs of elephants to the well-being of people and to conservation, through both consumptive and non-consumptive uses – Implement ongoing and new mitigation for human-wildlife conflict	Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	-PAC programmes are conducted, meat shared among the communities affected, skins and ivory may be sold and money ploughed back in to the affected communities.
2.6Adaptive elephant management framework adopted and implemented [Links to Component 4]	– Ensure collaboration between Regional Elephant Management Committee and regional and local resource management committees (e.g. LOCAL Forum) – Implement annual process of adaptive planning, implementation and monitoring in line with elephant management objectives and TPCs within the SEL – Develop and implement localised management plans (e.g. SVC plan) – Ensure alignment and harmonisation with other Zimbabwean, regional and international plans	Annual elephant management plans developed, adopted and implemented	-Annual elephant management plans have only been confined to hunting and PAC and cropping to a large extent has not been done. -Huge costs of this exercise are a major impediment as evidenced by the number of elephants taken off so far this year under such local arrangements.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.7Alternative outcomes modelled	– Develop framework for examining and modelling potential linked impacts between biodiversity issues, elephant issues, and societal issues, including any 'surprises', such as disease or extreme weather events. – Implement the modelling framework to define the outcomes of various management scenarios	Established modelling framework being used to guide adaptive management Scenario outcome recommendations and being used in management	Nothing to report
2.8SEL reporting to meet national / international standards achieved	– Advocate key summary set of elephant KPIs/outcomes for national reporting (e.g. potential population sizes against actual population sizes) – Comply with national and international legal obligations – Explore the designation of GNP as a MIKE site	CITES reporting requirements met National reporting compliance requirements	-Gonarezhou National Park meeting CITES requirements. Park not yet a MIKE site. -No information on Save Valley Conservancy and the area is still not a MIKE site

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Community partnerships and joint venture oportunities are incentivised and facilitated	– Establish protocols, policies and models for development of joint ventures (PPCPs) – Identify potential areas – Facilitate development of new, and strengthen existing, institutional frameworks and legal entities for beneficiaries at sub-district level – Develop concepts, business plans and prospectuses for different areas through consultative processes with Communities – Develop a SEL Tourism plan and review potential concessions within the framework of this Plan – Develop mechanisms for inclusive and transparent engagement and selection of operators and JV partners. – Facilitate communication, endorsement and support of JVs – Explore potential incentives and avenues of material and technical support that can be provided by Local Government and Authorities to promote establishment and sustainability of Community JVs – Promote access to affordable capital funding – Enhance capacity of community members to engage in wildlife and tourism management through training and employment	Models and protocols for joint ventures established Community institutions to engage in joint ventures established Joint ventures established and operating, resulting in financial benefit to communities SEL tourism developed and potential concessions identified Mechanisms of support and incentivisation to JVs established	- Save Valley Conservancy has a Joint Venture model and community share ownership trust with the local communities -PPCPs envisaged with the Gonarezhou Conservation Trust.
3.2 Elephant management in community wildlife areas improved	– Promote improved and professionalized elephant management and security in community wildlife areas through establishment and maintenance of improved capacity, infrastructure, security and management systems – Develop and implement a transparent Performance Based Quota system which incentivises improved management and security systems for elephant in community hunting areas and which promotes effective buffering of source populations – Update terms of lease agreements in community wildlife areas to confer a broader range of roles and responsibilities on operators including resource management and protection; re-investment and	Infrastructure, equipment and systems for elephant management in community wildlife areas established and operational Reduced human-elephant conflict Community capacity for wildlife management improved	**-WILD project** working on two community wildlife areas that is Naivasha in Chiredzi district and Jamanda in Chipinge district.WILD(Wildlife In Livelihood Development Programme is an intiative of SAT (Sustainable Agriculture Technology) and ZWVT (Zimbabwe Wild Vet Trust) funded by the European Union and is aimed at improving socio-economic and ecological resilience in semi arid communal areas through incorporation of robust wildlife based land use enterprise into the mainstream of communal areas. -Nyangambe in Save Valley Conservancy is part of the elephant managemnt in the community.

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
	infrastructure development; employment targets; local sourcing; etc. – Review key cooperation opportunities across different land uses and countries within GLTFCA, e.g. Sengwe-Tshipise Wilderness Corridor	Opportunities for cooperation within GLTFCA identified	
3.3 3.3 Additional elephant-based tourism and sustainable utilisation oportunities explored	– Promote awareness and marketing of iconic tuskers – Explore opportunities for expansion of community wildlife areas in viable wildlife corridors to enable establishment of additional sustainable utilisation areas and enterprises. [Links to Output 2.2 – identification of corridors]	Corridors identified and Agreements concluded Tourism and awareness campaigns undertaken	- No corridors agreed and concluded as as yet.
3.4 Transparent distribution of the benefits and costs of elephant management and conservation facilitated [Links to Output 2.5]	– Conduct regular and comprehensive Community Awareness campaigns regarding quotas, revenues and distribution within Communities – Capacitate and incorporate direct community involvement in management of Community Wildlife Areas, enterprises and JVs. – Diversify downstream natural resources enterprises to multiply the revenues from CBNRM, e.g. NTFPs	Awareness campaigns conducted Community structures have improved capacity to manage NRs and wildlife areas CBNRM revenues are invested in establishment of natural-resource based enterprises Community realises greater employment and financial benefit from CBNRM revenues	Awaerness campaigns are being conducted in areas arround Gonarezhou National Park and Save Valley Conservancy focusing on natural resources management not rvenue management. -The community share ownership trust is a clear testimony of improved capacity to manage NRs and Wildlife areas.These programmes bring about financial benefits to the communities.
3.5 Effective techniques and land use strategies to mitigate human-elephant conflict are implemented	– Review land use zonation through consultative processes [link to Output 2.2] – Promote awareness and adoption of effective HEC mitigation measures – Promote improved rangeland rehabilitation and grazing management to reduce competition between livestock and wildlife. – Promote improved and rationalised crop production and alternative mechanisms to promote food security to reduce habitat destruction for inefficient dry land cropping (e.g. irrigation development; carbon sequestration credits to generate income & purchase of staple grains).	HEC is effectively reduced Availability and application of HEC mitigation measures improved There is participation in effective grazing management schemes Grazing is better managed and rangeland health is improved	-Proposed irrigation schemes in fenced areas will help reduce human/wildlife conflict -Grazing areas for domestic animals are to be separated from wildlife areas again to reduce human wildlife conflict

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
		There is increased uptake of improved cropping techniques Crop yields are improved Alternative land uses evaluated	
3.6 Information on elephants and their conservation is included in school curriculae and environmental education adjacent to key elephant populations in the SEL is promoted	– Promote awareness of elephant conservation (and other issues) through cultural events, art, plays, sport, etc. – Participate in syllabus review of national environmental science curriculum approved by the Ministry of Education – Develop approved environmental training and extension material and promote dissemination to different stakeholder groups within the community – Promote the formation of environmental science clubs at schools – Coordinate various education, training and extension campaigns operating within the district	School children and communities have greater appreciation of elephant conservation issues Greater participation in environmental clubs at schools with greater understanding of environmental issues More social events linked to environmental and conservation awareness are held Elephant conservation messages are conveyed through art and cultural events & competitions Parallel education programmes are coordinated through stakeholder planning sessions at district level	Education extension programe established that is Chilojo club focusing on all schools close to Gonarezhou. Environmental books distributed to above schools. -Education extension programme in place in save Valley Conservancy and being conducted and funded by the Painted Dog Conservation and the Gonarezhou Conservation Project targeting schools surrrrounding the Save Valley Conservancy. -Education awawreness campaigns regulary conducted in schools by our Extension and Interpretation Unit. --Essay competions with prize giving are regularly done in schools to effectively disseminate information on wildlife conservation.
3.7 Cultural tourism is developed and marketed as a centre-piece of SEL attractions and linked explicitly to conservation of flagship species including elephant	– Promote existing cultural tourism events and attractions and promote incorporation of messages of elephant conservation within these – e.g. Machangana Cultural Festival; GL-Cultural Festival – Explore and develop additional cultural tourism opportunities – including development of interpretive centres, craft centres, museums, monuments, events, etc. and market these – Document and communicate the specific cultural importance of elephant to communities in the SEL and incorporate this into education, marketing, event and cultural messages and interpretative centres.	Community participation and tourist attendance of cultural events is increased Messages relating to elephant conservation and environmental issues are key themes	-GonarezhouNational Park actively involved in cultural festivals. Supported the Muhlanguleni cultural festival this year(2016). -

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
		The number of cultural tourism developments and enterprises is increased Anecdotes, artifacts and oral tradition regarding cultural importance of elephants are recorded and insinuated into marketing strategies and event messages	
3.8 Regional tourism is promoted	– Promote the development of infrastructure critical to accessibility of the region: e.g. border crossing at Pafuri; road development and maintenance; scheduled flights to Chiredzi; etc. – Promote diversification, branding and marketing of SEL-specific tourism products linked within the region and with other attractions in Zimbabwe and neighbouring countries. – Focus special attention on development of community-led tourism initiatives that contribute to the sustainability of the STWC as a movement corridor for elephant – Clear mines from STWC	Increased tourism traffic and arrivals Infrastructure upgrades Scheduled flights established Pafuri border crossing operational Tourism products are diversified Marketing and branding consultants engaged to develop branding and strategy Scoping, feasiblilty studies are undertaken Increased number of CB enterprises are operational	-The current global economic challenges faced are still a draw back to marketing efforts , however some individuals within the are putting much effort on consumptive tourism.
3.9 Policy framework for conservation and CBNRM is well understood by communities and other stakeholders in SEL	– Compile factsheets on policy framework for conservation and CBNRM and disseminate to communities and other stakeholders	Communities have access to existing CBNRM and Policy frameworks	- The awareness campaigns which are frequently conducted through out the year also attempts to explain about the existence of these policies as well as on traditional gatherings, village and council meetings.
	– Consider innovative mechanisms for trans boundary resource sharing and expanding “space for elephants”	Workshops conducted	- Still a challenge as the conept has not been fully embraced by the affected communities.

9.7.4 Building Conservation Capacity(South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to implement the plan secured	– Implement variable / graduated trophy fee structure based on trophy size – Review levy / fee structure for elephant hunting and the distribution of these revenues for conservation and communities – Develop and submit bankable project proposals to potential funders – Explore potential business partnerships – Increase capacity and law enforcement coverage by ensuring that all key stakeholders contribute to and are engaged in law enforcement activities: hunting operators, tour operators, and community anti-poaching teams [Links to Output 1.1] – Explore the potential for a dedicated elephant fund for SEL.	Revised trophy fee structure developed, resulting in increased funds available or secured for elephant conservation Number of project proposals developed submitted and funded Number of developed and functional partnerships contributing to improved elephant management	Gonarezhou Conservation Trust's establishment could secure funding for improved elephant management. - Funding not yet secured for the entire Save Valley Conservancy, but expecting the EU to come in with an aid once the fencing boundaries have been established.
4.2 Current capacity analysed and needs identified	– Analysed current capacity – Carry out a needs assessment across the full range of human resources – Carry out a needs assessment for equipment and infrastructure – Develop a strategy to address the identified needs	Needs assessment report	
4.3 Capacity for research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	– Develop and implement a multi-disciplinary research and monitoring strategy – Develop and implement a research programme based on that strategy, including graduate studies, post graduate and external researchers as well as ZPWMA researchers – Undertake periodic research meetings / conferences – Recruit and meet demands and requirements for research personnel in Parks and surrounding areas – Collaborate with external research institutions – Develop and implement a mentoring programme for researchers – Procure relevant research equipment	Functional research programme in place Research meetings held Publications Number of research projects developed and implemented Number of research personnel on the ground Number of collaborative projects Mentoring plan / number of days spent with experienced researchers Inventory of equipment for research procured	-Nothing to report for Gonarezhou National Park -No Parks Resident Ecologist in Save Valley Conservancy.

9.7.4 Building Conservation Capacity(South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.4 Training and retraining programmes established	– Carry out a training needs assessment for law enforcement, resource and wildlife management, research and monitoring, education and awareness, community elephant management, etc. – Develop and implement strategies based on the needs assessment – Standardise and harmonize training in law enforcement	Training needs assessment report Training programmes established	-Training needs for law enforcement and research staff known.

9.7.5 Coordination, Collaboration and Programme Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 SEL Regional elephant conservation and management steering committee of 8 established (ZPWMA, SVC, MT, Bubi Conservancy, Chiefs' rep, GCP, ZRP, RDC) This committee should include a core set of competencies (and can co-opt expertise if needed).	– Develop TOR for the steering committee – Identify members – Oversee the implementation of the regional elephant strategy as per national mandate – Meet biannually – Attend national elephant management meetings	Functional committee meetings held biannually with adequate attendance	- Steering committee members identified - Logistics for first meeting have been concluded in collaboration with stakeholders
5.2 Links with neighbouring states to confer on the management of shared elephant populations strengthened	– GLTFCA coordinator to identify relevant stakeholders to participate in the implementation of the regional elephant action plan – Sustain collaboration with regional partners+(one committee member for the regional committee meetings) – Share knowledge / data of all 5 key components of the plan with the regional partners	Number of consultative meetings held Tangible regional collaboration and participation	-Relevant stakeholders known.
5.3 Coordination between the tourism industry (consumptive and non-consumptive) and the elephant management programme strengthened	– Identify consumptive and non-consumptive operators in SEL – Liaise with SOAZ, ZPHGA, ZATSO, ZHA, etc. – Encourage non-members to be affiliated to relevant associations – Hold quarterly meetings with operators – Consider scale of operations in non-consumptive tourism	Regular meetings and workshops convened with the operators	
5.4 Effective information dissemination and communication strategy implemented	– Ensure clear communication of progress against action plan to all relevant stakeholders – Identify target groups, i.e. traditional leaders, school groups, amongst others – Develop a communications strategy, making use of relevant media (print, social, road shows) – Implement communication strategy – Monitor and evaluate	Outreach programmes conducted	Outreach programmes conducted by the Gonarezhou Conservation Project's Liaison Officer and the Parks' Extension and Interpretation staff.

From:	Vannorman, Tim
To:	Brenda Tapia
Subject:	Fwd: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
Date:	Wednesday, January 25, 2017 12:31:29 PM

---------- Forwarded message ----------
From: **Simukai Nyasha** <snyasha@zimparks.co.zw>
Date: Fri, Jul 8, 2016 at 6:26 AM
Subject: RE: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
To: "Vannorman, Tim" <tim_vannorman@fws.gov>

I thought you had already received the priorities from the Director General. Let me verify with him and then I update you.

Regards

Simukai Nyasha

International Conventions Manager

Cell: +263-772 678 351

From: Vannorman, Tim [mailto:tim_vannorman@fws.gov]
Sent: Wednesday, July 06, 2016 8:47 PM
To: Simukai Nyasha <snyasha@zimparks.co.zw>
Subject: Fwd: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction

Simukai,

I hope all is well with you. I wanted to follow up on my message below regarding priorities for implementing the elephant management plan. I am anxious to finalize my review and updated finding but am at a loss in how to rectify the Director General's statement without more information. Any additional clarification that you could provide would be greatly appreciated.

Sincerely,

Tim

---------- Forwarded message ----------
From: **Vannorman, Tim** <tim_vannorman@fws.gov>
Date: Tue, May 24, 2016 at 1:13 PM
Subject: Re: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
To: Simukai Nyasha <snyasha@zimparks.co.zw>, Edson Chidziya <wsithole@zimparks.co.zw>, Edson Chidziya <(b) (6)

Dear Director General,

Thank you for your May 9, 2016, letter providing more information on the football stadium. Based on your statement, I take it that the proceeds generated from only 10 elephant hunts was being allocated for the construction of the stadium. This would be more in line with our perception that the hunting revenue received by CAMPFIRE are for smaller community projects, as oppose to larger construction or capital gains projects.

I fully recognize that the limitations that have occurred due to the suspension of elephant trophy imports has affected your budget and ability to fully implement the 2015-2020 Management Strategy. However, has your department prioritized the activities identified in the strategy to fully utilize the albeit budget allocated to elephant management? I ask this not to require additional work from your staff, but to better quantify the statement made in the strategy and, if possible, strengthen my enhancement finding to authorize imports of trophies.

I look forward to your response,

Sincerely,

Tim

On Mon, May 9, 2016 at 9:01 AM, Simukai Nyasha <snyasha@zimparks.co.zw> wrote:

> My apologies for responding late to your email. Herewith attached please find a response letter to the issues raised in your email.
>
> It's true Olivia is no longer with Zim Parks and we had not seen the correspondence that you emailed on 4th April. For all future correspondences, please communicate through my email and copying the Director General also if need be.
>
> **Regards**
>
> **Simukai Nyasha**
>
> **International Conventions Manager**
>
> **Cell: +263-772 678 351**
>
> **From:** Vannorman, Tim [mailto:tim_vannorman@fws.gov]
> **Sent:** Monday, April 25, 2016 4:18 PM
> **To:** snyasha@zimparks.co.zw; Edson Chidziya <wsithole@zimparks.co.zw>; Edson Chidziya
> (b) (6)
> **Subject:** Fwd: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
>
> Dear Edson,
>
> I was informed last week by John Jackson that Olivia is no longer with ZPWMA. If this is the case, I am concerned that the e-mail I sent her on April 4th may not have been seen. I am hoping that this additional information can allow me to finalize the USFWS position for imports of 2016 elephant trophies.

If you have any questions, please let me know.

Sincerely,

Tim

---------- Forwarded message ----------
From: **Vannorman, Tim** <tim_vannorman@fws.gov>
Date: Mon, Apr 4, 2016 at 1:06 PM
Subject: Fwd: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
To: Olivia Mufute <omufute@zimparks.co.zw>

Dear Olivia,

I hope all is well with you. I am trying to finalize our finding for 2016 for Zimbabwe elephant trophies and a question arose.

An article in Newsweek (below) raised questions about how funds are used by RDC. It is my understanding the funds generated from trophy hunts goes back to the community for activities to benefit the communities, such as clinics, schools, and salaries for game scouts. I have some doubts about what the article identifies, but could you or someone on your staff elaborate on the article?

In addition, in reviewing the 2015-2020 Management Strategy, it states that the plan, if fully implemented, would require a greater amount of money than is currently available. I would assume that part of the reason for this statement is because for the last two years, US hunters have declined to hunt in Zimbabwe and therefore less money has been generated than in previous years. Fully recognizing the financial situation that your department is in, what aspects of the management plan is do you anticipate could not be carried out at this time? Also, is it anticipated that if the US again allowed imports of elephant trophies in 2016, sufficient revenue would be generated to facilitate full implementation of the plan in 2017?

Thank you for assistance in this matter.

Sincerely,

Tim

---------- Forwarded message ----------
From: **Save The Elephants News Service** <stenews@elephantnews.org>
Date: Tue, Mar 22, 2016 at 5:03 PM
Subject: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
To: african-elephant@elephantnews.org

Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction

Conor Gaffey, Newsweek

March 22, 2016

The construction of a football stadium in rural western Zimbabwe is being stalled by a dispute over its unusual source of funding—elephant hunting.

Zimbabwe's environment minister Oppah Muchinguri has been forced to deny claims that she is blocking pre-sanctioned elephant hunts, the funds from which would be used to start building the stadium in Tsholotsho.

Under Muchinguri's predecessor Saviour Kasukuwere, the Tsholotsho Rural District Council (RDC) was issued with hunting permits for some 70 elephants, with the funds raised from the hunt to be put towards building the stadium, Zimbabwe's state-owned Chronicle newspaper reported.

The chairperson of Tsholotsho RDC, Cde Alois Ndebele, accused Muchinguri of holding up the process on Sunday, according to the Chronicle. "We have all the documents in the office but after the new minister was appointed, things just started stalling, there has not been any movement," said Ndebele, referring to Muchinguri's replacement of Kasukuwere as environment minister in July 2015 in a cabinet reshuffle by President Robert Mugabe.

But Muchinguri dismissed the criticism on Monday, saying that the hunts had been suspended after elephants were killed in the area by poachers laying cyanide. "The country suffered bad publicity from the cyanide poisoning and it was felt that the hunts be stopped while the poaching issue was being handled," said Muchinguri, according to the Chronicle.

Tsholotsho borders Hwange National Park, where scores of elephants were killed by poachers using the poison in 2015, with most of the elephants having their tusks removed. Hwange is overpopulated with elephants, currently hosting twice its carrying capacity with 53,000 of the creatures, and hunting is often cited as a means of generating funds for local

communities impacted by elephant populations. Elephant hunting packages sell for around $30,000 online.

http://www.newsweek.com/zimbabwe-elephant-hunting-dispute-slows-football-stadium-construction-439504

This news service is provided by Save the Elephants.

For further information on elephants please see Save the Elephants' web site at http://www.savetheelephants.org
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Michelle Gadd, Ph.D.

Program Officer, African Elephant and African Rhino Programs

Division of International Conservation

U.S. Fish and Wildlife Service

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--

Timothy J. Van Norman, Chief

Branch of Permits

Division of Management Authority

U.S. Fish and Wildlife Service

(703) 358-2350

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Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

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From:	Vannorman, Tim
To:	Brenda Tapia
Subject:	Fwd: Zimbabwe"s Supplementary Elephant Management Plan (2015 - 2020)
Date:	Wednesday, January 25, 2017 12:25:42 PM
Attachments:	ZIMBABWE SUPPLEMENTARY NATIONAL ELEPHANT MANAGEMENT PLAN.pdf Letter to USFWS - Zimbabwe Supplementary Elephant Management Pl.pdf

---

---------- Forwarded message ----------
From: **Liberty Nyaguse** <lnyaguse@zimparks.co.zw>
Date: Wed, Nov 9, 2016 at 2:06 AM
Subject: Zimbabwe's Supplementary Elephant Management Plan (2015 - 2020)
To: tim_vannorman@fws.gov

Dear Mr Timothy J Van Norman

Please find as attached documentation relating to the Supplementary Elephant Management Plan for Zimbabwe as requested by yourselves.

Best Regards

Liberty W Nyaguse

National Elephant Manager

Parks and Wildlife Management Authority

Cell: ***+263 772 130074***

Phone: ***+263 4 790571/707626-9***

Email: ***lnyaguse@zimparks.co.zw***

--
Timothy J. Van Norman, Chief
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ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY

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Email : info@zimparks.co.zw

All correspondence to be directed to ***Director General***

Head Office

Botanical Gardens
Cnr Borrowdale Rd/Sandringham Dr
P.O.Box CY 140
Causeway
Harare

www.zimparks.org

Ref: USFWS/B/3/1

25 January 2017

The United States Fish and Wildlife Service (USFWS)
U.S. Department of the Interior
1849 C Street, NW
Washington, DC 20240
United States of America

Attention: *Endangered species department*

Dear Sir/Madam

Ref: The Role of Trophy Hunting of the African Elephant (*Loxodonta africana*) in supporting Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)

Zimbabwe Parks and Wildlife Management Authority (ZimParks) hereby submits a document detailing how the trophy hunting of the African elephant (*Loxodonta africana*) is benefitting local communities through the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE).

We hope the United States Fish and Wildlife Service (USFWS) will utilize this information to justifiably re-consider the decision to suspend the importation of elephant trophies taken in Zimbabwe. Following USFWS's extension of the suspension in 2015 to include future hunting seasons, ZimParks is concerned that will have undesirable impact on our elephant conservation efforts currently benefitting local communities and implementation of our National Elephant Management Plan.

As an elephant range state, Zimbabwe remains committed to sustainable conservation practices that enhance the protection of elephants and their habitat.

Thank you for giving us the opportunity to fill any existing information gaps which facilitates sound decision making processes in the interest of species survival in the wild.

Sincerely,

pp

Geoffreys Matipano
ACTING DIRECTOR GENERAL

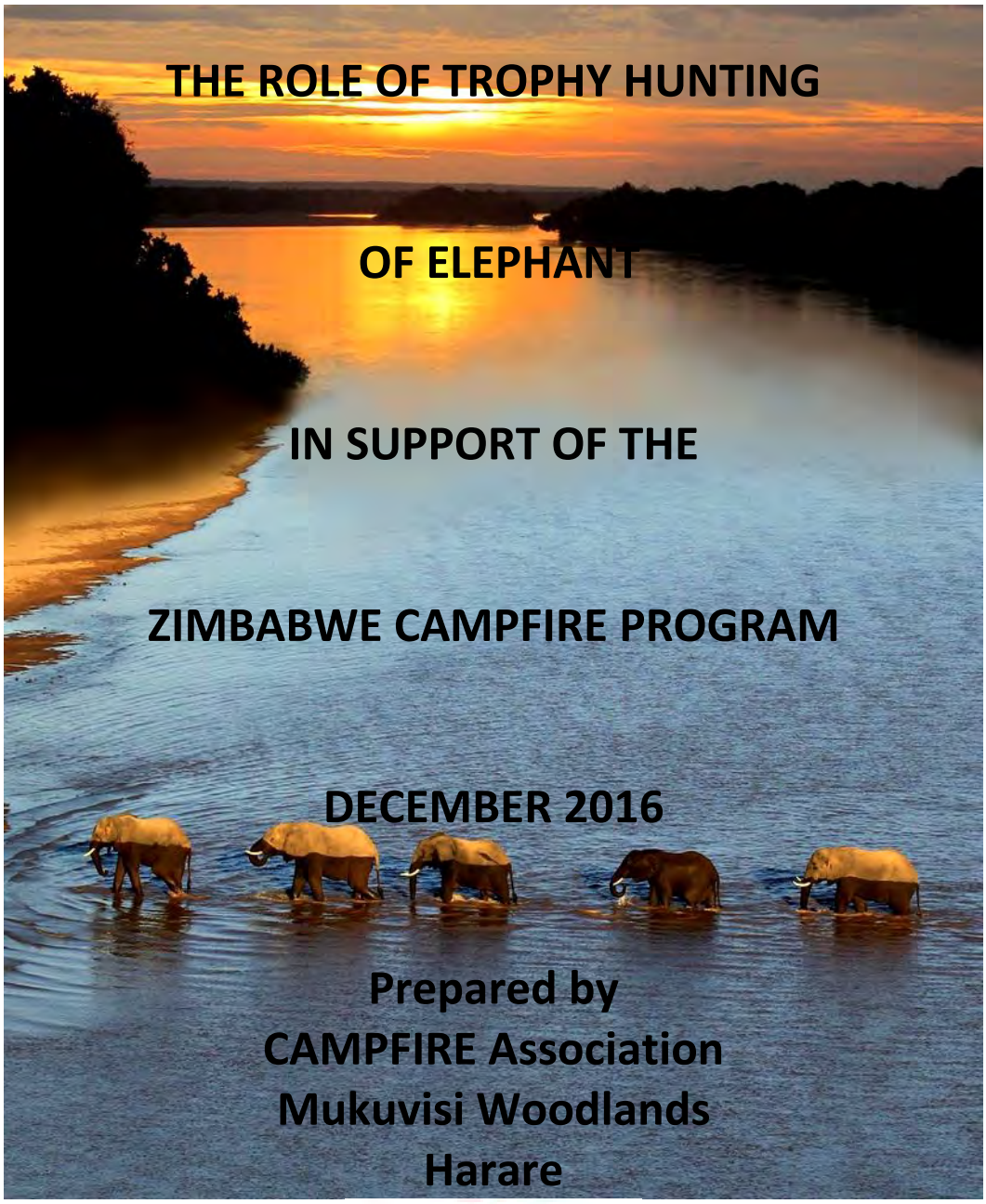
Board of Directors: Mr.T.E.Mundangepfupfu (Chairman), Mrs.I.E.Mupamhanga (Vice chairperson), Mr.W.Mutinhima, Mr.C.Mudenda, Mr.N.Mutsvangwa, Mr.I.D.Kunene, Dr.H.Rukato, Mrs.D.Mabika, Mr.E.Chidziya(Ex Officio)

THE ROLE OF TROPHY HUNTING

OF ELEPHANT

IN SUPPORT OF THE

ZIMBABWE CAMPFIRE PROGRAM



DECEMBER 2016

Prepared by
CAMPFIRE Association
Mukuvisi Woodlands
Harare

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ACRONYMS AND ABBREVIATIONS

AA	Appropriate Authority
CA	CAMPFIRE Association
CAMPFIRE	Community Areas Management Program for Indigenous Resources
CCG	CAMPFIRE Collaborative Group
DNPWLM	Department of National Parks and Wildlife Management
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
RDCs	Rural District Councils
SOAZ	Safari Operators Association of Zimbabwe
USAID	United States Agency for International Development
ZPHGA	Zimbabwe Professional Hunters and Guides Association
ZPWMA	Zimbabwe Parks and Wildlife Management Authority

Acknowledgements

This report has been prepared on behalf of the CAMPFIRE Association by Vernon Booth, with support from Safari Club International Foundation. The input from all CAMPFIRE Managers and Internal Auditors in the respective RDCs is greatly appreciated. The CAMPFIRE Association also acknowledges the help provided by Mr. Kennedy Chiremba with data analysis.

Cover photo: Lin Berrie, Chilo Lodge, Mahenya CAMPFIRE Area

EXECUTIVE SUMMARY

In April 2014, the United States Fish and Wildlife Service (FWS) suspended the import of elephant trophies taken in Zimbabwe. In March 2015, the suspension was extended to include future hunting seasons. For it to reverse this decision, the FWS must make a finding that the killing of the animal whose trophy is intended for import would enhance the survival of the species in the wild. The Zimbabwe Parks and Wildlife Management Authority (ZPWMA) defended its position and provided the FWS with significant amounts of information and data related to elephant management. While this is acknowledged, the FWS was still of the opinion that its concerns had not been addressed, and identified six areas where additional information was required.

The CAMPFIRE Association has taken these into consideration, especially the issues regarding "excessive retention of generated funds by Rural District Councils", and how much revenue elephant sport-hunting provides and how much of that comes from U.S. hunters. This document addresses part of the information requested by the FWS under "Revenue Utilization" to demonstrate that by allowing the importation of trophies taken by U.S. hunters, the survival of elephants in Zimbabwe would be enhanced. To support this position, the CAMPFIRE Association outlines the evolution of the CAMPFIRE Program, describing the extent of its coverage and the impact that it has had on wildlife conservation in Communal Areas of Zimbabwe.

Evidence from the 2014 national elephant survey is provided to show that Zimbabwe has a substantial elephant population that is managed sustainably through an adaptive quota setting mechanism. Data from 9 CAMPFIRE Districts that participated in this audit of CAMPFIRE revenue shows that approximately 60% of the allocated elephant quota is utilized and that the majority of hunters (53%) originate from America. These hunters have contributed US$9 million towards the CAMPFIRE Program during the period 2010-2015 compared to US$8 million by the 40 other nations.

The income generated from trophy fees in the last 6 years (2010 – 2015) is approximately US$11.4 million of which elephant trophy fees contributed 65%, while a further US$4 million has come from the sale of hides, concession fees and other sundry income. These funds have been distributed to CAMPFIRE communities in various Wards who received approximately 57% (range 39% - 77%) of the Trophy Fees.

A standardized tool designed to gather baseline data has provided information on the physical and human parameters of the 9 participating Districts including how and on what the revenues from hunting have been utilized. At the District level, approximately 80% of the funds are used to support the administration and management of the CAMPFIRE program, including investment on law enforcement. In contrast, 55% of revenues provided to the producer Wards are channeled towards supporting social services such schools, clinics and other programs that benefit the community.

The cost of living with wildlife, and particularly elephants, is shown through providing data on the scale of crop damage (7,000ha over 6 years) that has a significant impact in terms of its monetary value on rural communities who face food insecurity and deep poverty (average income US$1 a day). 96 human lives were lost to wildlife attacks, with elephant accounting for more than half of those deaths. Yet despite these challenges, communities still retain a high level of tolerance for elephants, but this support is rapidly dissipating as a result of the loss of income from trophy hunting. This places almost two million hectares of wild land at risk, including the risk of increasing retaliatory killing through poisoning and illegal wildlife crime.

A way forward is discussed outlining how the resumption of trophy imports can offset the challenges facing the CAMPFIRE program and through this, enhance the conservation of elephant outside of the protected areas.

1 INTRODUCTION

In April 2014, the United States Fish and Wildlife Service (FWS) suspended the import of elephant trophies taken in Zimbabwe. The suspension was extended to include future hunting seasons on March 26, 2015. In May 2015, the Assistant Director (International Affairs) from the United States Fish and Wildlife Service (FWS), Mr. Byron Arroyo, wrote to the (then) Minister of Environment, Water and Climate outlining the reasons why the Service made a determination on 26th March 2015 that it was unable to authorize the import of elephant trophies taken in Zimbabwe in future. This is further explained in detail in the "Enhancement Findings for African Elephant Taken as Sport-hunted Trophies in Zimbabwe during 2014" published on the 7/22/14 (see reference FWS/AIA/DMA).

The FWS make the point that for it to authorize imports of sport-hunted African elephant trophies into the USA, the Service must be able to determine that the requirements of the special rule for the African elephant under the U.S. Endangered Species Act (ESA) have been met (see 50 CFR 17.40(e)(3)(iii)C). Specifically, the FWS must make a finding that the killing of the animal whose trophy is intended for import would enhance the survival of the species in the wild.

In defense of this, the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) provided the FWS with significant amounts of information and data related to elephant management. The FWS also communicated with various stakeholders including the Safari Operators Association of Zimbabwe (SOAZ), Zimbabwe Professional Hunters and Guides Association (ZPHGA), the CAMPFIRE Association, as well as individual professional hunters and outfitters, and independent scientific researchers.

The FWS acknowledged this input but still believed the data received did not fully address the questions regarding how elephants are managed in Zimbabwe, and how, by allowing the importation of trophies taken by U.S. hunters, that the survival of elephants in Zimbabwe would be enhanced. Six areas were identified where additional information was required. These are:

1: Updated Elephant Management Plan with formalized targets or indicators

2: Current elephant population data and the impact of hunting on the elephant population

3: Levels of poaching and prevention, including MIKE and PIKE data

4: Regulation and enforcement, particularly regarding the use of funds generated by U.S. hunters to support law enforcement and management

5: Sustainable use of elephant, specifically information of the levels of legal and illegal offtake

6: Revenue utilization from the hunting of elephant on Communal Lands, Safari Areas, Forestry and Private Conservancies.

The CAMPFIRE Association is not able to address these issues since these are the prerogative of the ZPWMA who is responsible for the conservation and management of elephant at the national level. Nonetheless, the CAMPFIRE Association is in a position to address part of the information requested under "Revenue Utilization", and contribute indirectly to the other five issues raised by the FWS.

2 Overview of Community Based Natural Resources Management in Zimbabwe

There are numerous reports and references in the literature that analyze the community based natural resources management program (CBNRM) in Zimbabwe. A more recent assessment can be found in the document prepared for USAID Zimbabwe by Mazambani and Dembetembe (2010).

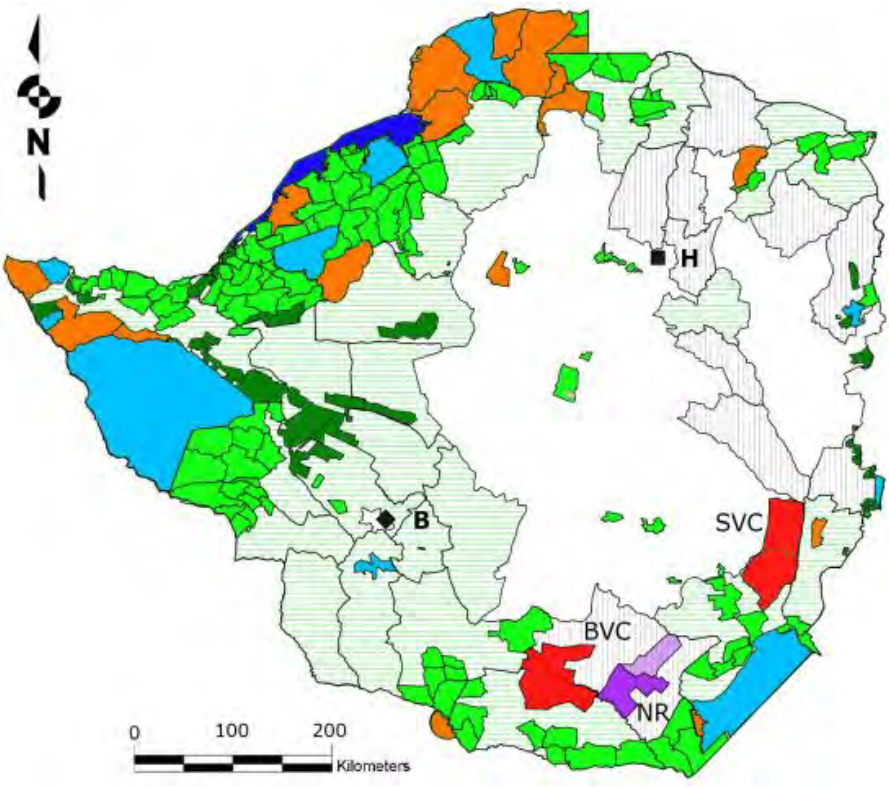

Figure 1: The location of CAMPFIRE areas (in light green) relative to National Parks (blue), Safari Areas (orange), Forest Areas (dark green) and Conservancies (red).

In 1982, the government amended the 1975 Parks and Wildlife Act to enable Rural District Councils (RDCs) to obtain 'appropriate authority' (AA) to utilize wildlife for commercial gain. The proposed changes were aimed at finding alternative forms of land use to subsistence agriculture on marginal lands. At that time, there was no particular model as to how this could happen without threatening the resource base. The (then) Department of National Parks and Wildlife Management (DNPWLM) began to explore options within the framework of an integrated landuse plan for the communal lands bordering National Parks and Safari Areas. This Act provided an opportunity to extend to communities in the Communal Lands the benefits that the private landowners enjoyed as a result of the 1975 Parks and Wild Life Act. This eventually led to the birth of Zimbabwe's Community Areas Management Program for Indigenous Resources (CAMPFIRE), which had far reaching impacts on wildlife productivity as well as the socio-economic wellbeing of CAMPFIRE communities.

2.1 The CAMPFIRE Program

The CAMPFIRE program was conceptually designed to focus on wildlife, woodlands, water, grazing resources, and grasslands. In practice, it focused on managing wildlife because of the direct monetary benefits which this resource offered to producer communities. The CAMPFIRE concept (see Murphree, 1993; Jones and Murphree, 2001) was developed in response to the realization that unless communities living adjacent to National Parks can obtain direct value from wildlife, they will not protect the wildlife. These communities would also need to have a much greater say in how those benefits would be derived and utilized.

While the 1982 amendment of the 1975 Parks and Wildlife Act permitted devolution of authority over wildlife to Rural District Councils (RDCs), the DNPWLM had meager resources to render the program operational (Jones and Murphree, 2001). The DNPWLM therefore turned to such institutions as the Center for Applied Social Sciences (CASS) at the University of Zimbabwe, which was assigned a socio-economic research and evaluation role; the WWF Multispecies Animal Production System Project in Zimbabwe; and the Zimbabwe Trust—an NGO focusing on rural development. These agencies had different but complementary objectives and together with the DNPWLM they formed the original CAMPFIRE Collaborative Group (CCG).

From 1986 to 1988, DNPWLM and its CCG partners engaged in discussions with selected communities and RDCs to identify locations for the inception of the program. The discussions focused on two main criteria, namely:

(a) voluntary interest in participation by communities and District Councils, and

(b) the presence of wildlife populations capable of producing sustainable and economically significant revenues.

The CCG work during this period also involved securing political support for the program, and attending to the demands of institutional and administrative detail associated with the conferment of Appropriate Authority (AA) by DNPWLM to RDCs, including the guidelines for awarding revenues and other benefits to communities from the the number of animals harvested within a local community's area each hunting season.

The agreed but non-binding guidelines stated that not less than 50% of the revenues was to be paid to the communities (as wards), not more than 35% was to be allocated to wildlife management (habitat management, fire control, monitoring, hiring of game scouts, etc.), and that 15% could be retained by the District Councils as an administrative levy.

Under the CCG, the CAMPFIRE Program attracted donor support and evolved through a number of phases.

- **Phase I** 1989-1994: (US$10m grant support – USAID and various partners). The period saw the initiation of CAMPFIRE and donor support was channelled towards the improvement of safari hunting in major districts that had been granted AA by 1995. This is also the period in which CAMPFIRE Association was established to coordinate the program.
- **Phase II** 1994-2003: (US$30m - USAID). This support focused on the capture of other natural resources (e.g. timber, sand, fishing, etc.). High-end non-consumptive tourism facilities were developed in Nyaminyami and Chipinge districts in the early 1990s, and 12 'joint venture' eco-tourism lodges were in operation in communal areas by 1999. Small grants were also provided to support the development of eco-tourism, crafts, and other community based natural resources management projects. Investments were also made in the production of natural resource products (e.g. fish in Beitbridge, Mwenezi; mopane worms in Bulilima Mangwe and Gwanda; honey in Binga, Kusile, Mutoko, and Nyanga districts) and many other products.
- **Phase III** 2003-2007: (US$165,000 – Ford Foundation). This period saw the cessation of major donor funding to CAMPFIRE, and it also coincided with larger macro level policy changes in

Zimbabwe after 2000, and the subsequent adverse socio-economic conditions. This led to the collapse of financial and technical support previously provided by the CCG.

- **Phase IV** 2007-present: (US$350,000 WK Kellogg Foundation). During this period, there was hyper-inflation, which led to the loss of income from hunting in real terms. This situation stabilised in 2009, when multiple foreign currencies were introduced. The CAMPFIRE Association maintained operations through a 4% levy paid by major hunting districts amounting to less than US$100,000 annually.

Following are key achievements in the development of CAMPFIRE (see Mazambani and Dembetembe, 2010):

I. Guruve and Nyaminyami, the first RDCs to be granted AA status, received their first hunting revenues in 1988. This had a dramatic effect in that many districts that are rich in wildlife applied for AA status and by the end of 1991 eleven additional districts had been granted AA status.
II. By the end of 1991, the 13 districts participating in the program collectively grossed US$1.1 million in revenue for that year.
III. By 1995 there were 23 districts participating in the program.
IV. The CAMPFIRE Association (CA), the secretariat for all districts with CAMPFIRE activities, was formed in 1992. Its primary objectives were to promote the wildlife interests of RDCs and to serve as an association of producer communities. The association played an important role in securing full government support for wildlife management in communal lands so that CAMPFIRE became a recognized conservation program.
V. Between 1995 and 2000 CAMPFIRE not only witnessed growth in terms of attracting more districts, but also in building the capacity of the RDCs, and in diversifying their activities to include other natural resources. The number of RDCs that were awarded AA status to manage wildlife increased from 2 in 1988 to 27 in 1996. Institutional capacity building grants via United States Agency for International Development (USAID) funding were secured for 24 districts from 1996 to 1999.
VI. Between 1989 and 2001, CAMPFIRE revenues amounted to almost USD $ 20.3 million, 97% of which originated in the original 13 districts. Of this, 49% was disbursed to communities (118 wards with over 121,500 households), 20% used for wildlife management, just over 12% retained by the District Councils as a levy, 3% used for other expenses (including the then 1.5% levy to the CAMPFIRE Association), and about 15% was retained by the RDCs pending allocation (Khumalo, 2003). Almost 90% of this income came from safari trophy hunting.
VII. The period from 2001 to 2003 witnessed two significant developments in CAMPFIRE:
    a. formation and registration of community trusts as a strategy for devolving decision making and control over resources from the RDCs to community groups, and
    b. a concerted drive to diversify CAMPFIRE. Twenty-eight non-wildlife-based community projects received financial support through CAMPFIRE compared to only five wildlife-based community projects.
VIII. At its peak in 2002, CAMPFIRE encompassed 53 districts with AA, though only 23 of these really functioned as intended, while only 12 received regular income from wildlife.
IX. The Association has spearheaded the revision of CAMPFIRE revenue sharing guidelines to improve the community's share of income from 50% to 55% of hunting income. A Direct Payment System was developed in 2006 to ensure that communities receive their income on

time. A standard hunting contract has been developed to improve hunting administration by RDCs.

In summary, CAMPFIRE protects about 50,000 km^2 (12.7%) of land in Zimbabwe (Figure 1). Benefits from wildlife and other incomes encompass:

- Approximately 777,000 households (25%) in Zimbabwe benefited from CAMPFIRE directly or indirectly;
- Approximately 25% of Zimbabwe's people are receiving incentives to conserve wildlife and prevent anti-poaching through CAMPFIRE;
- Between 1994 and 2012, CAMPFIRE generated US$39 million of which US$21.5 million was allocated to communities and used for resource management (22%), household benefits (26%), and community projects (52%).
- About 90% of CAMPFIRE revenue comes from hunting with elephant hunting contributing up to 70% of annual revenue.
- Based on Constitution of the CAMPFIRE Association as amended in 2007, all major RDCs use CAMPFIRE revenue sharing guidelines, and in these districts revenue is paid directly into community controlled bank accounts by safari operators using the following guideline:
  - RDC fees (41%), CAMPFIRE Association Levy (4%), and CAMPFIRE community (55%).

In the following sections, we describe how the income from the hunting of elephant is generated and utilized using data from 9 Districts (Beitbridge, Binga, Bulilima, Chipinge, Chiredzi, Hwange, Mbire, Nyaminyami, and Tsholotsho) for the period 2010 and 2015[1]. For each of these areas we provided:

- Total number of elephant hunted
- Total revenue earned from elephant (and other trophy species)
- How the revenue is spent on various management and social services

We also provide examples of community project support and the impact of human-wildlife conflict over this period.

3 Sustainable Use and Utilization of CAMPFIRE Resources and Revenues

The CAMPFIRE program relies almost exclusively on income from hunting. Since 2009, the number of RDCs where hunting is practiced has decreased, mostly because of the prevailing socio-economic conditions that have resulted in high levels of poverty. This is seen as the key driver of the escalating levels of illegal wildlife crime, and poaching of elephant in particular. Maintaining elephant numbers outside of the protected areas is important to their overall conservation, and the reason why Zimbabwe regards the sustainable utilization of all wildlife as critical to its national conservation strategy. The hunting of elephant in CAMPFIRE areas thus plays an important role and is the major source of income to communities in these areas.

[1] Hurungwe provided partial information, as explained in relevant parts of the report

3.1 NUMBERS, DISTRIBUTION AND REGIONAL TRENDS OF ELEPHANT IN ZIMBABWE

Elephants are distributed in four main regional populations in Zimbabwe, namely, Northwest Matabeleland, the Sebungwe, the mid-Zambezi Valley, and the South-East Lowveld**.** Crude ecological densities vary between 2.16 elephant/km^2 in Northwest Matabeleland and 0.46 elephant/km^2 in the Sebungwe region**.**

Elephant densities in the Communal Areas varies from 1.50 elephant/km^2 in the south-east Lowveld to 0.06 elephant/km^2 in the Sebungwe region. Overall it is estimated that 5,000 elephants reside in Communal Areas and occupy approximately 16,000km^2 (Table 1, Zimbabwe Elephant Management Plan: 2015-2020).

Table 1. Numbers and densities of elephants in the four regions of elephant range within Zimbabwe. (Source: Zimbabwe National Elephant Management Plan 2015 - 2020, see Dunham *et. al.* 2015a, b, c and d).

Name of Region & Area	Area (km2)	Estimated Number of Elephants	Density of Elephants/km^2
NW Matabeleland	**24,989**	**53,991**	**2.16**
Hwange National Park	15,180	45,846	3.02
Matetsi Complex	4,402	4,843	1.10
Forest Areas	2,332	1, 101	0.47
Communal Lands	**3,075**	**2,201**	**0.72**
Sebungwe	**15,529**	**3,407**	**0.22**
Parks & Wildlife Estate	6,234	2,894	0.46
Forest Areas	261	16	0.06
Communal Lands	**9,034**	**497**	**0.06**
Mid-Zambezi Valley	**16,014**	**11,656**	**0.73**
Parks & Wildlife Estate	12,257	9,752	0.80
Communal Lands	**3,757**	**1,904**	**0.51**
South East Lowveld	**8,835**	**13,037**	**1.48**
Gonarezhou NP & Malapati SA	5,118	11,120	2.17
Save Conservancy	3,496	1,585	0.45
Communal Lands	**221**	**332**	**1.50**
Mozambique Border	*1,574*	*0*	*0*
National Total*	**65,367**	**82,091**	**1.23**
Parks & Wildlife Estate	43,191	74,455	1.75
Forest Areas	2,593	1,117	0.43
Save Conservancy	3,496	1,585	0.45
Communal Lands	**16,087**	**4,934**	**0.18**

* The survey did not include Bubye Valley Conservancy or the Tuli Safari Area and some other small populations that likely add another 1,000 elephants to the estimated total for the country. The area surveyed in Mozambique is not included in the national total or in the South-East Lowveld total area.

3.2 ELEPHANT QUOTA ALLOCATION AND UTILISATION

Zimbabwe is allocated an export quota of 500 elephants (1,000 tusks) in terms of the CITES regulations (see https://cites.org/eng/res/10/E-Res-10-10R16.pdf). In practice, Zimbabwe adopts an adaptive management strategy that sets the overall elephant quota at up to 0.75% of the overall population. This implies that the maximum national quota should not exceed 600 animals at the current population estimate of 80,000 elephants. However, to maintain trophy quality at approximately 35kg (77lbs), the national quota is set at 0.3 – 0.5% of the overall population i.e. 240 – 400 elephants, assuming an average offtake of 60% (R.B. Martin, pers. comm.).

The approach applied to the CAMPFIRE areas is to set quotas that use parameters that are higher than these national guidelines. This strategy is adopted to provide incentives to local communities that reside in areas where high levels of human-elephant conflict is recorded, and to facilitate benefits to local communities through sport hunting.

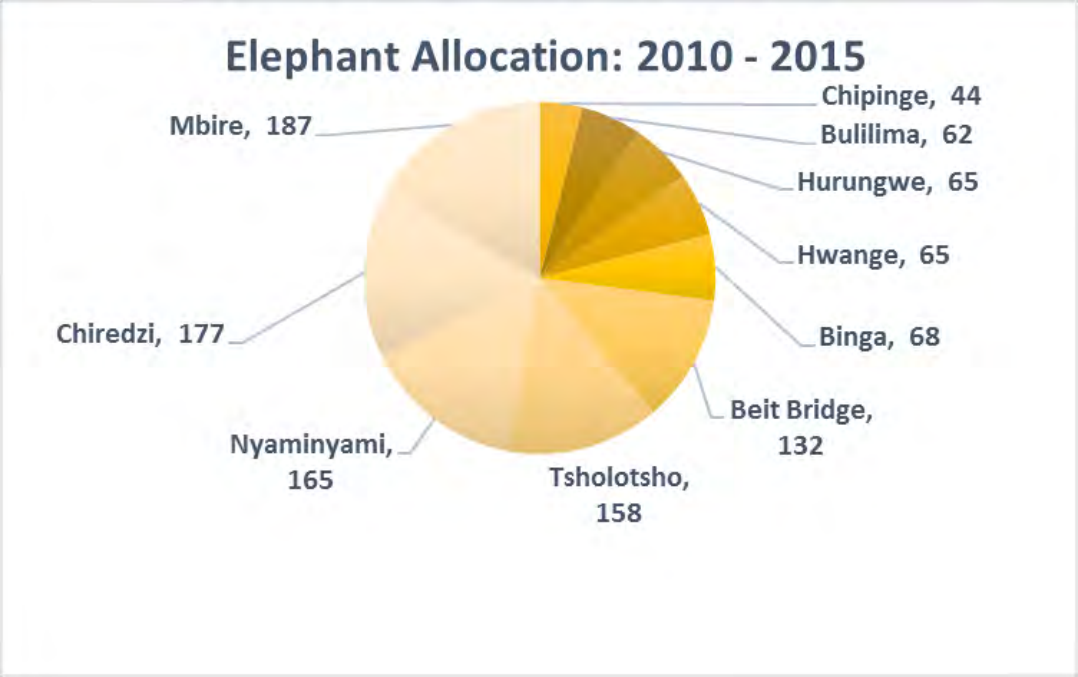

Figure 2: Total allocation of trophy elephant (N=1087) to nine major CAMPFIRE areas over a 6-year period

A total of 1,087 elephants have been allocated on quota to nine major CAMPFIRE areas since 2010 (Figure 2). This equates to 180 elephants per year. The distribution of this quota among the nine CAMPFIRE areas is dictated by the relative density of elephants in the neighboring protected areas and those residing in the CAMPFIRE areas. Tsholotsho, for example, that borders the southern boundary of Hwange National Park, was allocated 158 elephants (or 26/year) while Hwange, Binga and Hurungwe CAMPFIRE Areas that do not border onto areas of high elephant densities receive approximately 10 elephants/year.

The historical trend of utilization of the elephant quota (667 elephant or 61% of the quota allocation) is provided in Figure 3.

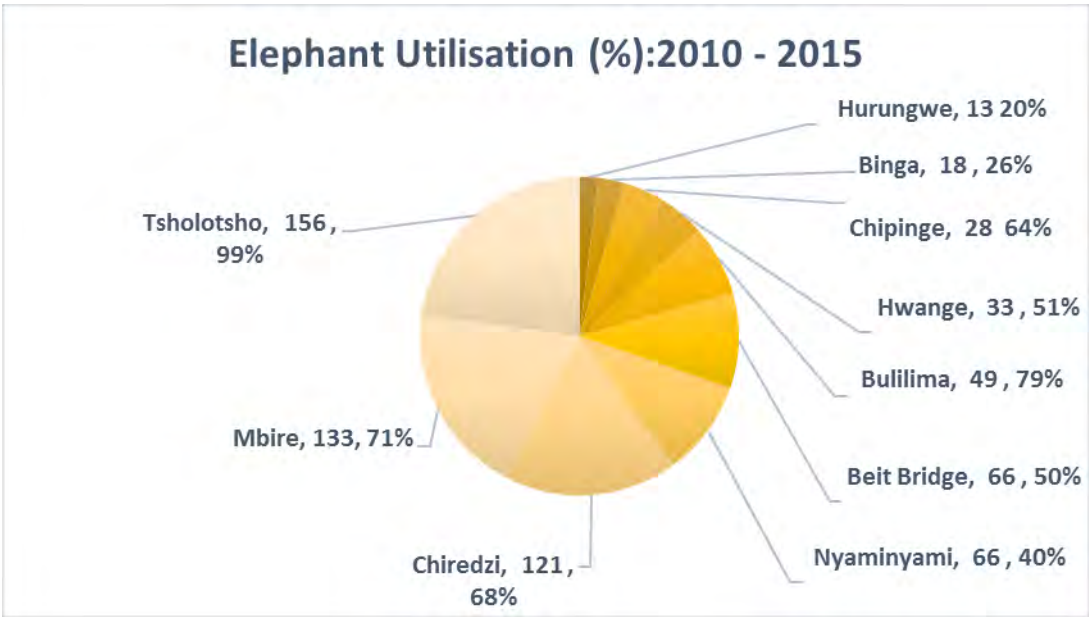

Figure 3: Overall utilization (%) of elephant quotas in nine major CAMPFIRE Areas over a 6-year period

Over the six years, Tsholotsho (99%), Mbire (71%) and Chiredzi (68%) have successfully utilized their allocated quotas while areas such as Hurungwe (20%) and Binga (26%) have not performed as well. The origin of clients hunting in these areas is summarized in Table 2. Over the 6-year period 1702 clients (average 284/year) have hunted in the seven CAMPFIRE Areas (excluding Binga and Hurungwe for which no data are available). Of these 897 clients (c.150/year or 53%) originated from the USA and 461 (c.77 or 27%) from Europe.

Table 2: Origin of hunting clients visiting the major CAMPFIRE Areas :2010 – 2015. Note. No data are available for Binga and Hurungwe

Origin of Clients	USA	Europe	Africa	Asia	South America	Oceania	Canada	Middle East	Total	Average
Beit Bridge	172	36	10	3	14	9	3	0	247	41
Bulilima	17	9	0	0	7	0	0	4	37	6
Chipinge	17	5	0	0	1	0	0	0	23	4
Chiredzi	151	52	57	69	0	0	0	0	329	55
Hwange	20	14	1	5	4	4	1	1	50	8
Mbire	213	90	36	0	10	16	3	0	368	61
Nyaminyami	273	218	24	1	18	21	8	0	563	94
Tsholotsho	34	37	3	4	1	1	1	4	85	14
Total	**897**	**461**	**131**	**82**	**55**	**51**	**16**	**9**	**1702**	**284**
Percentage	**53%**	**27%**	**8%**	**5%**	**3%**	**3%**	**0.9%**	**0.5%**		
Average/year	150	77	22	14	9	9	3	2		

3.3 Income Generation from Sport Hunting of elephants and other Key Species

3.3.1 Income received by Outfitters

To fully account for earnings in the hunting sector, the Reserve Bank of Zimbabwe, in collaboration with all the relevant stakeholders, introduced the Tourism Receipts Accounting System (TRAS) that required all outfitters to submit returns listing the revenue generated for hunting activities. This system has been in place for several years but required manual analysis of the data to extract the information. In January 2015, a web-based system (TRAS2) was introduced which links Safari Operators, Zimbabwe Parks and Wildlife Management Authority, Taxidermists, Shipping Agents, International Marketing Agents and Reserve Bank. Under this system all authorized hunts are registered allowing for the capture of hunting data (origin of clients, value of trophies and hunts, area hunted etc.), monitoring hunting quota utilization and tracking hunted trophies (Chitauro, 2016). The Exchange Control Division of the Reserve Bank of Zimbabwe and the ZPWMA are now able to:

1. Assess regional price differentials of similar hunts and the reasons thereof;
2. Present TRAS2 systems updates and reports to the users including international marketing agents;
3. Engage with international marketing agents of sport-hunting;
4. Obtain relevant insights on governing of the hunting sector; and
5. Come up with an effective mechanism to fully account for export proceeds from the hunting sector.

Outfitters that operate hunting concessions in CAMPFIRE Areas are required to deposit copies of the TRAS2 form with the CAMPFIRE Office in their respective RDCs/Wards. Each Office is therefore able to extract data on daily rates, trophy fees and other incidental revenues. Figure 4 provides a summary of the income by country of origin. This data confirms the major role of American hunters to the CAMPFIRE program who contribute 52% of the overall income.

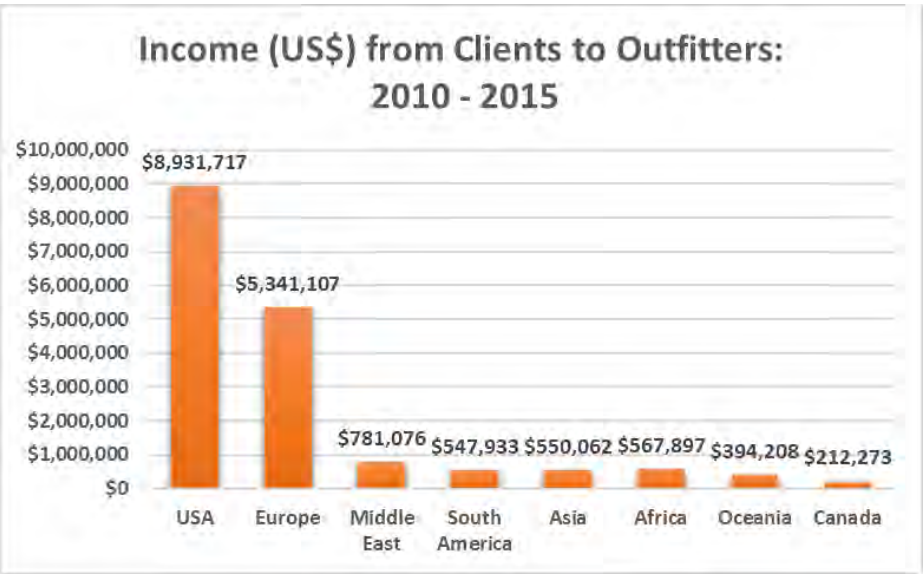

Figure 4: Contribution of hunting clients to the CAMPFIRE Program

3.3.2 Income from Trophy Fees

The data for the total amount of revenue generated for elephant, buffalo, leopard, hippo, crocodile and lion between 2010 – 2015 (approximately US$11 million) is shown in Figure 5.

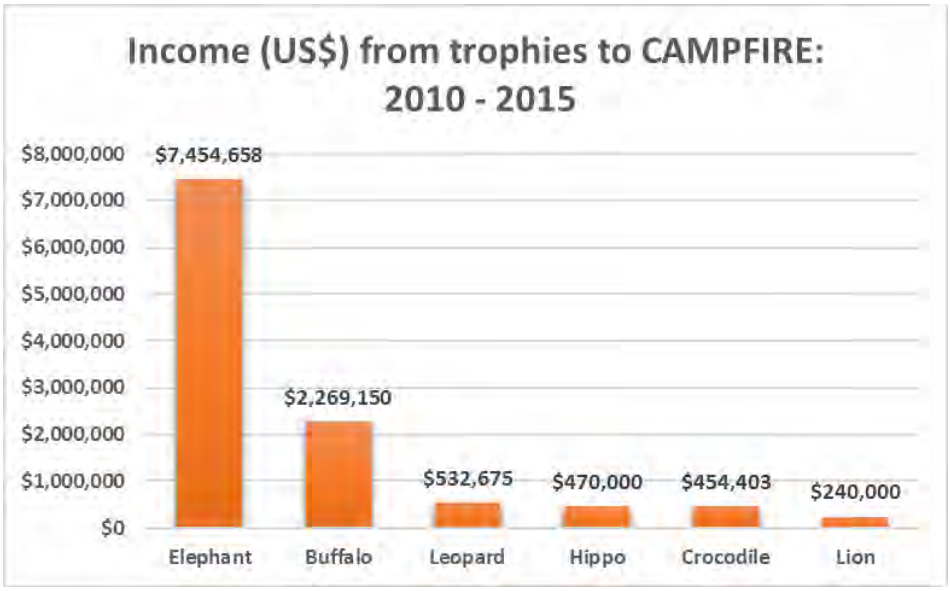

Figure 5: Income (US$) generated from the sale of key trophies

The importance of the income from elephant is clear from these data. Trophy fees from elephant account for 64% of all fees generated from the key species (approximately US$1.2 million/year). Buffalo (20%) are ranked second while leopard, hippo and crocodile contribute approximately 5% each. Noteworthy here is the low contribution of lion (approximately 2%). This low level of income generation is partly a result of the impact of the lion import suspension into the USA and Europe, decreasing quota allocations and decreasing offtake levels brought about by the recently imposed lion age hunting regulations. By comparison, the 897 American clients who hunted in CAMPFIRE Areas in the six-year period paid US$9 million in trophy fees and daily rates. Other nationalities, contributed US$8 million.

3.3.3 Other Income to RDCs

RDCs can generate income for other revenue streams, notably receiving a percentage of the daily rate, concession fees, bed night levies from photographic camps and from the lease/rent of equipment (Figure 6). The eight RDCs for which data are available generated approximately US$4 million from these revenue streams. Excluded here are revenues that could have been earned from the sale of ivory recovered from problem animal control (PAC) and natural deaths, and from the distribution of meat estimated at 550,000kg over the 6-year period.

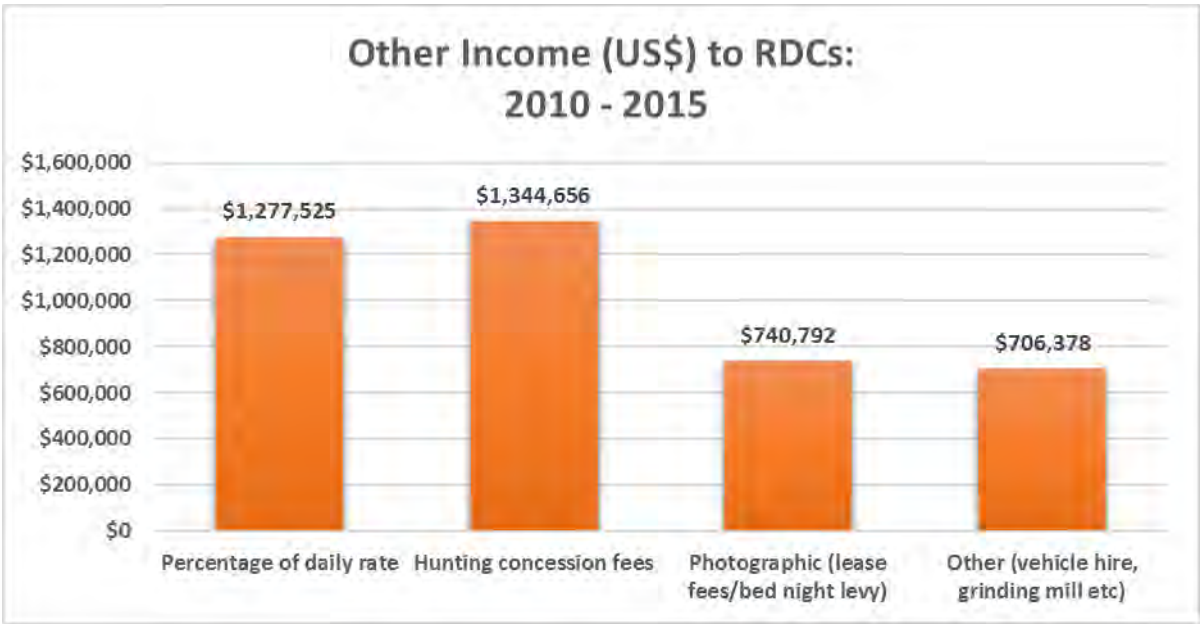

Figure 6: Income (US$) accruing to the RDCs from related income revenue streams

3.3.4 Benefit sharing: RDC vs Wards

Communities at the Ward level receive funds directly from the outfitter utilizing their area, except for those in Beitbridge and Hwange who are paid from dedicated CAMPFIRE accounts with the respective RDC. These funds are generated through trophy fees and income from the sale of hides, concession fees etc. (Table 3).

Over the last 6 years, the income generated from trophy fees is approximately US$11 million while a further US$4 million has come from the sale of hides, concession fees and other sundry income. The agreed split of these funds is that not less than 55% of the revenues is paid as Ward dividends, not more than 35% is allocated to the RDC for wildlife management (habitat management, fire control, monitoring, hiring of game scouts, etc.), and 15% is retained by the RDC as an administrative levy. Some RDCs do not consider all these revenues as "CAMPFIRE Funds" and segregate trophy fees from the other revenues. On average, the CAMPFIRE District Wards received 42% (range 23% - 66%) of the ***combined Concession and Trophy Fees***, but the Wards received approximately 58% (range 26% - 77%) of the ***Trophy Fees*** (Table 3).

Table 3: Summary of the benefit sharing (US$) of hunting related income between RDCs and Wards: 2010 - 2015

Districts	Income to RDC from trophy fees	Income to RDC from Hides, Concession fees etc.	Income to Wards	% All Revenue share: RDC vs Wards	% Trophy Fee Revenue share: RDC vs Wards
Beit Bridge	$657,458	$12,298	$370,228	55%	56%
Binga	$299,800	$364,224	$162,062	24%	54%
Bulilima	$521,700	$46,337	$403,685	71%	77%
Chipinge	$349,500	$139,259	$135,572	28%	39%
Chiredzi	$1,848,600	$181,420	$1,339,678	66%	72%
Hwange	$394,000	$105,131	$237,245	48%	60%
Mbire	$3,022,250	$54,420	$1,740,714	57%	58%
Nyaminyami	$1,883,853	$1,319,772	$1,132,204	35%	60%
Tsholotsho	$2,136,000	$1,990,200	$1,109,956	27%	52%
Total	**$11,420,886**	**$4,213,061**	**$6,631,342**	**42%**	**58%**

4 USE OF FUNDS BY RDCS AND WARDS

The CAMPFIRE Association prepared two templates in conjunction with district based CAMPFIRE Managers that were used as tools to audit the flow of income from safari hunting for the period 2010-2015, and how these funds are used to benefit CAMPFIRE communities. The tools gathered information on the following:

Tool 1: Data related to Rural District Councils

1. Area of district (either sq. km / ha) and total number of wards
2. The income generated by elephant, lion, leopard, hippo and crocodile i.e. Allocated quota (Number), Trophy fee, number hunted (offtake), percentage quota utilization.
3. The origin of the hunters (i.e. USA, Germany etc.) and the value of the safaris extracted from the TRAS2 forms where available. This data provided an indication of the income generation by outfitters.
4. The gross income that CAMPFIRE Districts received from the hunting and photographic activities (i.e. trophy fees, daily rates, concession fees, photographic fees, meat and any other sundry income).
5. Human resources employed at the District level (i.e. number of Wildlife Managers, number of Game Scouts, equipment (e.g., vehicles, patrol equipment etc.), patrol days per year.
6. The use of the funds to support:
    a. Meetings and Administration (i.e. the “15%” of funds)

   b. Law enforcement (RDC Game scouts, equipment, operational costs etc.)
   c. Compensation schemes (burial expenses, education, payment for hospital expenses etc.)
7. Management activities (fire guards, rehabilitation of water supplies, anti-poaching, problem animal control etc.)
8. Social services i.e. support to clinics, schools etc.
9. Other expenses not related to the above.

Tool 2: Data related to Wards

The following data was summarized for each ward in the District. The data collected at the Ward level was supported with evidence of income and expenditure e.g. copy of accounts, photographs of infrastructure etc.

1. Name of ward and ward number
2. Name and size of hunting area(s)
3. Name and number of village(s) and number of household beneficiaries
4. Income received at Ward level from hunting income, income generating projects from wildlife and other income (grinding mills etc.)
5. Allocation and use of income at Ward level for
   a. Meetings and Administration
   b. Wages/salaries
   c. Compensation schemes (e.g., burial expenses, education)
   d. Management activities (e.g., fire guards, rehabilitation of water supplies, anti-poaching, problem animal control.)
   e. Project running costs
   f. Social services (e.g. clinics, schools, grinding mills, roads, fencing, equipment, boreholes/pumps)
   g. Food security
   h. Direct cash benefits (i.e. to individuals, households, if applicable)
   i. Other
6. Human resources employed at the Ward level (i.e. number of Wildlife Managers, number of Game Scouts, equipment (e.g., vehicles, patrol equipment etc.), patrol days per year.
7. Number of Human and Wildlife Conflict cases by year and type (human death, injury, livestock, infrastructure)
8. Population estimates of major species (where available)

4.1 Profile of Rural District Councils

The data presented here has been extracted from Tool 1. For ease of understanding, these are presented below as follows:

- Characteristics of CAMPFIRE Districts
- Human resources and patrol effort
- Investment in equipment
- Expenditure

4.1.1 Characteristics of the CAMPFIRE Districts

The main parameters of the 10 RDCs (including Hurungwe) that provided data for this analysis are provided in Table 4. These RDCs represent approximately 9 million hectares of which 3.7 million hectares fall under the CAMPFIRE program. These RDCs have entered into agreements with both hunting and photographic outfitters who have invested in 26 hunting camps and 8 photographic camps respectively.

Altogether there are 224 Wards represented in these areas of which 104 are under the CAMPFIRE program. Excluding Hurungwe, there are 737 villages with a minimum of 85,847 households. This represents a community of approximately 600,000 people assuming that the average household is represented by 7 family members.

Table 4: Baseline features of the nine CAMPFIRE Districts

District	Total Area (Ha)	CAMPFIRE Area (Ha)	Hunting camps	Photo camps	Number of Wards	Number of Campfire Wards	Number of Villages	Number of Households
Beit Bridge	1,269,700	310,300	4	1	15	8	15	5,070
Binga	1,230,800	364,000	1	0	25	21	51	19,474
Bulilima	203,300	203,300	1	0	22	13	51	7,767
Chipinge	522,300	40,800	1	1	33	2	15	951
Chiredzi	1,710,239	481,004	5	0	32	9	52	9,461
Hurungwe	1,967,834	529,800	2	1	26	7	N/A	N/A
Hwange	376,963	376,963	2	1	20	18	93	13,980
Mbire	781,000	898,000	6	0	17	9	328	12,302
Nyaminyami	369,931	140,000	3	3	12	6	62	5,875
Tsholotsho	833,600	410,000	2	1	22	11	70	10,967
Total	**9,265,667**	**3,754,167**	**26**	**8**	**224**	**104**	**737**	**85,847**

4.1.2 Human resources and equipment employed at the District Level

Each of the RDCs employ staff to manage the CAMPFIRE program in their Districts. The number of people employed and the roles that they play is dependent on the level of income generated by the CAMPFIRE program. The core function of these staff is to monitor wildlife related activities in their respective areas, notably recording and dealing with human and wildlife conflict, coordinating meetings at the Ward level and monitoring outfitter hunting activities.

Most RDCs employ Game Scouts to conduct routine patrols and undertake basic law enforcement activities. In most cases this is low key since the CAMPFIRE program relies on members of the community to report incidents of wildlife crime, and any other matters related to wildlife in their respective Wards and villages.

Table 5: Summary of Human Resources Employed at District Level.

District	Wildlife Managers	Wildlife Officers	Game Scouts	Employees	Patrol Days
Beit Bridge	2	0	0	76	0
Binga	2	0	9	0	48
Bulilima	1	0	4	5	24
Chipinge	1	0	10	0	365
Chiredzi	2	0	8	8	91
Hurungwe	1	1	4	0	31
Hwange	1	0	6	0	144
Mbire	2	0	21	50	255
Nyaminyami	1	0	23	46	112
Tsholotsho	1	0	10	30	162
Total	**14**	**1**	**94**	**215**	**1231**

All RDCs have invested in various equipment that are employed on wildlife management activities. The number and type of equipment depends on the level of income and sophistication of the CAMPFIRE program. For example, the relatively wildlife endowed Mbire RDC has invested in a VHF radio system and camping gear for its scout force.

Table 6: Examples of equipment used in the CAMPFIRE Districts.

District	Vehicle (4 x 4, pick up etc.)	Truck	Tractor	Trailer	Grader/Tow Grader	Motor cycle	Bicycles	Radio Base Station	Radio hand sets	Rifles	Tents	Other
Beit Bridge	2	-	-	-	-	-	-	-	-	7	-	-
Binga	1	-	-	-	-	-	-	-	-	-	-	-
Bulilima	1	1	-	-	-	-	2	-	-	-	-	-
Chiredzi	2	-	1	1	1	-	-	-	-	-	-	-
Chipinge	1	-	-	-	-	-	-	-	-	7	-	-
Hurungwe	1	-	-	-	-	-	-	-	-	-	-	-
Hwange	1	-	-	-	-	3	-	-	-	7	1	-
Mbire	3	-	-	-	-	2	20	6	15	-	23	8
Nyaminyami	1	-	-	-	-	-	-	-	-	27	-	10
Tsholotsho	2	-	-	-	-	-	-	-	-	-	-	-
Total	**15**	**1**	**1**	**1**	**1**	**5**	**22**	**6**	**15**	**48**	**24**	**18**

4.1.3 RDC expenditure

CAMPFIRE related expenditure over the 6-year period is approximately US$6.2 million (or US$1.0 million/year). Figure 7 represents a breakdown of how the RDCs utilize the income from hunting to support the CAMPFIRE Program in their respective areas. These can be broken down into Administration, Management and Law Enforcement which accounts for approximately 80% of the expenses (or approximately US$835,000/year). The remaining 20% are used to support various community benefits and are aggregated under Social Services, Compensation and Other[2] activities. This equates to approximately US$220,000/year.

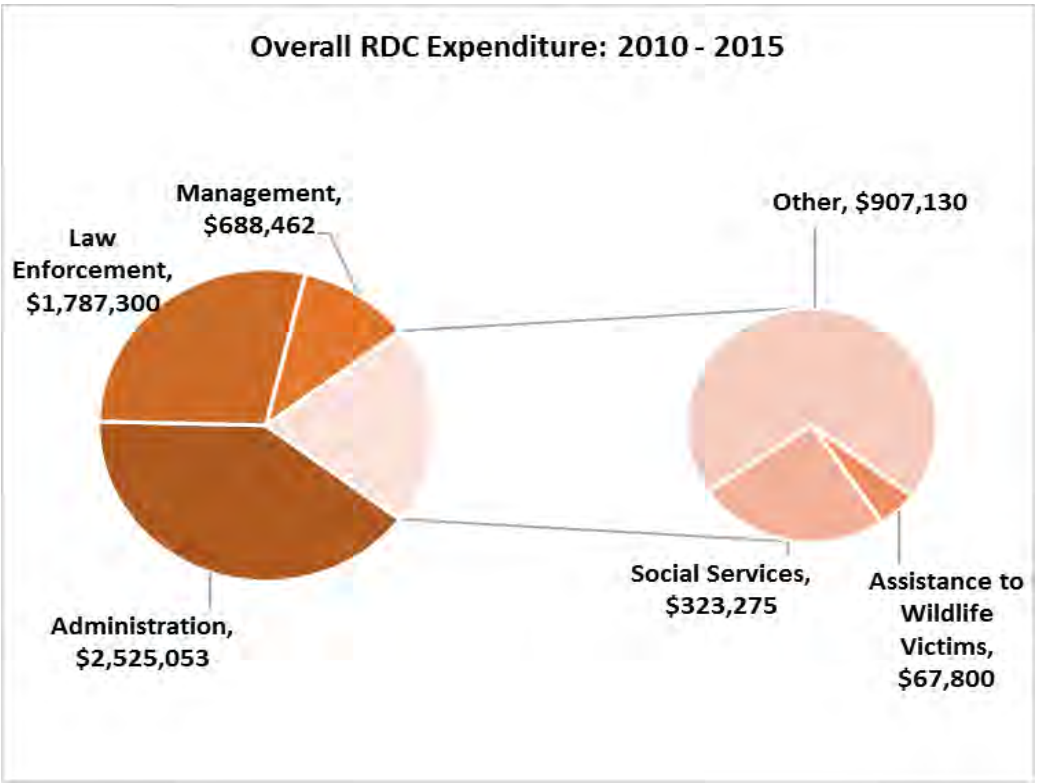

Figure 7: Breakdown of expenditure at the District level on CAMPFIRE program activities

A strategy employed by most RDCs is to invest more in activities related to the management and administration of the CAMPFIRE program rather than on social services. On average, 40% is spent on administration, 20% of law enforcement and 11% on management related expenses while 6% is allocated to support social services. There is no official national compensation scheme, however, RDCs and Wards (including outfitters) assist people and families who are injured or killed by wildlife.

4.2 Profile of CAMPFIRE Producer Wards

[2] The "Other" activities have been skewed by the inclusion of a number of expenses registered by Mbire RDC that include construction and maintenance of staff housing, promoting and managing a community cattle production scheme and purchasing vehicles and office equipment.

The data presented here has been extracted from Tool 2. For ease of understanding, these are presented below as follows:

- Human resources and patrol effort
- Human and Wildlife Conflict
- Investment in equipment
- Expenditure

4.2.1 Human Resources, Patrol Effort and Equipment

Table 7 represents the decision that the CAMPFIRE producer Wards elect to invest in their respective CAMPFIRE Programs. Each Ward is required to establish a Wildlife Committee to which at least 7 members are elected from the villages located in that ward. Each Wildlife Committee employs several people either as ward based monitors or as Game Scouts. This workforce is responsible for approximately 2.6 million hectares of land and represents the 85,847 households that reside in the 737 villages.

The decision to invest in equipment is dictated by the level of income that each producer Ward receives, and the ability of the Ward to service and maintain the equipment in the long term. The records kept at the Ward level under estimate the number of patrol days (minimum 3,002/year) achieved.

Table 7: Average number of staff employed at the Ward level, patrol effort and investment in equipment

District	Number of Wildlife Committee members	Number of Employees paid by community	Number of Game Scouts paid by community	Patrol days per year	Equipment (e.g., vehicles, tractors, grinding mills)	Concession Area (Ha)	Number of Villages	Number of Households
Beit Bridge	66	1	3	152	1	324,300	15	5,070
Binga	7	-	-	-	-	364,000	51	19,474
Bulilima	-	-	100	7	-	193,984	51	7,767
Chiredzi	56	32	-	-	3	N/A	52	9,461
Chipinge	9	5	5	1,584	4	9,400	15	951
Hwange	49	-	-	-	-	342,750	93	13,980
Mbire	76	90	48	1,259	19	898,000	328	12,302
Nyaminyami	45	30	12	-	-	140,000	62	5,875
Tsholotsho	77	2	-	-	1	410,000	70	10,967
Total	**385**	**161**	**168**	**3,002**	**28**	**2,682,434**	**737**	**85,847**

4.2.2 Human and Wildlife Conflict and Problem Animal Control

Communities living in CAMPFIRE areas are on the front line and are required to deal with wildlife problems almost on a daily basis. Table 8 below provides a summary of the magnitude of human and wildlife conflict (HWC) recorded over a 6-year period (2010 – 2015) in 9 CAMPFIRE Districts.

Conflict with wildlife falls under two areas: crop damage and livestock deaths. While there are many other wildlife species responsible for crop damage (baboons, monkeys, bushpig, rats, quelea birds etc.), elephant are considered the greatest threat and problem.

Although the data are incomplete, it is estimated that 7,000ha of crops were destroyed by elephant during the 6-year period under review. It is not possible to accurately place a monetary value to this because crop production varies greatly from one year to the next, and from one region to another. It is important however to take into consideration that the impact of crop destruction in the highly prone drought areas and areas of low rainfall (e.g. Beit Bridge, Binga, Tsholotsho) is more acute than in areas where crop production may be higher. To place this into perspective, the national average maize yield is estimated at 300 – 600kg/ha, and the minimum cash value is US$180/ton[3]. The approximate value of the maize lost is therefore US$500,000 – US$1.0 million. Applying this to livestock losses, the average price of cattle is US$400 – US$700/head depending on the time of year and condition of the livestock. Lion and crocodile are responsible for most cattle deaths and at these prices, the value of stock lost to these predators is US$500,000 – US$1.0 million. Hyena equally destroy cattle but are more likely to kill small livestock (goats, sheep). At US$75 – US$125/head, the minimum cost of predation on small livestock is estimated at US$170,000 – US$300,000 (Table 8).

Table 8: Summary of the extent of human – wildlife conflict recorded in CAMPFIRE Wards: 2010 - 2015

District	Crop Damage (estimated Ha)			Livestock killed (cattle, goats, sheep)				Human deaths
	Elephant	Hippo	Buffalo	Lion	Leopard	Crocodile	Hyena	
Beit Bridge	268	-	1	3	-	-	30	4
Binga	26	35	-	1	-	32	29	7
Bulilima	522	-	-	5	-	-	231	-
Chiredzi	18	9	-	122	-	21	-	2
Chipinge	22	10	-	5	-	7	-	7
Hwange	461	-	-	71	2	15	-	2
Mbire	3,878	475	1,146	426	52	416	1,870	53
Nyaminyami	1,216	49	102	59	6	9	-	13
Tsholotsho	1,085	-	20	175	19	-	211	8
Total	**7,495**	**578**	**1,269**	**867**	**79**	**500**	**2,371**	**96**
	9,342ha			**3,817**				
Cost (US$)	**@300kg/ha*$180/ton**		**$504,473**	**Cattle@$400 - $700/head**		**$546,800 - $1,040,400**		
	@600kg/ha*$180/ton		**$1,008,947**	**Small livestock@$75 - $125/head**		**$177,825 - $296,375**		

Communities who live with wildlife also pay the ultimate price and 96 people have lost their lives and others injured after encountering dangerous animals. Crocodile and hippo are responsible for most human deaths and injuries but there are many incidents where elephant have killed and maimed people who were tending their fields or traversing wildlife areas.

[3] Note: the official price for maize is approximately $350/ton but sellers rarely receive this price from the millers and other interested buyers.

Table 9 summarizes the incidents of problem animal control and illegal activities recorded in the 9 major CAMPFIRE RDCs (data extracted from The Proceedings of the CAMPFIRE workshop, Gandiwa et. al. 2014).

Table 9: Summary of problem elephant destroyed and through illegal activities in 9 CAMPFIRE Districts

	2009	2010	2011	2012	2013	2014	Total
Conflict	250	283	340	208	295	478	**1854**
PAC	55	66	41	33	36	66	**297**
Illegal	7	14	12	11	16	19	**79**

It is not unexpected that local communities will seek to mitigate these losses either through retaliatory killings (this applies mostly to the carnivores) or through removal of problem animals. With respect to elephant, it is important to understand the relationship between trophy hunting, problem animal control and illegal offtake. The interactions amongst all three variables are not simply additive. For example, a relatively small offtake of problem animals can have a significant influence on the mean tusk weight of hunting trophies taken from the population and, hence, the income derived from hunting. Martin (pers. comm.) uses a population simulation model (Craig et. al. 2011) to carry out an analysis to examine these interactions. This model assumes that Problem Animal Control (PAC) is selective, and that most of the elephants killed are males between the ages of 13-36 years old and females between the ages of 22-42 years old. Moreover, more males are killed than females (5:1).

Martin demonstrates that the combined effect of trophy hunting quotas and level of PAC shows that in a scenario where there is no PAC, trophy hunting quotas can be set ranging from 0.1 - 0.6 % of the population. However, as PAC increases, so the trophy hunting quotas must be decreased to maintain trophy quality. The magnitude of the changes caused by relatively minor increments in PAC are highly significant. The modelling shows that increases in the trophy hunting quotas and PAC offtake causes only a minor drop in the rate of increase of the population which remains above 4% per annum, however, if the PAC offtake exceeds 1% of the population, then hunting quotas should not exceed 0.1% of the population. Unless these ratios are maintained, there is a real risk that the elephant populations will decline with the consequential loss of income from sport hunting.

Currently Zimbabwe adheres to quotas set at 0.3 – 0.4% of the population, and slightly higher in the CAMPFIRE areas. The PAC levels shown in Table 9 do not approach these critical thresholds, however, close attention needs to be paid to trophy quality and age (see discussion of elephant hunting in Mbire - in The Proceedings of the CAMPFIRE workshop, Gandiwa et. al. 2014).

4.2.3 Beneficiaries of CAMPFIRE Income at the Ward Level

The beneficiaries of revenues from the CAMPFIRE program are the community's resident in the producer Wards. However, the volume of people residing in these areas precludes providing individuals with direct dividends since the value of such dividends would be meaningless. The CAMPFIRE wards have therefore elected to invest in projects that provide social services to the whole community and only in special circumstances are dividends paid out for food security and direct cash benefits.

Table 10: Examples of Social Services funded in selected CAMPFIRE areas from Ward Revenues generated from sport hunting: 2010-15

District	Project
Beitbridge	Rehabilitation of schools, clinics and protection of irrigation schemes
Bililima	Rehabilitation of 3 clinics and 3 primary schools, hall, fencing of fields and rehabilitation of lodge, community truck, tractor, dam repair machinery.
Chipinge	3 grinding mills, lorry, teachers houses, community office, shop
Chiredzi	Clinic, teachers' houses, primary school, community-grinding mill, Police sub-office, piped water and electrification of clinic.
Hurungwe	Construction of classroom block Nyamakate Secondary, Maintenance of Nyamakate bridge. Purchase of tractor tube, payment of carpenters, Roofing Chipfuko Primary School and Huyo Secondary School, CAMPFIRE Ward tractor major service, Purchase of Treasurers bicycle, Payment of Nyamakate Clinic guard, 7 resource monitors allowances, 26 bag cement Chitindiva, Kabidza , Manyenyedzi and Mawau schools for toilets construction, renovation Karuru School (5 bags cement), and toilet construction, Chitindiva Clinic toilet construction, Roofing Chikova Secondary School, Purchase of buiding materials Chikova Secondary Block, Painting Dete Primary School, Building toilets Makwiye school, Building shed Mupuse school, Roofing Bhashungwe primary school, Sanyati Bridge camp renovation, Purchase of Cement Tashinga Primary School, 6 pairs uniform for resource monitors, Purchase of 20 bags cement Chisipite Primary School, Purchase of tires for Ward tractor, Bridge maintenance
Mbire	Clinic, nurse's houses, office, storerooms, 14 classrooms, 7 teachers houses, grinding mill, school office, wildlife administration offices, 2 hand pump boreholes, water piping, toilet, water storage tanks, 2 tractors, a basic tourist camp with 4 chalets;
Nyaminyami	Tillage tractors, renovation of dispensary at clinic, nurse's house. Construction of Mayovhe classroom block, 3 grinding mills, Teacher's house, Jongola school. School bursaries x 3 students at Seke Teacher's College. Renovation of pre-schools x 2. Negande: Rehabilitation of water pipeline, grinding mill. Nebiri: Chikuro primary block, rehabilitation of Harudziva water pipeline. Kasvisva: Rehabilitation of water pipeline to supply water to Kasvisva clinic, Kasvisva Secondary school block. Msampa: Teacher's house, Majazu primary, renovation of ward warehouse; Kanyati: Cement for teacher's house renovation.
Tsholotsho	Classroom blocks and furniture (Sihazela, Mlevu, Mtshwayeli, Ntulula, Dibutibu, Gwaai, Nkwizhi, Zibalongwe, Malindi, Mgodimasili, Phelela, Mpilo, Jimila, and Kapane Primary schools), 2 F14 cottages, 10 sewing machines (Dibutibu Secondary school), 7km piped water system for Thembile primary school, Sikente Clinic, Tshitatshawa and Jowa clinics construction, fencing of Madlangombe clinic, 10 water engines, borehole drilling and repairs and repair kits, Lister diesel engines for 6 villages in ward 21 and at Sihazela Line in ward 1, grinding mills, solar water pumping in wards 1, 2 and 4. 2 pickup trucks for wildlife monitoring purchased in 2015.

Figure 8 summaries the distribution of the US$5.4 million that Wards in 9 CAMPFIRE areas received over the 6-year period under review (2010 – 2015). As with the District expenditure, the Ward Wildlife Committees allocate 42% of the funds (US$2.2 million) for administrative functions (i.e. Meetings and Administration, Wages and Salaries, Management and Projects) and 55% of the funds (US$2.9 million) to

community benefits. Most of the funds are allocated to social services (US$2.4 million) that support schools, clinics and other infrastructure that benefit the whole community. Examples of this support are provided in Annex 1.

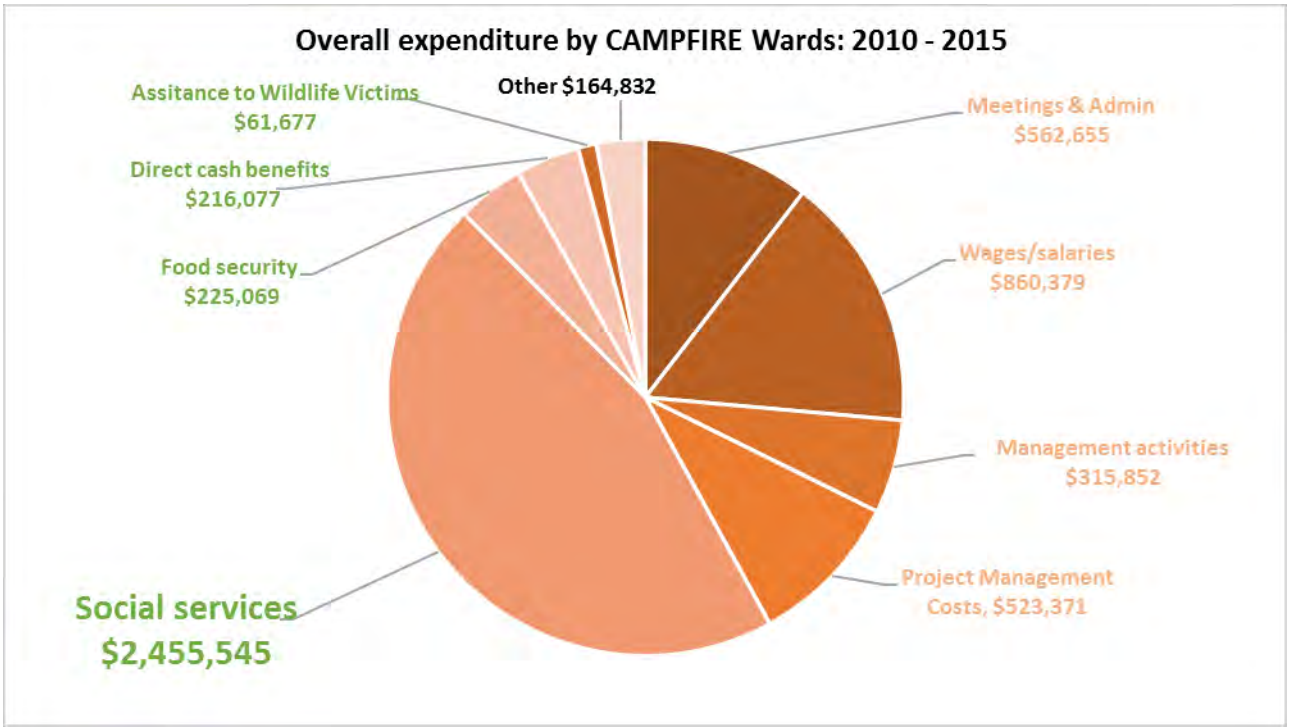

Figure 8: Allocation of Ward Campfire funds

5 Impact of the Suspension of Elephant Trophy Imports to the United States on THE CAMPFIRE Program

The income to CAMPFIRE from the sustainable use of elephants has been declining since 2013, with 2014 registering a significant drop following the announcement of the ban on ivory imports into America (Figure 9). Although the hunting industry responded by seeking alternative markets (e.g. Russia, Middle East), this trend continued through 2015 and unconfirmed reports suggest that the decline has continued in 2016.

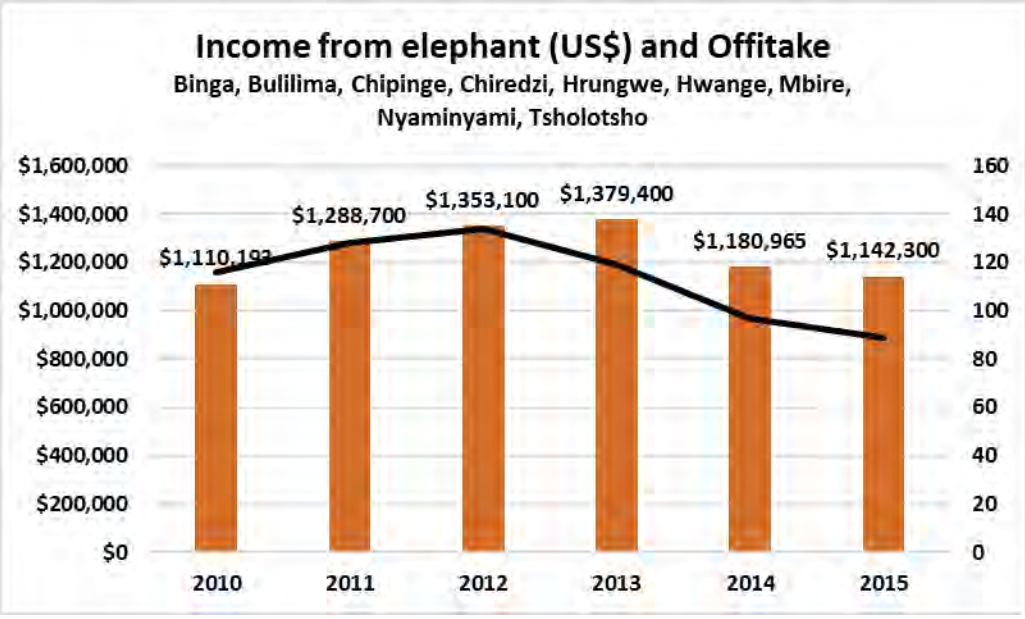

Figure 9: Annual income (US$) and offtake of elephants in 10 CAMPFIRE Districts

It is difficult to show concisely how the American ban on importation of elephant ivory from Zimbabwe has contributed to the decline in CAMPFIRE revenue and how hunting has enhanced the conservation of this species, due to the nature of the hunting industry in the CAMPFIRE areas. The hunting sector is integrated across a wide range of socio-economic activities and withdrawing one segment adversely affects a range of other wildlife based activities. Several indicators are provided here to demonstrate this:

1. The US suspension of ivory imports from Zimbabwe has had a significant impact on CAMPFIRE, and resulted in the cancellation of 108 out of 189 (57%) elephant hunts in all major districts initially booked by US citizens in 2014. The net impact of this was a reduction of CAMPFIRE income for all areas from US$2.2m in 2013 to US$1.7m in 2014. A similar pattern prevailed in 2015 (US$1.6m), and a further decline is anticipated in 2016 where outfitters struggled to sell elephant safaris and those that did had to heavily discount their prices.
2. The key trophy species (elephant, buffalo, leopard, hippo, crocodile and lion) contribute approximately US$1.2 million/year to CAMPFIRE revenues. Elephant account for 64% of these fees.

3. Quota utilisation of elephant prior to the ban did not exceed 60% of the CAMPFIRE quota allocation.
4. American hunters make up 53% of the clients in CAMPFIRE areas.
5. CAMPFIRE producer Wards receive on average 57% of all trophy revenues.
6. The CAMPFIRE hunting industry in the 9 RDCs covered in this analysis directly supports 104 producer Wards, representing 737 villages or 85,847 households.
7. The CAMPFIRE program employs managers, officers and game scouts at both the District and Ward level who are responsible for monitoring wildlife based land use activities in their areas and these are directly paid from safari hunting income.
8. Both RDCs and Wards invest in a variety of equipment that benefits communities and wildlife management. The operational and maintenance costs for this equipment are drawn from safari hunting income.
9. RDCs utilise 80% of the CAMPFIRE revenues to support administration and management of the program. 20% is invested in global social services that benefit communities at the District level.
10. Producer Wards, representing approximately 2.6 million hectares, bear the cost of living with wildlife. Under the 6-year period under review, elephants are responsible for the destruction of approximately 7,000ha of croplands in the 9 Districts. The minimum cost of this in terms of food production is estimated at US$500,000 – US$1.0 million.
11. Producer Wards have elected to invest 55% of their dividends from CAMPFIRE revenues in social services (schools, clinics etc.). 74% of these revenues are generated through trophy fees where elephant play a significant role.
12. Although CAMPFIRE communities suffer most from elephant crop damage, the number of elephant destroyed as problem animals is well within acceptable limits and with few exceptions, has little or no impact on population numbers.

In conclusion, the CAMPFIRE program relies almost exclusively on revenues generated through hunting. These revenues cannot be replaced through alternative wildlife based activities. This places almost two million hectares of wild land at risk, including the risk of increasing retaliatory killing through poisoning and illegal wildlife crime.

Wildlife in Communal Lands is under pressure. Removing any benefits will tip the balance and disgruntled CAMPFIRE communities will turn to pastoralism and unsustainable agricultural practices, thereby reducing wildlife habitat. The suspension of trophy imports is effectively encouraging communities to become willing tools for poaching – a forced abandonment of CAMPFIRE.

6 The Way Forward

The ZPWMA has recently developed and approved its 5-year Elephant Management Plan (ZPWMA, 2015). This plan recognizes that if elephants are to survive in the future, they must have a value, both to the governing authorities and to the local people. Unless the local communities, who live closest to elephants, are tolerant of this charismatic yet destructive species, it is unlikely that they will survive in the long term.

The Elephant Management Plan recognizes that "*regulated sport hunting converts wildlife into assets for the benefit of local people and the country as a whole. Wildlife can be a most valuable asset and in turn empower local communities and provide basic necessities. When it is viewed as a valuable asset, wildlife becomes an economically competitive land use in Zimbabwe, which leads to habitat preservation instead of habitat destruction and conversion to agriculture or livestock production*."

The presence of regulated hunting can also reduce illegal activities, and private outfitters' lease agreements are being reviewed to include anti-poaching as an obligation of the concessionaire. Trophy hunting revenues are vital to facilitating not only law enforcement activities but also general wildlife management. Alternative wildlife land use practices, e.g. eco-tourism, cannot generate sufficient revenues to cover these costs, and certainly not to justify wildlife as a land use outside of protected areas.

Hunting can generate revenues under a wider range of scenarios than eco-tourism, including in remote areas lacking infra-structure, attractive scenery, or high densities of viewable wildlife. Consequently, elephant and other wildlife populations will be negatively affected through reduced conservation efforts arising from low funding and reduced goodwill from the communities.

CAMPFIRE has been widely regarded as one of Africa's most successful contemporary conservation initiatives. Hunting of elephants plays an integral part in promoting CAMPFIRE as it permits the residents of communal lands to share in the benefits generated by wildlife utilization on those lands.

As shown above, the bulk of CAMPFIRE's revenue comes from hunting, with elephant hunting contributing more than 60% of annual revenue. The current revenue sharing guidelines require safari outfitters to pay revenue directly into community-controlled bank accounts and this has had a positive impact on community attitudes to wildlife conservation. These funds have been used by RDCs and producer Wards to promote wildlife conservation, but despite its achievements, CAMPFIRE still faces fundamental challenges.

The most crucial of these challenges is developing strategies to accommodate the increasing human populations averaging 16-20 people per km^2 in some key CAMPFIRE areas. Understandably, the focus of these households is on food security requiring the extension of basic agricultural schemes and increased livestock numbers. Such land uses are incompatible with wildlife based land use.

Other CAMPFIRE challenges include: (i) the downturn in Zimbabwe's economy and tourism sector post-2000, (ii) great reliance on consumptive trophy hunting and less focus on other uses and non-consumptive uses of natural resources due to viability considerations, and (iii) low re-investment in development, fixed assets, human capital, and management and protection of wildlife in CAMPFIRE areas.

Despite these challenges, CAMPFIRE stands very high in the agenda of Zimbabwe's Government, and an evaluation dedicated to improving the program is ongoing and should be finalized by the end of 2017. Zimbabwe's Government recognizes that the survival of wild animals depends entirely on those among whom they live. Unless local people want to save them, wildlife will be poached to the point where just a few remain in fortified reserves. CAMPFIRE is meant to avoid this and the future of wildlife in communal areas rests on the success of this program.

The hunting of elephants, under sustainable and well-regulated conditions, has the potential to raise adequate funds to support itself and other species in CAMPFIRE areas. For these reasons, Zimbabwe confirms its commitment to the sustainable use of elephant and other wildlife in its Elephant Management Plan, and recognizes the role that elephant play in the CAMPFIRE program.

7 ANNEX 1: EXAMPLES OF SOCIAL SERVICES PROJECTS SUPPORTED BY CAMPFIRE FUNDS AT THE DISTRICT AND WARD LEVEL

CHINONGE WARD Binga District: Clinic under construction and example of Ward bank statement.

Results 1 - 11 of 11

Account Statement
Account : 103000008919 Currency : USD
Customer : 174696 Name : CHINONGE WARD CAMPFIRE FUND
Address 1 CHINONGE WARD CAMPFIRE FUND
Address 2 CHINONGE WARD CAMPFIRE FUND
Address 3 BOX 23 BINGA

Value date	Description	Reference	Post date	Debit	Credit	Amount
	Balance at Period Start				3,030.45	
16 SEP 14	Cash Withdrawal Charge 06011533Z06 NEVER NDLOVU	TT14259HDYZH	16 SEP 14	-29.30		3,001.15
16 SEP 14	Cash Withdrawal 06011533Z06 NEVER NDLOVU	TT14259HDYZH	16 SEP 14	-2,930.00		71.15
01 OCT 14	Ledger Fees	103000008919-2014093	30 SEP 14	-12.50		58.65
01 OCT 14	Service Fees 103000008919	103000008919.SERVICE	30 SEP 14	-2.00		56.65
01 NOV 14	Ledger Fees	103000008919-2014103	31 OCT 14	-12.50		44.15
01 NOV 14	Service Fees 103000008919	103000008919.SERVICE	31 OCT 14	-2.00		42.15
10 NOV 14	TRANSFER LODZI HUNTERS	FT143140JG30\TRE	10 NOV 14		2,800.00	2,842.15
10 NOV 14	TRANSFER	FT143150JG40\TRE	11 NOV 14	-2,800.00		42.15
10 NOV 14	TRANSFER LODZI HUNTERS	FT143150JG41\TRE	11 NOV 14		2,800.00	2,842.15
01 DEC 14	Ledger Fees	103000008919-2014113	29 NOV 14	-12.50		2,829.65
01 DEC 14	Service Fees 103000008919	103000008919.SERVICE	29 NOV 14	-2.00		2,827.65
	Balance at Period End				2,827.65	

Agriculture & Development Sector Of Zimbabwe, Harare AGRITEX 16 DEC 2014 ENQUIRIES BINGA BRANCH

Beit Bridge CAMPFIRE Program: Masera Secondary School Classroom Block and Staff Housing

Tsholotsho RDC: CAMPFIRE Vehicles, Tshitatshawa Clinic under construction in Ward 8, Tsholotsho CAMPFIRE District Wildlife Committee, Hunting Camp, and solar powered 7km piped water scheme

8 REFERENCES

Chitauro. 2016. Status of the hunting sector in Zimbabwe. Internal report prepared by the Director of Exchange Control om behalf of the Reserve Bank of Zimbabwe. Unpublished.

Craig G.C., Martin, R.B. and Peake, D.A. 2011. The Elephants of Northern Botswana: Trophy Hunting, Population Dynamics and Future Management. Study funded by the Conservation Trust Fund (CTF) of the Ministry of Environment, Wildlife and Tourism, Botswana. Awaiting publication.

Dunham, K.M. 2008. Detection of anthropogenic mortality in elephant *Loxodonta africana* populations: a long-term case study from the Sebungwe region of Zimbabwe. Oryx, 42, 36– 48.

Dunham, K.M. Mackie, C.S. and Nyaguse, G. 2015a. Aerial Survey of Elephants and other Large Herbivores in the Zambezi Valley (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 118 pp.

Dunham, K.M., Mackie, C.S., Nyaguse, G. and Zhuwau, C. 2015b. Aerial Survey of Elephants and other Large Herbivores in north-west Matabeleland (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 126 pp.

Dunham, K.M., Mackie, C.S., Nyaguse, G. and Zhuwau, C. 2015c. Aerial Survey of Elephants and other Large Herbivores in the Sebungwe (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 111 pp.

Dunham, K.M. & van der Westhuizen, H.F. 2015d Aerial Survey of Elephants and other Large Herbivores in Gonarezhou National Park and Save Valley Conservancy (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 115 pp.

Gandiwa, E., Jonga, C. and Mufute, O. (editors). 2014. *Proceedings of the CAMPFIRE stakeholders' workshop: Towards the development of a new Elephant Management Plan and Policy*. Harare, Zimbabwe, 17–18 November 2014.

Jones, B. and Murphree. M. 2001. The Evolution of Policy on Community Conservation in Namibia and Zimbabwe. In: *African wildlife and livelihoods: The promise and performance of community conservation*. (Eds. D. Hulme and M. Murphree). James Currey, Oxford.

Khumalo, A. 2003. CAMPFIRE Monitoring and Evaluation Data, 2001. WWF SARPO, Harare.

Mazambani, D. and Dembetembe, P. 2010. *Community Based Natural Resource Management. Stocktaking Assessment: Zimbabwe Profile*. Publication produced for review by the United States Agency for International Development (USAID). It was prepared by DAI in collaboration with World Wildlife Fund, Inc. (WWF).

Murphree, M.W. 1993. Communal Land Wildlife Resources and Rural District Council Revenues. CASS Occasional Paper No.53/93. 10pp.

ZPWMA. 2015. Zimbabwe National Elephant Management Plan (2015-2020). Ministry of Environment, Water and Climate. Harare, Zimbabwe. 84 pages.

From:	Patience Gandiwa
To:	"Vannorman, Tim"
Cc:	"Geofreys Matipano"; patoddgconservation@zimparks.co.zw; cites@zimparks.co.zw
Subject:	RE: Re-submitting Elephant Hunting and Revenue Accruing to Local Communities
Date:	Tuesday, January 31, 2017 9:29:51 AM

Dear Tim

Many thanks for your feedback-much appreciated!

With regards,

Patience

From: Vannorman, Tim [mailto:tim_vannorman@fws.gov]
Sent: 31 January 2017 3:23 PM
To: Patience Gandiwa <pgandiwa@zimparks.co.zw>
Cc: Geofreys Matipano <gmatipano@zimparks.co.zw>; patoddgconservation@zimparks.co.zw
Subject: Re: Re-submitting Elephant Hunting and Revenue Accruing to Local Communities

Dear Patience,

Thank you for re-sending the information. I did receive the material earlier and am reviewing it. I was hoping to finalize our decision before now, but other issues keep coming up. As soon as we can finalize our decision, I will let you know.

Sincerely,

Tim

On Tue, Jan 31, 2017 at 3:13 AM, Patience Gandiwa <pgandiwa@zimparks.co.zw> wrote:

> Dear Tim
>
> I am resubmitting the document on the role of Trophy hunting of the African Elephant (Loxodonta africana) in supporting Zimbabwe's CAMPFIRE programme. We have not yet received feedback or acknowledgement of receipt thereof
>
> Thank you very much for your support,
>
> Sincerely
>
> Patience Gandiwa
> INTERIM CITES COORDINATOR-ZIMBABWE
>
> For DIRECTOR GENERAL

From: Vannorman, Tim [mailto:tim_vannorman@fws.gov]
Sent: 08 December 2016 9:42 PM
To: Patience Gandiwa <pgandiwa@zimparks.co.zw>
Subject: Re: Zimbabwe's Lion NDF Submission-Final Report

Dear Patience,

Thank you for the e-mail and the telephone call. I appreciate the information and will get back to you as soon as possible.

Sincerely,

Tim

On Mon, Dec 5, 2016 at 4:08 AM, Patience Gandiwa <pgandiwa@zimparks.co.zw> wrote:

> Dear Tim
>
> Greetings and hope you received the email I sent earlier on the submission of the Lion NDF Report by the Republic of Zimbabwe. Reference is made to the email below
>
> Kindly note that a section in Chapter 9 of the report describing the Socio-economic findings had been omitted from the version that was sent through to you…(I am still looking forward to receive acknowledgement of receipt thereof, which I haven't received). The section should have been mistakenly deleted in the editing process, and now is has been put back in the document
>
> The corrected final version is attached herewith.
>
> Sincerely,
>
> Patience Gandiwa (Interim CITES Coordinator)
> For DIRECTOR GENERAL-ZIMPARKS
>
> **Patience Gandiwa**| International Coordinator
> **Transfrontier Conservation Areas Unit**| Botswana South Africa Zimbabwe
>
> Zimbabwe Parks and Wildlife Management Authority (ZIMPARKS) Headquarters
> Corner Borrowdale Road and Sandringham Drive|Alexandra Park|Harare
> P.O Box CY 140|Causeway|Harare|Republic of Zimbabwe
> Tel + 263 (0)4 707 626|Cellphone: +263 (0)772 916988|
> E-
> Mail:**patience.gandiwa@gmail.com |pgandiwa@zimparks.co.zw**

From: Patience Gandiwa [mailto:pgandiwa@zimparks.co.zw]
Sent: 29 November 2016 1:08 PM
To: 'tim_vannorman@fws.gov' <tim_vannorman@fws.gov>
Cc: 'Geofreys Matipano' <gmatipano@zimparks.co.zw>; 'pmupazviriho@environment.gov.zw' <pmupazviriho@environment.gov.zw>
Subject: Zimbabwe's Lion NDF Submission

Dear Tim

Greetings from southern Africa and hope this email finds you well in North America.

Kindly find attached letter and document-being Zimbabwe's Non-Detriment Findings for *Panthera leo*

Looking forward to your feedback,

Patience Gandiwa (Interim CITES Coordinator)
For DIRECTOR GENERAL-ZIMPARKS

Patience Gandiwa| International Coordinator
Transfrontier Conservation Areas Unit| Botswana South Africa Zimbabwe

Zimbabwe Parks and Wildlife Management Authority (ZIMPARKS) Headquarters
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Mail:**patience.gandiwa@gmail.com** |**pgandiwa@zimparks.co.zw**

--
Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

***Sign up* for our e-newsletter to learn how we're working around the globe to protect species and their habitats!**

--
Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

***Sign up** for our e-newsletter to learn how we're working around the globe to protect species and their habitats!*

From:	Patience Gandiwa
To:	"Vannorman, Tim"
Cc:	"Geofreys Matipano"; patoddgconservation@zimparks.co.zw
Subject:	Re-submitting Elephant Hunting and Revenue Accruing to Local Communities
Date:	Tuesday, January 31, 2017 3:25:36 AM
Attachments:	Cover letter to USFWS-Revenue Accruing to Communities-ZW.pdf Role of Trophy hunting of Elephants.pdf

---

Dear Tim

I am resubmitting the document on the role of Trophy hunting of the African Elephant (Loxodonta africana) in supporting Zimbabwe's CAMPFIRE programme. We have not yet received feedback or acknowledgement of receipt thereof

Thank you very much for your support,

Sincerely

Patience Gandiwa
INTERIM CITES COORDINATOR-ZIMBABWE

For DIRECTOR GENERAL

From: Vannorman, Tim [mailto:tim_vannorman@fws.gov]
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AFRICAN CONSERVANCIES

ANTI-POACHING REPORT

2016

AFRICAN CONSERVANCIES

African Conservancies was established in 2014, and the first project was in Nyaminyami Rural District Council, the Omay Communal Land hunting area. AC comprises Carbon Green International, the relevant Rural District Council and the relevant community in which the conservation plan falls. A trust has been formed that will include these parties as beneficiaries.

The primary goal of AC was to locate a suitable area to form, build and manage a sustainable community conservation area. The Omay 1 hunting area between the Ume and Sengwa Rivers was selected as a perfect phase one. The criteria of selection include: being communal land hunting area, falling within the CGI REDD+ project area, and having a suitable residual resource and forest land to be able to resuscitate.

OBJECTIVES OF AFRICAN CONSERVANCIES

The primary objective of AC was to select an area within the REDD+ project, (stretching from Binga to Kanyemba in the communal areas) and partner the community and council. The belief in building sustainable conservation areas and in particular enabling communities to truly and directly benefit from this sustainable utilization is at the core of this project.

The immediate goals with the Ume River Community Conservation Area were to reduce hunting offtake and reduce poaching. The hunting offtake was reduced in 2014, 2015 and in 2016. For example, 2014 saw twelve buffalo being hunted from the quota of thirty five. In 2015 we had a buffalo offtake of ten from the possible thirty five. Having done our own numbers on the ground, our offtakes are very conservative and the population increase through relocation due to no hunting pressure is clearly visible, with far better trophy quality and substantial numbers increases across species.

Anti-poaching began in 2014, with six CGI game scouts based out of Manyuli camp close to the Gokwe boundary and six scouts based out the Ume hunting camp. We decided at the close of 2014 that the anti-poaching was not having enough effect on the structured elephant poaching, so in March 2015 Steve Wentzel and I decided that it needed direction and management. So beginning in March, I personally came into the Omay to oversee and manage the anti-poaching teams.

I immediately amalgamated the two teams and brought in Mr Charles Khumalo to head up this new team. Charles is ex-Zimbabwean National Army, a brave, dedicated leader, who has commanded not only the respect of this unit, but myself and the community at large.

We started in-house training incorporating firearms training, tactical house clearances, offensive tracking and in the process building a more intense unit that could cope with a far more aggressive outlook to the poaching problems. This immediately began to produce results.

This team has increased in size and area of operations; in 2015 additional capacity was attained to eighteen personnel and there are four fixed bases of operations.

Our focus has been on hardened, armed poachers with the theory that the fish, snare, and dog bushmeat poachers would be dealt with in the process of eliminating the more "serious" elements.

AREA OF OPERATIONS

Though we in theory are based in the Omay communal land, our operations stretch into Gokwe, around Chizarira and Charisa and Binga. Due to our operations being outside of the National Parks we predominantly operate with Zimbabwe Republic Police details and RDC game scouts. Our entire unit has now been accepted as Police reservists and we are awaiting our Police force numbers.

It has been agreed that our unit, having been accepted as reservists, will establish a dedicated reaction team within the police force that I shall train and manage. The first in-house courses in conjunction with Police and ourselves are set to begin early 2017. We hope to achieve better safety, operational cohesion and teamwork by implementing standardized Standard Operating Procedures and insight into our intelligence and operations work.

OPERATIONS

In August 2015 Charles Khumalo was tasked with resurrecting and bettering the information gathering networks, as reacting to shots fired is almost a pointless affair. The poaching teams shoot toward last light and fifteen minutes from shots fired the elephant's face is chopped off and the poachers are moving. There is no way to track them fast enough to catch them up at this stage. The needle-in-a-haystack affair is almost pointless for arresting poachers. There are over two million acres of bush to patrol and it would require an army to do this.

The informant/intelligence network has had significant effect; we had over one hundred and twenty people on our books at the beginning of 2015. We have over one hundred and eighty at this time. Over ninety five percent of our arrests have occurred and been made possible through the capturing or purchasing of intelligence that is then collated, vetted and prioritized.

Our full-time Intel man has proven time and time again that our focus on the "funnies" department produces results. By taking away the safe zones of the community that the poaching teams utilized in the past, they are now severely limited as to where and how to carry out illegal operations without being compromised. We incorporate many layers into this department.

EDUCATION

Educating people and school children to the value of their wildlife and ensuring the CAMPFIRE funds trickle down and are utilized correctly is essential. In doing this we ask communities to embrace the teams' desire to protect their valuable resources and to understand that without the participation of the community in our protection efforts there is very little hope for the future as the community only has their renewable resources to consistently rely on.

PAC

We make sure the community is protected from the wildlife and ensure that we promptly carry out PAC (Problem Animal Control) operations. We carry out PAC work in predominantly a non-

lethal method, fireworks, implementation of beehive projects on elephant entrance routes, reinforcing stock pens against lions, and teaching methods of pushing unwanted wildlife back into the conservation areas - and supporting communities to do this.

UNDERCOVER OPERATIONS

There are continual rolling undercover operations taking place. These again vary in style and target various criminal elements. The “sales” department, “purchase” department and “poaching” department. The covert teams pose as the above, leading to sting operations carried out in conjunction with the police. These teams actively work their way into the ivory trade in the area, building up intelligence and “networking” the illegals and setting up stings that protect the identities and integrity of undercover teams and Confidential Informants. These ops by nature are very testing and have a high danger component that takes a certain type of individual to carry out with a high degree of success.

ENTRIES AND EXITS

The poaching teams generally originate from south of Nyaminyami district, with a few (under 5%) from Zambia to the north. Over 85% of them have to enter and exit the areas and cover substantial distances generally on foot. A substantial amount of time is put into understanding these routes, mapping them, walking and timing them, watching them physically or with trail cameras or in establishing informants to monitor the routes. By doing so we have formed a very good idea of which team is on the way in or has come into the area and where to intercept them on the way out or set up sting ops to catch them on exit.

GENERAL PATROLS

General cross-graining for spoor is carried out between intel operations, with the entries and exits work helping to minimalize the amount of area that requires coverage. We will also utilize this quiet time to carry out work on lesser criminal activities like bushmeat and fish poaching.

SUCCESFUL OPERATIONS

25 January. Confidential Informant (CI) resulted in a night operation on a poacher’s home resulting in an arrest and recovery of an illegal firearm used for elephant poaching.

13 March. CI led to an ambush of an entrance route from Binga. The poaching team changed their route, resulting in an imperfect ambush. On contact, one was arrested and three escaped. Tracker team follow-up found the escapees fled to Zambia to avoid arrest.

21 March. A patrol found a fresh snare line. Tracker team followed up approximately 30 km to homesteads. Subsequent search and questioning led to the arrest of two and recovery of 25 snares and spears.

4 April. CI led to a night op on two locations. One with an illegal firearm and the second with the ammunition, both recovered. Warrants of arrest have been issued for the individuals involved.

13 July. Tracker team follow-up of suspicious spoor led to the arrest of an individual laying cable snares, 17 cable snares were recovered.

15 July. Observation team sighted a suspicious fire at night. OP guided tracker team in at first light. Were fired upon, poachers fled during exchange of fire.

15 October. Tracker team with information from CI followed spoor of elephant poaching team leading to Matusadona National Park. Contact and exchange of fire ensued, contact initiated prematurely due poaching teams imminent entry to the Park. Suspects fled into the Park unfortunately holding the firearm but dropping other equipment. Cross-boundary follow up delayed due the time of day.

3 November. Suspect photographed by trail cam exiting Park with Ivory. After positive ID, night op resulted in his arrest. Trial is ongoing, critical due to the first time photographic evidence of this nature will be utilized for state prosecution.

3 November. CI information led to the arrest of a poacher found in possession of poached buffalo meat and poaching equipment.

18 December. CI information led to arrest of an individual in possession of pangolin scales and skins, buffalo carcass and equipment.

26 December. CI information led to a night op and the arrest of a known meat poacher. Illegal bush meat, snares and equipment were recovered.

ARRESTS

ELEPHANT POACHING	**3**
MEAT POACHING	**12**
ILLEGAL FISHING	**30**
GOLD PANNING	**7**

	52
RECOVERIES	
WEAPONS	**2**
SNARES	**119**
ILLEGAL NETS	**+ 4000m**

GENERAL

2016 saw a massive reduction in poaching activities and the increase in game numbers is now quite visible. Over the last nineteen months only four elephant have been poached in the whole of Omay. We believe that these results have been achieved by the continuous efforts to reduce the operating space and safe zones for poaching teams and the significant reduction in firearms available to the teams from our 2015 recoveries of illegal weapons.

Poaching teams still enter Matusadona National Park via their southern boundary, and 2017 will see our teams operating to close these routes down and we expect significant action over the coming months.

2015 saw the unfortunate murder of one of our confidential informants. The person targeted was the head of our intel section. His brother, the CI was poisoned and died. The subsequent attempts to poison senior members of our team and myself just go to prove the impact that we have had on the illegal elephant poaching in the Omay and to the lengths these gangs will go.

We would not be able to operate without the significant financial assistance we receive from Carbon Green Africa and the Safari stakeholders in the Omay. Hunting and the sustainable utilization of forests plays a pivotal role in the subsistence of the communities that live in Omay. Our role in contributing to a sustainable livelihood from these renewable resources on behalf of the communities is imperative. Any assistance contributed toward this in any format always goes a long way.

CHRIS MOORE
AFRICAN CONSERVANCIES
chrismoore.saf@gmail.com

From: Regina A. Lennox
To: Vannorman, Tim
Subject: Confidential Anti-Poaching Information for Zimbabwe
Date: Wednesday, February 01, 2017 10:54:03 AM
Attachments: 2016 AFRICAN CONSERVANCIES report (2).docx

Dear Tim,
Attached please find confidential anti-poaching information for Zimbabwe. This reflects implementation of the Mana Pools/Lower Zambezi regional elephant management plan. Please consider this information in making an enhancement finding for Zimbabwe.
Best wishes,
Regina

Regina A. Lennox
Conservation Force
3240 S I-10 Service Road W, Suite 200
Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

Da: Chris Moore (b) (6) >
Oggetto: 2016 AFRICAN CONSERVANCIES report (2).docx - Hword
Data: 31 gennaio 2017 15:21:32 CET
A: Marco Pani <(b) (6)

Hi Marco,

Not as dramatic as 2015, not from lack of effort but we had far fewer incursions due to removal of space and removal of firearms 2015. We are working on securing the southern boundary now. I am going to have to find some funding this year. I feel my best way is to auction some hunts?

I hope this finds you well and when are you and Mr. Jackson coming to visit us in Omay to hunt a nyami?

Chris

ZIMBABWE

All correspondence should be addressed
To "THE SECRETARY"
Telephone : Tel: +263 4 700596 - 8
www.environment.co.zw

MINISTRY OF ENVIRONMENT, WATER AND CLIMATE
Private Bag 7753
Causeway
HARARE

Ref: G/21

08 November 2016

Chief Branch of Permits
U.S. Fish and Wildlife Service
Division of Management Authority
Washington D.C 20240
USA
Attention: *Mr Timothy J. Van Norman*

ZIMBABWE'S ELEPHANT MANAGEMENT PLAN PRIORITIES (2015 - 2020)

We would like to thank you for granting us an opportunity to meet at the recent CITES CoP17 and we hope that you travelled safely to your home country.

Further to previous correspondence regarding prioritising implementation of our Elephant Management Plan and to our discussion during CITES COP 17, which meeting also included Hon Minister and Mr B Arroyo and Mr D Arshe, we hereby wish to submit our supplementary Elephant Management Plan.

This plan prioritises activities identified in the National Elephant Management Plan to fully utilise the budget allocated to elephant management in Zimbabwe. These priorities listed herewith constitute those activities and actions that we believe, given the limited budgets, we are able to curtail poaching and illegal trade of elephants and ivory.

We hope that the information provided will suffice in responding to your enquiry. We welcome your commitment to lift the suspension on imports of hunted trophies of elephants from Zimbabwe. For any further clarifications do not hesitate to contact the undersigned.

MIN. OF ENVIRONMENT, WATER & CLIMATE
0 8 NOV 2016
11th Floor, Kaguvi Bld, Harare
Tel: 04 701681-2 / 701691 - 3
PERM. SECRETARY

P. Mupazviriho
SECRETARY FOR ENVIRONMENT, WATER AND CLIMATE

THE ZIMBABWE NATIONAL ELEPHANT SUPPLEMENTARY MANAGEMENT PLAN (2015 – 2020)

Introduction and Background

The supplementary Elephant Management Plan (EMP) is a supplement that has been developed from the Zimbabwe National Elephant Management Plan (2015 – 2020). This supplementary plan looks at all the deliverables from this plan and highlights the priorities for the successful implementation of the plan. The supplement also highlights the progress that has been made towards the successful implementation of the EMP from the time it was adopted in 2015.

It was noted that the EMP was an ambitious plan and it required the cooperation of all internal and external stakeholders in order to achieve its obligations. The urgency that was placed upon well-equipped men on the ground to combat illegal killing of elephants, improved monitoring and research, and the provision of incentives to maintain and if possible increase the elephant range, requires huge resources.

This supplementary EMP recognises that the implementation of the Zimbabwe Elephant Management Plan (2015 – 2020) requires adequate and sustainable funding and provision of other resources to effectively protect the elephant and to curb illegal trade in elephant products. Thus there is need to fully resource all the components of this plan in order to successfully manage Zimbabwe's elephant population.

Resources are being mobilized from within ZPWMA, from its own business ventures, by the private sector, and by intergovernmental and nongovernmental organizations. Partnerships between ZPWMA and other stakeholders are also in place to secure some of the resources for elephant conservation. There is a need for the Government to provide additional support to the conservation of elephants given the present poaching crisis affecting the species continentally.

This supplementary elephant management plan recognises the work and the resource allocation that has made towards full implementation of the plan, and provides detail of the milestones achieved and work covered. It also prioritises the major areas of the EMP into immediate areas that are meant to arrest poaching and illegal trade in elephants. However, it details the impressive extent to which most of the structures have been set up and some of the innovations that have been put in place to attempt to bridge the funding gap.

Resources Available

An audit has been conducted of the implementation of the EMP to date and resources have thus far been channelled into the following areas.

Table 1: Financial resources deployed up to August 2016

BUDGET (USD)					
Item	**North West Matabeleland**	**Sebungwe**	**Mid Zambezi Valley**	**South East Lowveld**	**Total Current**
Law Enforcement	158,948	113,920	244,650	318,000	835,518
Monitoring	31,000	-	8,155	15,500	54,655

Investigations	-	-	16,500	8,000	24,500
Training	12,548	-	30,124	23,000	65,672
Community Relations	4,854	-	9,770	15,000	29,624
Total (USD)	205,350	113,920	309,199	379,500	1,009,969

Table 2: Other Non-Financial Resources

Item	**North West Matabeleland**	**Sebungwe**	**Mid Zambezi Valley**	**South East Lowveld**	**Total Current**
Summary Stats					
Area (Km^2)	24,989	15,529	16,014	8,835	**65,367**
Rangers	212	90	160	77	
Rangers/Km^2	0,01	0,01	0,01	0,01	**0,01**
Total Staff	271	123	181	142	**717**
NGO/Private Sector Anti-Poaching	Painted Dog Conservation, Bhejane Trust	Matusadonha Anti Poaching P	Zambezi Society, The Tashinga Initiative	-	
Vehicles					
4 WD Parks	12	4	8	10	**34**
4 WD Other	-	2	-	-	**2**
2 WD Parks	4	-	-	-	**4**
2 WD Other	1	-	-	-	**1**
5 Ton Trucks	1	6	2	2	**11**
Tractors	9	3	3	5	**20**
Graders	5	-	2	1	**8**
Boats	2	3	1	2	**8**
Motor Cycles	-	4	-	4	**8**
Micro light			1		**1**
2 Seater Helicopter	1		1		**2**
4 Seater Helicopter	1				**1**
Communications					
Repeater station	7	2	2	3	**14**
Mobile handsets	118	53	82	60	**313**
GPS	46	-	36	60	**142**
Operating Database	10	-	1	1	**12**

Progress towards Implementation of the Elephant Management Plan (2015 – 2020)

Several milestones stated in the Elephant Management Plan have already been achieved which include the following:

a. Appointment of the Elephant Manager as in section 4.5 of the Zimbabwe Elephant Management Plan (2015 – 2020).

b. Getting a basic agreement of implementation in the 4 relevant regions.
c. Some work towards Law Enforcement, Monitoring, Investigations, Training and Community Relations. As of August 2016, more than USD 1million had been spent on these activities. Table 1 above. More detailed breakdown of how this was spent see Annexes 1.0, 2.0, 3.0 and 4.0.

Constraints and Challenges

One of the major challenges regarding implementation of the EMP is with regards to the adoption of stricter domestic measures by the United States of America. This has had the net effect of further reducing the revenue from hunting into the Authority, which therefore affects the budget allocated to resource protection, in particular the elephant in this case.

One of the key impediments towards the full and comprehensive implementation of the Elephant Management Plan is the limited resources. However, Zimbabwe is at an advanced stage in the development of resource mobilisation strategies. These strategies include partnering with both local and international institutions in resourcing and financing aspects of the programme.

Priorities

Due to the fact that Zimbabwe is experiencing some funding constraints with respect to the full implementation of the Elephant Management Plan, which means therefore that it will not be possible to fully implement every aspect of the plan at the same time, we have developed a set of priorities (all drawn from the plan), that we feel are implementable and enable the work of conservation to proceed smoothly.

1. Law Enforcement
   Law enforcement continues to be one of the most critical aspects of this strategy. From the perspective of the EMP, it has also to date been allocated the biggest budget (Table 1). While strategic gaps still exist with respect to the law enforcement capacity (the numbers of rangers on the ground are still in need of improving to effectively cover that Parks Estate, more patrol kits and equipment are still required to improve enforcement capacity). In order to effectively combat poaching and illegal trade the Law enforcement capabilities are top priority.
2. Monitoring
   Biological monitoring and management, with respect to the priorities for this plan would come in as a second priority. This enables monitoring programmes and research to support science based adaptive management of elephants in this action plan. The resource allocation to this activity needs to be dramatically improved, although innovations have had to be put in place to manage that insufficient resource allocation. Rangers on patrol also carry out significant monitoring activities which feed into the biological monitoring and management of the elephants.
3. Investigations/Intelligence
   The investigations capacity (together with training) are critical components of this action plan. To date of the available resources, allocations to investigations have been minimal. Innovations have also been developed in this area, for support from various private players, institutions and state institutions in the investigative processes.

Assistance with areas like crime scene attendance have been improved through the assistance of the Zimbabwe Republic Police involvement.

4. Appointment of Elephant Manager

   While the appointment of the National Elephant Manager has been concluded (April 2016) to enhance implementation, monitoring and evaluation of the Action Plan, funding constraints still exists. Some funding for the activities of the Elephant Manager have been unlocked through cooperation with stakeholders in the monitoring and evaluation activities of the office. This includes setting up of the Regional Elephant Management Committees and funding their activities.

ANNEX 1.0 Northwest Matabeleland Action Plan – *Status and progress report Aug - 2016*

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants documented	- Collaborations with other stakeholders (e.g. WWF, Government of the People's republic of China) in law enforcement efforts was done were equipment such as camping tents, GPSs, vehicles, road maintenance equipment (graders, tipper trucks, lorries) were sourced - Training was done in Spatial Monitoring and Reporting Tool (SMART). 4 Officers and 40 Ranger were trained - New recruitment and recruitment drive for rangers initiated - Database on elephant illegally killed is maintained and updated
1.2 Informer network, investigation and intelligence system strengthened / established and operating	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	- 5 cases based on information from intelligence were attended to. No recruitment of investigators and training done 6 calls to whistle blowing systems resulted in effective follow up 10 incursions reported on by local communities and reacted to by ZPWMA/ZRP under the joint operations initiative

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines in collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	- The SOP for Joint Operations with ZRP and other law enforcement agencies not available - 100 % proportion of arrests leading to prosecution - 95 % proportion of successful prosecutions
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	- Database is available at station levels feeding into the Regional and National levels. - Reporting protocols in place
1.5 Joint law enforcement operations within the NWM region	- Conduct joint operations - Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing)	- Number of joint operations leading to arrests and successful prosecutions - Number of meetings held per year - Number of successes from shared wildlife crime information	5 joint operations leading to arrests and successful prosecution were done 16 meetings have been done to date Have been successful on all shared information wildlife crime
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the NWM	Enhanced data collection and collation of returns for quota setting implemented
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the NWM that are settled has not increased, or has declined, from 2015 levels	There are no increases or decreases in settlements within protected areas. It should be noted however, that there is illegal grazing in Hwange National Park from the communities in the Tsholotsho area.

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	There are no agreed SOP for cross border law enforcement operations 5 cases of joint operations leading to arrests and successful prosecution

9.4.2. Biological Monitoring and Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations, forest areas, and RDCs in NWM - Introduce ranger-based monitoring across all stations in NWM - Analyze the data and report on trends - Annual water hole count continued	- Information on trends in elephant numbers, structure and mortality analysed and available	Analysis data is based on the national survey of elephants and large herbivore done in 2014, road count data and from waterhole counts which are done yearly.
2.2 Impacts of elephants on selected habitats, selected indicator plant and animal species, and water use and supplies monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands - Measure and assess water use and its sustainability	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported Sustainability of water use completed	Permanent vegetation plots are monitored regularly for the effects of elephants and the data analysed. The effect of elephants on indicator plants species is monitored. Research is ongoing on their effects on major herbivores. A study on the effects of drawing on underground water to water elephants is about to be initiated
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, and HWC in the region - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research reports completed - PCP consultation results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	A study looking at changes in vegetation has recently been completed in collaboration with WWF, data is yet to be analysed Adaptive management is exercised through adopting results from research work within the park

9.4.2. Biological Monitoring and Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	More boreholes have been drilled to ensure there is enough water for other animals and to relieve pressure on some areas.
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Age, sex and tusk sizes for all elephant killed recorded Elephant trophy quality is maintained or improved in relation to the stipulated desired age and trophy size.	A database with information on elephants killed is maintained Trophy quality is maintained through the policing of the hunting industry and record keeping and adaptive management of quotas.
2.6 Elephant range defined and managed to maintain (and/or recover) habitats and elephant populations, and connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	13% of land in Zimbabwe is maintained for wildlife Corridors are being resuscitated such as the Hwange Sanyati Biological corridor which is being maintained in collaboration with WWF.
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Done at National level. However through our normal reporting system we feed in with the related information

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in NWM adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	HSBS, KAZA, CAMPFIRE, save Australia are some of the joint venture operations adopted and being implemented in NWM
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	There is need to review the benefit-sharing frameworks of CAMPFIRE and other schemes. There is little involvement of traditional leadership in revenue sharing There are no audits and accountability is minimum for revenue from wildlife
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	There are distinct land use regimes governed through government statutes and policies. Decline on human-wildlife conflicts is evident. For example data shows that lion conflicts have reduced by 50%
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	100%

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for NWM - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in NWM - Proportion of schools within or neighbouring elephant areas receiving and using information provided	There is little information distributed on elephants to communities. Distribution is largely done by private organisations such as painted dogs The proportion is low

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- Value of funding and support in kind for conservation of elephants in NWM realised each year	There is high value in funding of elephant conservation (WWF HSBC, WEZ, Friends of Hwange and Other Stakeholders)…funding coming in in terms of drilling of boreholes, vehicles, camping equipment, solar panels, fuels radio communication, roads and fire guards
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	Was done and is being implemented through HSBC
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the NWM - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify and provide needed equipment - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for NWM developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	Research strategy is under development 1 done by University of Zimbabwe Under review n/a 3 No publications have been done

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
			None
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. of communities trained and implementing elephant management programmes d) No. of elephant management campaigns conducted	No modules developed as yet - - - About 10 elephant management campaigns were conducted.
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the NWM developed	- Rebuild / refurbish all main access and internal roads within NWM wildlife areas - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the NWM - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	- Roads, bridges, airstrips refurbished and maintained as planned - Feasibility study of required field stations completed by June 2016 - Identified infrastructure requirements prioritised and required developments undertaken and completed by 2018	2 airstrips were refurbished and 1650km of roads were graded The list has been produced and is included in the Hwange Management Plan

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the NWM (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational secure communications system in place and being maintained	The communication system has been improved, however more is required in relation to the repeater links

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	- Timely minutes of each bi-annual meeting produced and circulated - Number of committee resolutions and actionable points initiated and acted upon	N/A N/A
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA & FC	- Functional team established - Technical support provided in keeping with TORs and planned activities implemented	N/A N/A
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA and FC - Establish terms of reference and recognition as a formal entity - Establish effective engagement with RDCs, and Traditional Leaders in NWM and neighbouring communities	- Formal recognition by ZPWMA / FC achieved - Meetings held - Effective engagement with neighbours	Quarterly stakeholder meetings There is effective engagement with neighbours…working with RDCs, KAZA, communities in law enforcement, human wildlife conflicts
5.4 Links with neighbouring Botswana, Namibia and Zambia to confer on the management of shared elephant populations established / strengthened	- Establish links with Botswana, Namibia and Zambia to confer on cross border elephant management issues	- Links established and operating	The KAZA forum allows for the mentioned countries to tackle cross border management issues

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	- At least one awareness campaign conducted each year - Annual progress reports produced - Number of briefs / news releases on major developments or progress released - Funds raised to support elephant conservation	This is yet to be done

ANNEX 2.0 **Sebungwe Action Plan** - *Status and progress report Aug - 2016*

9.5.1 Protection and Law Enforcement (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1. Joint operation reaction team established and existing base renovated at Bumi Hills old ZRP Camp as primary base. Followed by 3 others (Binga, Siabuwa, Old Chizarira Lodge/ Sengwa Wildlife Research Institute) *Manpower* *Vehicles* *Aircrafts* *Communication – eg radios* *Equipment eg firearms, boats* *Training* *Central database* *Intelligence networks*	**Manpower** – Draw up 20 man reaction team from law enforcement agencies and other stakeholders from the whole Sebungwe sub-region. (Prioritise Bumi, Sengwa) **Refurbish main base** **Training** – Initial database training Refresher course **Transport and Equipment** Procurement of 3 vehicles (land cruisers) Procurement of 3 boats (speedboats – 1 mothership and 2 patrol boats) **Communications** – establish an independent inter-agency communication network	- Number of arrests - Number of cases detected - Number of recoveries made (eg ivory, firearms etc) - Number of patrols conducted - Number cases finalized (convictions) - Number of carcasses detected - Number of joint operations carried out - Number of refresher courses carried out - Number of failed cases	The Sebungwe Region whose greater part is under the jurisdiction of Central has stations which include Sengwa Wildlife Research Area, Chirisa Safari Area, Chizarira National Park, Chete Safari Area and Matusadona National Park. During the reporting period of August 2016 we had a total of 22 incursions with the highest incursions happening in Chirisa Safari Area while the least was in Chete Safari Area. We had a total of 5 visual contacts with poachers but all were unarmed contacts. No ivory was recovered, no fire arms were recovered. 203 wire snares were removed. 8 people were arrested however all the arrests were not ivory cantered. No refresher course was conducted in the Region. Joint operations were conducted by our investigations section with MBCU, the police and MAPP. A total of 6 elephant carcasses were discovered of which 2 were natural mortalities in Matusadona, 1 was poached in Matusadona, 2 were poached in Chete and 1 was poached in Chizarira.
1.2 Informer network, Investigation and intelligence system strengthened	- Recruit informers and contacts - Maintain hotline for whistle-blowers - Procurement of 2 vehicles and 2 motorbikes - Recruit investigators (6) and deploy strategically - Train investigators - Constant liaison with informers - Rewards to informers standardized	- Number arrests and successful convictions based on information from intelligence system - Number of incursions reported on/reacted to by local communities - Number of informer reports per informer leading to arrests and convictions	From the month of August to date 2016,based on information given through informer network assisted in arresting two persons found in possession of a pangolin in Sengwa,Gokwe Davison Goredema and Batau Murambiwa Both were sentenced to 9 years effective each.On the 14th of September 2016 One suspect was arrested for possessing approximately 5kgs of ivory.The case is still pending in court.Approximately 8 ivory deals have been reported through informer network and are still being worked on for reaction.10 deposit fine tickets were also issued for separate offences .

9.5.1 Protection and Law Enforcement (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.3 Zambezi Valley deployment tactics revisited and implemented	- ZV deployment tactics revised - Identification of OP sites, crossing points etc - Identification and procurement of specialized equipment (eg night vision) - Provision of dry rations for operations - Introduction of aerial surveillance flights	- Resource books - Number of successes on detections - Number of contacts - Number of recoveries - Patrol effort (surveillance)	MAPP assisted in deployments for Matusadona both in the Lake with a boat and in the land with a vehicle. MAPP also assisted in joint operations and following up information from informers within the Gokwe and Nyaminyami districts. Recoveries and surveillances were made by our Investigations team together with the informers, MBCU and sometimes with the duty uniform ZRP
1.4 Ranger patrols strengthened	- Establish effective patrolling force of deployable rangers - Establish (or review) standard operating procedures (SOP) - Establish well-equipped reaction teams - Honorary Officer system re-established to support ranger patrols - Increase support for establishing/ improving dedicated APU for every concession.	- Number of deployable rangers at any one time - Total man-days spent on patrol - SOPs in place - Area patrolled each month - Reaction time to incidents - Number of APUs established	A total of 90 rangers were deployable and a total of 1099 man-days were spent on patrol during the month of August 2016
1.5 Training of staff enhanced	• Establish regular training and retraining schedule (includes training on weaponry, bushcraft, tracking, information gathering, crime scene management, Judiciary procedures etc • Training on standard operation procedures (harmonization)	• Number of training and retraining sessions carried out	8 rangers went for a refresher course at Head Office with the Army training them in drilling movements during the month.
1.6 Conviction rates improved	• Judiciary sensitization (incl. workshops) • Formulation of proper charges, indictment and summons • Gathering all evidence available using legal means • Completion of dockets timeously, submission and concluding cases in a reasonable time • Creation of a district sub-committee on elephant and wildlife issues • Hold workshops to share information on wildlife issues	• Number of successful prosecutions • Decrease in number of crimes committed • Number of workshops or meetings held	From August 2016 to date one case of ivory possession was successfully finalized and one for ivory is still pending trial.Generally poaching seem to have decreased as compared to the other years due to deterrent sentences being given by the courts,Conviction of ring leaders,changing of area of operation and current economic challenges which are also hitting the market on acquiring the us dollar.One workshop was held at Midlands black Rhino Concervancy with the judiciary to address challenges being faced .

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Viable population, geographical distribution, and habitat connectivity targets established.	- Establish TPC for all areas to set viable population target. - Collect spatial data (livestock densities, human population densities, forest cover, and agricultural cover) to map potential geographic distribution of elephants - Identify potential connectivity areas and promote wildlife-based land uses in those areas.	- Viable population target of minimum 5,000 for the region with minimum and maximum thresholds in different land categories - Updated geographical distribution map and spatial datasets - Number of conservancies approved/ green-lighted by communities	There are no private conservancies in the Sebungwe Region, however the 4 Rural District Councils within the Region are very active in conservation and also CAMPFIRE is active. The 4 RDCs are Gokwe North, Gokwe South, Nyaminyami and Binga RDC.
2.2 Monitoring system for population trends, habitat, and impacts designed and implemented.	- Establish regional database for data on population, habitat, HEC, patrolling, poaching, and trophies (for trophies, see also Output 5). - Design and adopt standardized reporting formats. (i.e. MOMS) - Report to the regional management committee to review data and decide on management actions. - Conduct annual aerial surveys for the "core area" (to be defined).	- Regional database operational - Number of reporting formats designed and distributed - Number of persons, patrols, and sectors submitting data - Quarterly reports - Quarterly reviews	We have formats for different reports which start from Incidental reports, Daily reports, Weekly reports, Monthly reports, Quarterly reports and Annual reports. The reports come from the stations and are consolidated at the Regional Office before they are sent to HQ.
2.3 Direct and indirect causes of decline (2006-2014) researched.	- Causes of mortality quantified using the regional database. - Gather information from local communities and experts. - Examine potential socio-economic factors related to decline - Research habitat changes. - Publish research in scientific publication.	Data and analyses	For the month of August 2016, the Sebungwe Region lost a total of 6 elephants, 2 of them died of natural causes in Matusadona National Park, 1 was poached in Matusadona, 2 were poached in Chete Safari Area and 1 was poached in Chizarira National Park. A long term elephant research programme to be launched in Matusadona National Park in conjunction with a private partner

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.4 Viable population, geographical distribution, and habitat connectivity achieved and maintained.	- Establish wildlife-based land-use system (not a land use plan) with community conservancies acting as corridors between protected areas - Reduce human-elephant conflict to acceptable levels. - Implement responsible habitat management (with regard to fires, REDD+, mining, illegal and legal settlement) - Conduct integrated land-use planning. - Support extension of REDD initiative	- Number of operational conservancies/ corridors - Elephant Population data - Number of elephants and people involved in "serious HEC incidents" - Effective, non-lethal elephant deterrents in place - Regional land-use plan - Number of stakeholders, meetings in planning process - Utilization of corridors by elephants	The Authority is supporting efforts to establish conservancies in the Region and we have approved the setting up of a conservancy in the Gatshe Gatshe Area. The Chirisa-Sengwa excision area is also planned to be established as a community conservancy
2.5 Sustainable offtakes established through participatory quota setting and monitored through adaptive management.	- Establish a database of offtakes, trophy qualities, and age classes (See Output 2, Activity 1). - Using participatory quota setting following best practices, set optional quotas based on scientific survey data, with no more than 0.5% of the estimate as the elephant quota for the region. - Revisit quota system and establish optional quotas as opposed to fixed quotas - Set minimum trophy size and a variable trophy fee with large increments based on size - Identify and enforce best hunting practices through a code of conduct incorporated in lease agreements and hunting permits.	- Trophy quality improving - Record of hunting practice transgressions	Quotas for the Nyaminyami District and the Sebungwe Region as a whole have been greatly reduced and all elephant hunts are now being monitored by Parks

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.6 Robust and comprehensive research program enhanced and maintained.	- Research the impact of decline on population dynamics. - Investigate migration hypothesis. - Develop applied research projects, especially interdisciplinary and multidisciplinary research. - Establish research oversight body, building on existing approval processes.	Publications, particularly with management guidance	A long term elephant research programme to be launched in Matusadona National Park in conjunction with a private partner

9.5.3 Social, Economic and Cultural Framework (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Transparent and equitable distribution of benefits established	- Develop an instrument to increase elephant revenues at the ward level. - Instrument to provide for traditional leaders to be involved in management and distribution of elephant related benefits. - Revise CAMPFIRE guide lines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodic auditing of the revenue sharing system.	- Instrument approved. - CAMPFIRE guidelines revised and approved - Revenue accountability system established - Number of audits	The Zimbabwe Elephant Nursery to establish a community outreach program that will provide community educational and developmental projects and activities in the region
3.2 Economic management of consumptive and non-consumptive tourism of elephants in Sebungwe improved.	- Preventing human settlement in protected areas - Review length of concession leases to encourage greater investment. - Rehabilitate the depleted Safari areas - Promote PPCPs	- Number of eviction notices issued. - Number of reviewed leases - Number of safari areas under proper management/concessions - Record of PPCPs established.	Mokore safaris is currently operating in Sengwa Wildlife Research Area and the lease is under proper management, Statunga Safaris has also got the Chirisa hunting lease and will start operating in the year 2017. Chete Safri Area is currently still open however there are applicants who may take it at anytime.
3.3 Land use strategies to mitigate human elephant conflicts (HEC) established	- Review of human elephant conflict measures (consultancy) - Increase sense of ownership of wildlife as a mitigation measure to HEC (review) - Traditional leaders to set up a compensation scheme for land holders directly affected by HEC. - Support review and development of land –use plans to optimize agricultural livestock and farming activities	- Reports - Link with activity 1 and 2 output1(benefits) - Compensation scheme functioning and record of HEC in place. - Land use plans supported	Established a Problem Animal Control Committee in Nyaminyami and Gokwe that includes all stakeholders to assist in the effective coordination of all PAC issues

9.5.3 Social, Economic and Cultural Framework (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.4 Investment of wildlife revenue in income generating community products established	- Revitalize technical support services to communities/ community initiatives - Participatory business plan at community level. - Explore micro financing opportunities - Explore markets for community projects related to elephant conservation	- Technical support services established through proper instrument. - Participatory business plan adopted.	There is a strong move to promote the development of aquaculture projects to enhance food security
3.5 Relationship and communication mechanism established	- Sebungwe WG to include Traditional leaders and RDCs - Methodologies for regular communication with communities and their leaders established	- Traditional leaders and RDC included in the WG - Communication strategy developed	
3.6 Education on elephant conservation in the community increased	- Information campaign explaining reasons for quota decrease (see Biological Component for cross check) - Explain what trophy hunting means and how it links to benefits - Share census results and explain implications - Extend conservation education to Sebungwe wards (NGOs?)	- Number of Outreach meetings with Traditional leaders / Wards/ RDC including the 4 key activities	The Zimbabwe Elephant Nursery to establish a community outreach program that will provide educational and developmental projects and activities in the region

9.5.4 Building Conservation Capacity Component (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Capacity needs for elephant management in Parks and CAMPFIRE areas analysed and identified	- Draw up TOR - Appoint consultant	Report produced	Still outstanding
4.2 Training provided	- Analyse training needs - Prioritise and develop training curricula if not already available - Implement in-service training and re-training	Numbers of people trained and certified	Still outstanding
4.3 Best practice standards for elephant management in place	- Standards defined by and through National Elephant Policy and CAMPFIRE Principles and Guidelines - Define clear objectives for elephant management in the Sebungwe - Support CITES MIKES site(s) and application of SMART and RBM	- MIKES PIKE database - SMART database	Nyaminyami RDC is a MIKE site and efforts are needed to adopt the SMART database system in th region
4.4 Research and monitoring capacity strengthened	- Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring systems - Identify equipment needs, source and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- 2 persons trained per annum - 5+ people in mentoring system each year - Equipment procured and in place - Active community research programme underway - Event Book System functional and operationalised	Still outstanding
4.5 Funding secured	- Complete Sebungwe Elephant Management Plan and disseminate for funding purposes - Development of funding proposals for each of the components, if necessary - Identify donors (e.g. bilateral, WB GEF, NGO, other) - Submit proposals - Develop Sebungwe branding and marketing campaign	Number of successfully funded proposals	Still outstanding
4.6 Infrastructure refurbished and functioning	- Roads rehabilitation: Parks and CL - Karoi-Binga road - Airstrips	- 2,000 km repaired to standard - Airstrips registered and functioning	Still outstanding

9.5.4 Building Conservation Capacity Component (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.7 Communications	- Procure and install radio communications systems	System installed and operational	Still outstanding

9.5.5 Coordination and Programme Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1. Sebungwe Management Committee with an Elephant Working Task Force and Project Coordinator established	-Identify committee members, select WTF and appoint Coordinator -ToR for each institution (from national plan)	Committee meeting twice yearly; WTF meets quarterly, identifies priority activities and oversees implementation by Coordinator	Still outstanding
5.2. Coordination and communication between Traditional Authorities, their communities and the elephant management programme and plan strengthened	-Address the community through CAMPFIRE and traditional leadership -Introduce elephant management plan in easily understandable format – maps and graphs – and disseminate through all levels/actors in Sebungwe	• Management plan documents for dissemination	Still outstanding
5.3. Coordination between Sebungwe safari operators and implementation of the elephant management plan strengthened	-SOAZ, ZPHGA appoint liaison officer for Sebungwe elephant management plan -Encourage non-members of associations to participate in plan implementation	Liaison officer appointed and operating and non-members of associating participating in implementation of the action plan	Still outstanding
5.4. Links with neighbouring states established – shared elephant management	-Establish relationship with KAZA Secretariat -Establish links and synergies with transboundary natural resource mgmt -Bilateral JOC to focus on illegal wildlife trade and trade routes -Establish links with TRAFFIC	• KAZA Secretariat aware of Sebungwe elephant management plan • TBNRM established and functional • Reduced illegal trade	Still outstanding

ANNEX 3.0 Lower Zambezi Valley Action Plan - *Status and progress report Aug - 2016*

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)			
Output	**Activities**	**KPIs**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants	-
1.2 Informer network, investigation and intelligence system established	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	5 informers were recruited, one more investigator was recruited. 10 calls were received indicating poachers coming in from the local community and 3 calls indicating foreign poachers coming in. Since January 2016, 4 foreigners have been arrested from tip offs and one local person. A total of 32 incursions were recorded whereby the majority of them were recorded during the first quarter of the year.
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines on collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering) - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	Of all the five arrested poachers, all were sent for prosecution and were all convicted and sentenced

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)			
Output	**Activities**	**KPIs**	**Narrative Report on Progress in Implementation**
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	The current data base in place is the MIKE data base system where one Senior Ranger and two rangers were trained to manage the input of information into that system. Recording starts from the time the callsign are deployed using patrol briefing form, patrol details will then record information of their findings onto the ground patrol data form whilst out on patrol; on return, a report is then reproduced which will be used together with the ground data form to then enter the information onto the MIKE system data base.
1.5 Joint law enforcement operations within the LZV	- Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) - Conduct joint operations	- Number of meetings held per year - Number of successes from shared wildlife crime information - Number of joint operations leading to arrests and successful prosecutions	One liaison meeting conducted with our Zambian counter parts, 3 community outreach programs with the Nyamakate and Chundu community. -
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the LZV	Implementation of the LZV Action plan is in progress with
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the LZV settled has not increased, or has declined, from 2015 levels	
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations and RDCs in LZV - Introduce ranger-based monitoring (SMART, MIKE, ETIS) across all stations in LZV - Analyze the data and report on trends	- Information on trends in elephant numbers, structure and mortality analysed and available	-According to the 2014 Aerial Survey report, Mana Pools has 2984 elephants. From 2009 to 2016, Mana Pools has lost 95 elephants to poaching of which 16 were recorded this year. The report states that there was 40% reduction in elephant populations from the 2001 survey. Causes of reduction include natural deaths, migration and poaching.
2.2 Impacts of elephants on selected habitats and selected indicator plant and animal species monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported	-Elephant damage has been observed and recorded on woody species on the flood plain where they are greatly concentrated. Impacts shown were ring barking and uprooting of woody species such as *Combretum spp* and, *Fidherbia albida.* The impacts have resulted in weakening of the tree species, making them susceptible to diseases and mistletoes. -These species also do not have recruitment due to impacts of elephants. -Introduction of enclosures are at initial stages to monitor the impacts and enhance recruitment.
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, HWC, in the LZV - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research report completed - Survey results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	-Recommendations have been submitted to release pressure on the Mana Pools national park through stopping hunting on the Sapi Safari Area flood plain.
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	-Sapi Safari Area turned hunting in the process of being stopped, and the area to promote photographic safaris instead of hunting.

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Elephant trophy quality is maintained or improved in relation to the stipulated desired trophy size.	Non-trophy hunting area. Mana Pools being a non-hunting areas, the sizes of trophies hunted from management quota and those picked from natural deaths, trophy sizes are more constant.
2.6 Current elephant range defined and management to recover habitats and elephant populations and maintain connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range and maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	Elephants aggregation on the flood plain during the dry season has resulted in a lot of pressure being exerted on the area. Changing of management system of Sapi's flood plain could contribute to recovery of the habitat on the floodplain once animals disperse.
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Situational reports involving poaching of elephants have been submitted in time. MIKE Data Base is also being maintained. A record of recovered of all ivory obtained is kept and the recovered tusks are constantly submitted to Head Office where they are again reweighed and recorded as well.

9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in the LZV adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	A number of organisations have come aboard in support of conservation through Joint Ventures and Memorandum of Agreements such organisations like: Zambezi Society, Tashinga Initiative, Animal Wildlife Fund Foundation, Sino Zimbabwe Wildlife Foundation Fund, and Kariba Animal Wildlife Fund Foundation, these have formalised they assistance to Mana Pools which vary from Anti-Poaching assistance to treatment of injured animals.
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	Benefits from wildlife utilisation are channelled through CAMPFIRE program through the local Rural District Council.
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	Only one case of Human Wildlife Conflict has been recorded since January where one person was attacked by a hippo but survived the attack. Cases of Wildlife encroachment onto the communities on the southern boundary are dealt with by the CAMPFIRE because of the buffer zone between the southern boundary of the park and the community.
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	Of the 16 located elephant carcass, six elephant carcasses were recovered from two contacts. Note that 22 other elephant carcass were recovered in Chirundu again from a contact but we cannot directly link them to the elephants poached in mana Pools though there is a very high possibility of having the elephants poached in Mana Pools as well or in Marongora or Sapi..

9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for the LZV - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in the LZV - Proportion of schools within or neighbouring elephant areas receiving and using information provided	2014 Elephant Survey Report

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- No of project proposals developed, submitted and funded - Value of funding and support in kind for conservation of elephants in LZV realised each year	A proposal was submitted by Tishinga Initiative for the establishment of the Nyakasikana Anti-poaching Base and has been funded and near completion. See section 9.6.3.1
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the LZV - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify equipment needs and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for the LZV developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	Mana Pools has one Ecologist

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. communities trained and implementing elephant management programmes	Training modules are guided as per the Mushandike College of Wildlife Management at the organisation training institute. The station has 8 staff members who have undergone training at Mushandike College of Wildlife Management in various fields from Accounting, Certificate in Wildlife Management, Diploma in Wildlife Management, and IT courses
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the LZV developed	- Rebuild / refurbish all main access roads to the LZV (c.150 km) - Repair, clear, grade where necessary some 600 km of internal roads and several bridges - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the LZV - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	Roads, bridges, airstrips refurbished and maintained as planned Feasibility study of required field stations completed by June 2016 Identified infrastructure requirements prioritised and required developments undertaken and completed	New operational roads are in the process of being opened, existed roads were maintained, the Mana Main Airstrip was renovated this year 2016 Of priority was to establish an anti-poaching base at Nyakasikana which I now near completion
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the LZV (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational communications system in place and being maintained	New operational radios, repeater links and potable GPS systems have been secured.

9.6.5 Coordination, Collaboration and Programme Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	Timely minutes of each meeting produced and circulated Committee resolutions and actionable points initiated and acted upon	
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA	Functional team established Technical support provided in keeping with TORs and planned activities implemented	A technical person has been seconded to Mana Pools by AWF to assist in Anti-poaching
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA - Establish terms of reference and recognition as formal entity - Establish effective engagement with RDCs, and Traditional Leaders in the LZV and neighbouring communities	Formal recognition by ZPWMA achieved Meetings held Effective engagement with neighbours	In 2016, 1 Meeting has been held between ZIMPARKS officers and the Chief (Chief Chundu) together with his village heads. Another meeting has also been held between Mana Pools Officers and Safari Operators to discuss their support in conservation.
5.4 Links with neighbouring Zambia and Mozambique to confer on the management of shared elephant populations established / strengthened	- Establish links with Zambia and Mozambique to confer on cross border elephant management issues	Links established and operating	There is cordial communication with ZAWA counterparts.
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	At least one awareness campaign conducted each year Annual progress reports produced Briefs / news releases on major developments or progress released Funds raised to support elephant conservation	Funds have been raised by Non-Governmental organisations through provision of camping equipment, availing vehicles for use in Anti-poaching, assisting in opening up of roads, developing of base camp for rangers and training

ANNEX 4.0 South East Lowveld Action Plan - *Status and progress report Aug – 2016*

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units strengthened	– Appoint anti-poaching coordinator (for region and/or separate areas) – Recruit staff – Train staff – Procure vehicles and equipment – Deploy unit – Support existing units	Trained and fully equipped units established and operating with relevant security agency by June 2016	Five units were established in Gonarezhou National Park, trained and fully equipped. Three new Lancruiser vehicles were procured to augment the existing patrol fleet. -Two candidates identified with one to be elected for the post of antipoaching coordinator for the Region. - 35 Cadet rangers recruited by the Gonarezhou Conservation Project to boost the existing staff compliment. Cadet Rangers trained in basic paramillitary skills by the Gonarezhou Conservation Project -A Gonarezhou Antipoaching Reaction Unit established and operating throughout the Gonarezhou Nationa Park. -Out of the 20 properties in Save Valley Conservancy, 8 properties have 2X call signs of 3 rangers each who are highly trained and able to carry out combined operations with security agencies in addition to the15scouts also highly trained with AggressiveTracking Specialist a security private company assisting in the protection of rhinos and elephants in SEL.
1.2 Informer and intelligence systems established and/or strengthened	– Identify and recruit informers – Establish and implement incentive protocols – Set up, implement hotline for anonymous reports and communicate it to the public – Analyse and use information – Ensure information is included in database outlined in Output 1.6	An active informer system/network operating within the SEL by Jan. 2016 Hotline widely advertised and operational by Jan 2016	-Informer network is being established and had a number of informer lead success. Awareness of the hotlines began in September 2016 by Regional team. -Informers recruited by the Gonarezhou Conservation Project. -A hotline set up for Gonarezhou and Save Valley Conservancy. -Data being analysed and a data base in place and being mantained at the Regional Office. -Hotline facility fully advertised through the Parks Investigations Branch.
1.3 Investigation of wildlife crime improved	– Implement training programmes for investigation personnel – Ensure collaboration between Parks, ZRP and intelligence officers	At least two law enforcement staff trained in scene of crime collection and preservation of	-3 Investigations officers trained in scene of crime collection and preservation of exhiits course

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
	– Recruit more investigators – Put in place Investigator incentive system – Collaborate with forensic scientists and ballistic experts, as well as agencies such as EMA and approved universities (e.g. Chinhoyi University of Technology, University of Zimbabwe, National University of Science and Technology)	evidence, ballistics evidence, etc. in SEL. Percentage of investigations resulting in successful prosecutions in SEL greater than in 2014	-1 investigations officer trained in Wildlife, Pestcide and Forensic Crime Scene Investigation Course. -Collaboration with other law enforcement agencies satisfactorily yielding results. -Collaboration with other agencies strengthened -plans are underway to recruit more investigators and to open an investigations office in Chiredzi. -Some stakeholders have pledged to assist the investigators with some incentives. -In Save Valley Conservancy one trained personnel is dealing with wildlife crimes and is based at Humani Ranch. - The % of successfulness on investigated cases is now higher than 2014, and the current % is estimated to be 60% after lobbying with the Judiciary Services
1.4 Prosecution of wildlife crimes improved	– Train prosecutors on legislation and processes available to deal with wildlife crimes – Conduct awareness / outreach programs with Prosecution, Judiciary – Utilize ancillary laws, such as those dealing with economic crime, organized crime, money laundering, – Communicate status of prosecutions to the public via ZPWMA website – Clear backlog of wildlife cases – Explore the possibility of appointing dedicated wildlife crime prosecutors at Regional and National level	Monthly liaison sessions on wildlife crime and law enforcement held with members of the judiciary Relevant legislation available and being used Wildlife crime prosecutors available and being used in SEL	-Liaison with the Judiciary, Courts and the Prosecuting Authority on wildlife crimes conducted. -Relevant legislation available and referred to in dealing with wildlife crimes -Wildlife Crime Prosecutors not available from the Wildlife Authorities but Public Prosecutors being used to deal with wildlife crimes to which they may not be well versed with certain technical wildlife issues. -No wildlife crime prosecutors appointed. - Inadequate resources of transport and fuels to fully implement monthly liaison.

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.5 Law enforcement in collaboration with communities enhanced [Links to Component 3]	– Engage and collaborate on curbing wildlife crimes (ZRP & Communities) – Establish anti-poaching clubs/ community natural resource monitors that collaborate with ZPWMA and ZRP – Lobby support from Chiefs to deal with local poachers – Hold workshops with Chiefs and communities about wildlife and wildlife crimes – Establish incentives for communities to provide information	Incentive schemes that encourage the public and members of rural communities to contribute to law enforcement (e.g. through informer hotline) established in SEL Increasing number of incidents of community contribution to law enforcement (e.g. whistle blowers) by Dec. 2017	Trained community rangers from Sengwe area, four passed and ready to carry out ant poaching operations within the Sengwe area. Several meetings on wildlife issues were held with Chief Sengwe. - Collaboration with ZRP and Communities strengthened and yielding results. -We have opened a hotline and fliers facility that we distributed through the Save Valley Conservancy, Gonarezhou and surrounding areas and information is coming in. -All stakeholders workshop on wildlife issues is planned soon -Some stakeholders have pledged to incentivize the whistle blowers -In Save Valley Conservancyseveral education awareness campaigns have been carried out in all areas bordering wildlife protected areas. -meetings with chiefs have been maintained regarding protection of wildlife. - Resource monitors have been selected by the communites. -The surrounding communities are benefitting from meat obtained from problem animal control and trophy hunting.
1.6 Local wildlife law enforcement database established	– Set up database, as per national database – Ensure inclusion of prosecution status in database – Implement national data recording protocols – Train data entry staff and crime analysts	Local database established and operating Illegal activities recorded and analyzed	Spatial Monitoring And Reporting Tool is being used in Gonarezhou and all captured data can be easily analysed.The SMART approachaims at improving conservation effectiveness and tracking of wildife crimes. -No SMART use in Save Valley Conservancy - A poaching database from when the crime is committed up to the final court outcome is in place. -A database of poachers and their modus operandi in place -Crime Registers being mantained.
1.7 Illegal settlements / grazing in wildlife areas reduced	– Liaise with RDC, Traditional Leaders and ZRP, DA's Office – Conducted Education programmes – Regular updated satellite mapping	Illegal settlements reduced to less than 5% of wildlife areas by 2020 (i.e. state protected areas, conservancies and community wildlife areas)	Illegal settlement in the park is still very low no other settlement after 2000 (Chitsa communities). Grazing of cattle in the park is under control in the GonarezhouT National Park. -The Southern part of the Save Valley Conservancy 85 % settled.An inter ministerial committee set up to look at the possibilities of fencing out the settlers and also there

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
[Links to activities on land use mapping and planning in Component 2 – Output 2.2 and incentivization / alternative livelihood activities in Component 3]			are proposals to remove some of the settlers from some of the properties to pave way for a game corridor and allow free movement of game within. -Local authority currently working out on orderly settlement in the Save Valley Conservancy. - Fencing of the Save Valley Conservancy is also expected to assist in reduced human and domestic animal movements.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1Research programme to understand temporal and spatial drivers of elephants established [Links to Component 4]	– Create enabling opportunities and environment for research – Prioritise research needs – Conduct localised case studies and research projects – Monitor and evaluate poaching and other drivers - hunting, water, food, human disturbance – Explore possibility of GLTFCA flagship research programme for elephants [linked to Component 5] – Carry out ground surveys to monitor distribution and density	Research programme that enables local and international researchers, and links with the GLTFCA research programme, in place and producing reports	-Ten elephants were collared to monitor elephant movement in Gonarezhou.
2.2Current elephant range defined and options for extending range and maintaining connectivity between fragmented populations explored	– Define elephant range use, and existing and potential connectivity – Identify priority corridors and human land use barriers – Conduct spatial analyses to inform land use planning – Advocate land use planning to facilitate connectivity and reduce human wildlife conflict – Explore options for translocating elephants to under-stocked areas	Identified priority corridors for elephant connectivity within SEL, between SEL and other areas in Zimbabwe, and with neighbouring countries	-Research is in progress in the Gonarezhou National Park - Elephant corridors are known in Save Valley Conservancy but because of illegal settlements the problem of understanding this is still far from reality.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.3Elephant population numbers, structure, mortality and trends monitored, quotas adjusted, and desired levels of trophy quality maintained	– Undertake standardised, regular, aerial and ground surveys of the elephant range – Explore methods to monitor elephant presence and abundance in Mozambique (to Zinave) and up to the Chimanimani range – Undertake trend analysis – Define elephant age and sex structures and extract birth and death rates – Establish annual monitoring plans – Record and analyse elephant mortalities (all causes e.g. poaching, PAC, natural, hunting, etc.) – Monitor trophy quality and age – Develop and implement an age-based and size-based trophy quota	Elephant range surveyed at regular intervals Demographic data available and analysed Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers and used in quota setting	-Biannual aerial survey carried in Gonarezhou and surrounding. Last survey in September 2016. Could not get authority to survey in Mozambique. Elephant's mortalities recorded in park security registers -Elephant survey in Save Valley Conservancy done 2013 -Quota setting being a wild life management tool is implemented annually - taking cognisance of research data -PAC , hunting etc information is kept
2.4Elephant impacts on their habitats and selected indicator species of biodiversity monitored	– Establish annual monitoring plans – Measure vegetation indicators such as woodland cover – Measure other functional biodiversity indicators e.g. bird responses to structural changes to woodlands – Measure ecosystem functions – Relate desired impact to measures of elephant abundance and spatial use – Research other drivers of ecological impact (climate change, change in land use, water provision, and fencing, amongst others) – Use research findings, expert opinion and informed public opinion to establish thresholds of potential concern (TPC or limits to change) to initiate management action in respect of elephant impacts in protected areas and effects in communal land – Identify areas with key vegetation communities that are utilized by elephants	Annual monitoring plans defined and implemented for selected indicator species of biodiversity TPC's established Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	-Annual monitoring through sightings when conducting hunts and patrol is in place.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.5Costs and benefits of elephants to local and national economy monitored and costs of elephants to local communities reduced	– Monitor and evaluate extent and costs of human-wildlife conflict incidents – Relate human-wildlife conflict to elephant abundance and spatial use – Understand drivers and social and economic consequences of human-wildlife conflict – Evaluate the direct and indirect contribution (financial, economic and social) and the direct and indirect costs of elephants to the well-being of people and to conservation, through both consumptive and non-consumptive uses – Implement ongoing and new mitigation for human-wildlife conflict	Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	-PAC programmes are conducted, meat shared among the communities affected, skins and ivory may be sold and money ploughed back in to the affected communities.
2.6Adaptive elephant management framework adopted and implemented [Links to Component 4]	– Ensure collaboration between Regional Elephant Management Committee and regional and local resource management committees (e.g. LOCAL Forum) – Implement annual process of adaptive planning, implementation and monitoring in line with elephant management objectives and TPCs within the SEL – Develop and implement localised management plans (e.g. SVC plan) – Ensure alignment and harmonisation with other Zimbabwean, regional and international plans	Annual elephant management plans developed, adopted and implemented	-Annual elephant management plans have only been confined to hunting and PAC and cropping to a large extent has not been done. -Huge costs of this exercise are a major impediment as evidenced by the number of elephants taken off so far this year under such local arrangements.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.7Alternative outcomes modelled	– Develop framework for examining and modelling potential linked impacts between biodiversity issues, elephant issues, and societal issues, including any 'surprises', such as disease or extreme weather events. – Implement the modelling framework to define the outcomes of various management scenarios	Established modelling framework being used to guide adaptive management Scenario outcome recommendations and being used in management	Nothing to report
2.8SEL reporting to meet national / international standards achieved	– Advocate key summary set of elephant KPIs/outcomes for national reporting (e.g. potential population sizes against actual population sizes) – Comply with national and international legal obligations – Explore the designation of GNP as a MIKE site	CITES reporting requirements met National reporting compliance requirements	-Gonarezhou National Park meeting CITES requirements. Park not yet a MIKE site. -No information on Save Valley Conservancy and the area is still not a MIKE site

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Community partnerships and joint venture oportunities are incentivised and facilitated	– Establish protocols, policies and models for development of joint ventures (PPCPs) – Identify potential areas – Facilitate development of new, and strengthen existing, institutional frameworks and legal entities for beneficiaries at sub-district level – Develop concepts, business plans and prospectuses for different areas through consultative processes with Communities – Develop a SEL Tourism plan and review potential concessions within the framework of this Plan – Develop mechanisms for inclusive and transparent engagement and selection of operators and JV partners. – Facilitate communication, endorsement and support of JVs – Explore potential incentives and avenues of material and technical support that can be provided by Local Government and Authorities to promote establishment and sustainability of Community JVs – Promote access to affordable capital funding – Enhance capacity of community members to engage in wildlife and tourism management through training and employment	Models and protocols for joint ventures established Community institutions to engage in joint ventures established Joint ventures established and operating, resulting in financial benefit to communities SEL tourism developed and potential concessions identified Mechanisms of support and incentivisation to JVs established	- Save Valley Conservancy has a Joint Venture model and community share ownership trust with the local communities -PPCPs envisaged with the Gonarezhou Conservation Trust.
3.2 Elephant management in community wildlife areas improved	– Promote improved and professionalized elephant management and security in community wildlife areas through establishment and maintenance of improved capacity, infrastructure, security and management systems – Develop and implement a transparent Performance Based Quota system which incentivises improved management and security systems for elephant in community hunting areas and which promotes effective buffering of source populations – Update terms of lease agreements in community wildlife areas to confer a broader range of roles and responsibilities on operators including resource management and protection; re-investment and	Infrastructure, equipment and systems for elephant management in community wildlife areas established and operational Reduced human-elephant conflict Community capacity for wildlife management improved	**-WILD project** working on two community wildlife areas that is Naivasha in Chiredzi district and Jamanda in Chipinge district.WILD(Wildlife In Livelihood Development Programme is an intiative of SAT (Sustainable Agriculture Technology) and ZWVT (Zimbabwe Wild Vet Trust) funded by the European Union and is aimed at improving socio-economic and ecological resilience in semi arid communal areas through incorporation of robust wildlife based land use enterprise into the mainstream of communal areas. -Nyangambe in Save Valley Conservancy is part of the elephant managemnt in the community.

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
	infrastructure development; employment targets; local sourcing; etc. – Review key cooperation opportunities across different land uses and countries within GLTFCA, e.g. Sengwe-Tshipise Wilderness Corridor	Opportunities for cooperation within GLTFCA identified	
3.3 3.3 Additional elephant-based tourism and sustainable utilisation oportunities explored	– Promote awareness and marketing of iconic tuskers – Explore opportunities for expansion of community wildlife areas in viable wildlife corridors to enable establishment of additional sustainable utilisation areas and enterprises. [Links to Output 2.2 – identification of corridors]	Corridors identified and Agreements concluded Tourism and awareness campaigns undertaken	- No corridors agreed and concluded as as yet.
3.4 Transparent distribution of the benefits and costs of elephant management and conservation facilitated [Links to Output 2.5]	– Conduct regular and comprehensive Community Awareness campaigns regarding quotas, revenues and distribution within Communities – Capacitate and incorporate direct community involvement in management of Community Wildlife Areas, enterprises and JVs. – Diversify downstream natural resources enterprises to multiply the revenues from CBNRM, e.g. NTFPs	Awareness campaigns conducted Community structures have improved capacity to manage NRs and wildlife areas CBNRM revenues are invested in establishment of natural-resource based enterprises Community realises greater employment and financial benefit from CBNRM revenues	Awaerness campaigns are being conducted in areas arround Gonarezhou National Park and Save Valley Conservancy focusing on natural resources management not rvenue management. -The community share ownership trust is a clear testimony of improved capacity to manage NRs and Wildlife areas.These programmes bring about financial benefits to the communities.
3.5 Effective techniques and land use strategies to mitigate human-elephant conflict are implemented	– Review land use zonation through consultative processes [link to Output 2.2] – Promote awareness and adoption of effective HEC mitigation measures – Promote improved rangeland rehabilitation and grazing management to reduce competition between livestock and wildlife. – Promote improved and rationalised crop production and alternative mechanisms to promote food security to reduce habitat destruction for inefficient dry land cropping (e.g. irrigation development; carbon sequestration credits to generate income & purchase of staple grains).	HEC is effectively reduced Availability and application of HEC mitigation measures improved There is participation in effective grazing management schemes Grazing is better managed and rangeland health is improved	-Proposed irrigation schemes in fenced areas will help reduce human/wildlife conflict -Grazing areas for domestic animals are to be separated from wildlife areas again to reduce human wildlife conflict

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
		There is increased uptake of improved cropping techniques Crop yields are improved Alternative land uses evaluated	
3.6 Information on elephants and their conservation is included in school curriculae and environmental education adjacent to key elephant populations in the SEL is promoted	– Promote awareness of elephant conservation (and other issues) through cultural events, art, plays, sport, etc. – Participate in syllabus review of national environmental science curriculum approved by the Ministry of Education – Develop approved environmental training and extension material and promote dissemination to different stakeholder groups within the community – Promote the formation of environmental science clubs at schools – Coordinate various education, training and extension campaigns operating within the district	School children and communities have greater appreciation of elephant conservation issues Greater participation in environmental clubs at schools with greater understanding of environmental issues More social events linked to environmental and conservation awareness are held Elephant conservation messages are conveyed through art and cultural events & competitions Parallel education programmes are coordinated through stakeholder planning sessions at district level	Education extension programe established that is Chilojo club focusing on all schools close to Gonarezhou. Environmental books distributed to above schools. -Education extension programme in place in save Valley Conservancy and being conducted and funded by the Painted Dog Conservation and the Gonarezhou Conservation Project targeting schools surrrrounding the Save Valley Conservancy. -Education awawreness campaigns regulary conducted in schools by our Extension and Interpretation Unit. --Essay competions with prize giving are regularly done in schools to effectively disseminate information on wildlife conservation.
3.7 Cultural tourism is developed and marketed as a centre-piece of SEL attractions and linked explicitly to conservation of flagship species including elephant	– Promote existing cultural tourism events and attractions and promote incorporation of messages of elephant conservation within these – e.g. Machangana Cultural Festival; GL-Cultural Festival – Explore and develop additional cultural tourism opportunities – including development of interpretive centres, craft centres, museums, monuments, events, etc. and market these – Document and communicate the specific cultural importance of elephant to communities in the SEL and incorporate this into education, marketing, event and cultural messages and interpretative centres.	Community participation and tourist attendance of cultural events is increased Messages relating to elephant conservation and environmental issues are key themes	-GonarezhouNational Park actively involved in cultural festivals. Supported the Muhlanguleni cultural festival this year(2016). -

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
		The number of cultural tourism developments and enterprises is increased Anecdotes, artifacts and oral tradition regarding cultural importance of elephants are recorded and insinuated into marketing strategies and event messages	
3.8 Regional tourism is promoted	– Promote the development of infrastructure critical to accessibility of the region: e.g. border crossing at Pafuri; road development and maintenance; scheduled flights to Chiredzi; etc. – Promote diversification, branding and marketing of SEL-specific tourism products linked within the region and with other attractions in Zimbabwe and neighbouring countries. – Focus special attention on development of community-led tourism initiatives that contribute to the sustainability of the STWC as a movement corridor for elephant – Clear mines from STWC	Increased tourism traffic and arrivals Infrastructure upgrades Scheduled flights established Pafuri border crossing operational Tourism products are diversified Marketing and branding consultants engaged to develop branding and strategy Scoping, feasiblilty studies are undertaken Increased number of CB enterprises are operational	-The current global economic challenges faced are still a draw back to marketing efforts , however some individuals within the are putting much effort on consumptive tourism.
3.9 Policy framework for conservation and CBNRM is well understood by communities and other stakeholders in SEL	– Compile factsheets on policy framework for conservation and CBNRM and disseminate to communities and other stakeholders	Communities have access to existing CBNRM and Policy frameworks	- The awareness campaigns which are frequently conducted through out the year also attempts to explain about the existence of these policies as well as on traditional gatherings, village and council meetings.
	– Consider innovative mechanisms for trans boundary resource sharing and expanding “space for elephants”	Workshops conducted	- Still a challenge as the conept has not been fully embraced by the affected communities.

9.7.4 Building Conservation Capacity(South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to implement the plan secured	– Implement variable / graduated trophy fee structure based on trophy size – Review levy / fee structure for elephant hunting and the distribution of these revenues for conservation and communities – Develop and submit bankable project proposals to potential funders – Explore potential business partnerships – Increase capacity and law enforcement coverage by ensuring that all key stakeholders contribute to and are engaged in law enforcement activities: hunting operators, tour operators, and community anti-poaching teams [Links to Output 1.1] – Explore the potential for a dedicated elephant fund for SEL.	Revised trophy fee structure developed, resulting in increased funds available or secured for elephant conservation Number of project proposals developed submitted and funded Number of developed and functional partnerships contributing to improved elephant management	Gonarezhou Conservation Trust's establishment could secure funding for improved elephant management. - Funding not yet secured for the entire Save Valley Conservancy, but expecting the EU to come in with an aid once the fencing boundaries have been established.
4.2 Current capacity analysed and needs identified	– Analysed current capacity – Carry out a needs assessment across the full range of human resources – Carry out a needs assessment for equipment and infrastructure – Develop a strategy to address the identified needs	Needs assessment report	
4.3 Capacity for research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	– Develop and implement a multi-disciplinary research and monitoring strategy – Develop and implement a research programme based on that strategy, including graduate studies, post graduate and external researchers as well as ZPWMA researchers – Undertake periodic research meetings / conferences – Recruit and meet demands and requirements for research personnel in Parks and surrounding areas – Collaborate with external research institutions – Develop and implement a mentoring programme for researchers – Procure relevant research equipment	Functional research programme in place Research meetings held Publications Number of research projects developed and implemented Number of research personnel on the ground Number of collaborative projects Mentoring plan / number of days spent with experienced researchers Inventory of equipment for research procured	-Nothing to report for Gonarezhou National Park -No Parks Resident Ecologist in Save Valley Conservancy.

9.7.4 Building Conservation Capacity(South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.4 Training and retraining programmes established	– Carry out a training needs assessment for law enforcement, resource and wildlife management, research and monitoring, education and awareness, community elephant management, etc. – Develop and implement strategies based on the needs assessment – Standardise and harmonize training in law enforcement	Training needs assessment report Training programmes established	-Training needs for law enforcement and research staff known.

9.7.5 Coordination, Collaboration and Programme Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 SEL Regional elephant conservation and management steering committee of 8 established (ZPWMA, SVC, MT, Bubi Conservancy, Chiefs' rep, GCP, ZRP, RDC) This committee should include a core set of competencies (and can co-opt expertise if needed).	– Develop TOR for the steering committee – Identify members – Oversee the implementation of the regional elephant strategy as per national mandate – Meet biannually – Attend national elephant management meetings	Functional committee meetings held biannually with adequate attendance	- Steering committee members identified - Logistics for first meeting have been concluded in collaboration with stakeholders
5.2 Links with neighbouring states to confer on the management of shared elephant populations strengthened	– GLTFCA coordinator to identify relevant stakeholders to participate in the implementation of the regional elephant action plan – Sustain collaboration with regional partners+(one committee member for the regional committee meetings) – Share knowledge / data of all 5 key components of the plan with the regional partners	Number of consultative meetings held Tangible regional collaboration and participation	-Relevant stakeholders known.
5.3 Coordination between the tourism industry (consumptive and non-consumptive) and the elephant management programme strengthened	– Identify consumptive and non-consumptive operators in SEL – Liaise with SOAZ, ZPHGA, ZATSO, ZHA, etc. – Encourage non-members to be affiliated to relevant associations – Hold quarterly meetings with operators – Consider scale of operations in non-consumptive tourism	Regular meetings and workshops convened with the operators	
5.4 Effective information dissemination and communication strategy implemented	– Ensure clear communication of progress against action plan to all relevant stakeholders – Identify target groups, i.e. traditional leaders, school groups, amongst others – Develop a communications strategy, making use of relevant media (print, social, road shows) – Implement communication strategy – Monitor and evaluate	Outreach programmes conducted	Outreach programmes conducted by the Gonarezhou Conservation Project's Liaison Officer and the Parks' Extension and Interpretation staff.

From:	Liberty Nyaguse
To:	tim_vannorman@fws.gov
Cc:	gmatipano@zimparks.co.zw
Subject:	REsubmission, Zimbabwe Supplementary Elephant Management Plan
Date:	Friday, February 03, 2017 9:16:51 AM
Attachments:	ZIMBABWE SUPPLEMENTARY NATIONAL ELEPHANT MANAGEMENT PLAN.pdf Letter%20to%20USFWS%20-%20Zimbabwe%20Supplementary%20Elephant%20Management%20Pl.pdf

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Dear Tim

Kindly find as attached. This is a resubmission of the Supplementary Elephant Management Plan from Zimbabwe. I have been asked to resubmit by the Acting Director General Mr Matipano.

Regards

Liberty Nyaguse

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY

Lower Zambezi Valley Elephant Management Plan

2015-2019

1. Protection and Law Enforcement (Lower Zambezi Valley)						
Output	**Activities**	**KPIs**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants	- Assessment report - Staff recruitment and training records - Monthly and annual reports of operations - Illegal activity reports and records	Immediate and ongoing	- Staff salaries - Vehicles and S&T - Equipment	ZPWMA RM, AMs ZRP
1.2 Informer network, investigation and intelligence system established	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	- Inspection of informer reports / database - Records and reports of training session - Whistle-blower system reports - Records / reports	Incremental set up over 1 year, then ongoing	- Staff salaries - Vehicles and S&T - Rewards and payments to informers - Telecommunications costs -	ZPWMA ZRP
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines on collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering) - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	- Court records - Law enforcement data base	SOPs to be established within 3 months. On going	Training costs Expert costs Specialized equipment	ZPWMA ZRP Tikki Hywood Trust

1. Protection and Law Enforcement (Lower Zambezi Valley)						
Output	**Activities**	**KPIs**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	- Database system being used and operational - Reports from database	Immediate and ongoing	Computers and software Database design and roll out	ZPWMA
1.5 Joint law enforcement operations within the LZV	- Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) - Conduct joint operations	- Number of meetings held per year - Number of successes from shared wildlife crime information - Number of joint operations leading to arrests and successful prosecutions	- Minutes - Joint operation reports - Records - Manpower involved (by agency)	Meetings: Quarterly (national) and Monthly (cross-border) On going	Meeting costs (travel, etc.) Operational costs	ZPWMA ZRP ZNA
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the LZV	Proceedings of hunting workshop and revised models Record of infringements and penalties and analysis of trends	Immediate and ongoing	Staff time and meeting costs	ZPWMA SOAZ, ZPGHA ZHA
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the LZV settled has not increased, or has declined, from 2015 levels	Satellite monitoring records	Immediate and ongoing	Satellite imagery Meeting costs Awareness and educational materials	ZPWMA, RDCs Traditional Leaders
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	Minutes of joint meetings Record of agreed SOPs Reports of cross border operations Record of arrests and prosecutions	Immediate and ongoing	Travel and meeting costs	ZPWMA ZRP JOC

2. Biological Monitoring and Management (Lower Zambezi Valley)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations and RDCs in LZV - Introduce ranger-based monitoring (SMART, MIKE, ETIS) across all stations in LZV - Analyze the data and report on trends	- Information on trends in elephant numbers, structure and mortality analysed and available	- Databases and reports	Aerial surveys done every 3 years (LZV) Ground and waterhole counts annually Illegal activities and ranger patrol ground counts reported monthly Database and monitoring ongoing	Aerial survey – USD 150,000 Computers and software Training in SMART, MIKE, etc.	ZPWMA Research Partners
2.2 Impacts of elephants on selected habitats and selected indicator plant and animal species monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported	Copies of research and monitoring reports	2016-2019	Staff salaries and S&T Field equipment	ZPWMA Research partners
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, HWC, in the LZV - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research report completed - Survey results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	- Copies of reports, papers and recommendations -	Provisional TPCs provided with in 3 years	Staff salaries and S&T Aerial photos Satellite imagery Stakeholder meetings	ZPWMA Research partners

2. Biological Monitoring and Management (Lower Zambezi Valley)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	- Monitoring records and reports - Use of monitoring and research results in determining management actions - Management action taken in respect of TPCs being approached or exceeded	2018	??	ZPWMA RDCs SOAZ ZPGHA ZHA Traditional Leaders
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Elephant trophy quality is maintained or improved in relation to the stipulated desired trophy size.	Record trophy quality of elephants obtained in each year	Immediate and ongoing	Staff training and time, Safari operators training and time	ZPWMA SOAZ ZPGHA ZHA
2.6 Current elephant range defined and management to recover habitats and elephant populations and maintain connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range and maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	Elephant range use maps and reports	2016 - 2019	Staff time, S&T, satellite imagery and mapping, GIS software	ZPWMA RDCs Traditional Leaders Neighbouring countries
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Record of reports submitted	Ongoing	Staff time	ZPWMA RM, AM

3. Social, Economic and Cultural Framework (Lower Zambezi Valley)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in the LZV adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	Policy framework document Record of operational Joint ventures / PPCPs	2016-2018	?	ZPWMA RDCs Traditional Leaders CAMPFIRE Association
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	Records of revenue earned by and disbursed to communities Report on annual consultation with Traditional Leaders Audit reports	By Dec 2016	Meetings, Drafting Legal review	ZPWMA RDCs CAMPFIRE Association Traditional Leaders
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	Reports and records of implementation Database records and trend analysis reports	Immediate and ongoing	??	ZPWMA RDCs Traditional Leaders
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	Database records and reports	Immediate and ongoing	??	ZPWMA RDCs, Community leaders

3. Social, Economic and Cultural Framework (Lower Zambezi Valley)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for the LZV - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in the LZV - Proportion of schools within or neighbouring elephant areas receiving and using information provided	Elephant information items produced and distributed Reports/ records of delivery and use of elephant conservation information packages	By June 2016 and ongoing	Design and production of educational material Printing and distribution costs	ZPWMA NGOs Min Education RDCs Traditional Leaders

4 . Building Conservation Capacity (Lower Zambezi Valley)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- No of project proposals developed, submitted and funded - Value of funding and support in kind for conservation of elephants in LZV realised each year	Records maintained by ZPWMA, NGOS, RDCs, Tour and Safari Operators	Annual assessment		ZPWMA, NGOs, RDCs Tour and Safari Operators
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	Capacity needs assessment report	By June 2016	Time and travel costs of lead agencies and travel costs Consultant costs?	ZPWMA
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the LZV - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify equipment needs and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for the LZV developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	- Copy of research Strategy - Trained personnel in place for stipulated minimum period of time - Project proposals Technical reports and research papers - Annual State of the LZV Report - Event Book records / reports	Immediate and ongoing Annual LZV report commencing with baseline report for 2015	A range of training costs	ZPWMA, Universities, LZV Working Group
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. communities trained and implementing elephant management programmes d	Record of training modules Record of training courses completed Records of personnel /c communities trained Individual staff files	Initiated by March 2016	Cost of training staff and training	ZPWMA NGOs Universities

4 . Building Conservation Capacity (Lower Zambezi Valley)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the LZV developed	- Rebuild / refurbish all main access roads to the LZV (c.150 km) - Repair, clear, grade where necessary some 600 km of internal roads and several bridges - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the LZV - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	Roads, bridges, airstrips refurbished and maintained as planned Feasibility study of required field stations completed by June 2016 Identified infrastructure requirements prioritised and required developments undertaken and completed	Housing, field units, feasibility study review report On site inspection of roads, airstrips and constructed housing units	Immediate and ongoing through 5-year period	USD 3 million+ ??	ZPWMA Donor support
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the LZV (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational communications system in place and being maintained	Reports and tests of system	Immediate ongoing	USD 310,000	Tashinga Initiative ZPWMA

5 .Coordination, Collaboration and Programme Management (Lower Zambezi Valley)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	Timely minutes of each meeting produced and circulated Committee resolutions and actionable points initiated and acted upon	Meeting minutes Actions and recommendations approved and implemented	Immediate and ongoing	Costs of meetings (venue and travel)	ZPWMA Private sector agencies, RDCs Traditional Leaders
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA	Functional team established Technical support provided in keeping with TORs and planned activities implemented	Meeting minutes Technical activities implemented	Immediate and ongoing	Costs of meetings (venue and travel	TTI ZPWMA NGOs
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA - Establish terms of reference and recognition as formal entity - Establish effective engagement with RDCs, and Traditional Leaders in the LZV and neighbouring communities	Formal recognition by ZPWMA achieved Meetings held Effective engagement with neighbours	Minutes of meetings	By early 2016	Costs of meetings (venue and travel	TTI Private Sector ZPWMA
5.4 Links with neighbouring Zambia and Mozambique to confer on the management of shared elephant populations established / strengthened	- Establish links with Zambia and Mozambique to confer on cross border elephant management issues	Links established and operating	Records of meetings and any joint elephant management initiatives	By June 2016 and ongoing	Costs of meetings (venue and travel	ZPWMA RDCs NGOs Researchers
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	At least one awareness campaign conducted each year Annual progress reports produced Briefs / news releases on major developments or progress released Funds raised to support elephant conservation	Reports Campaign materials Press releases Funds raised	Initial campaign by June 2106	Preparation of campaign material	ZPWMA NGOs Private sector

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY

Northwest Matabeleland Elephant Management Action Plan

2015-2019

1. Protection and Law Enforcement (Northwest Matabeleland)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants documented	- Assessment report - Staff recruitment and training records - Monthly and annual reports of operations - Illegal activity reports and records	Immediate and ongoing	- Staff salaries - Vehicles and S&T - Equipment	ZPWMA, FC RM, AMs ZRP
1.2 Informer network, investigation and intelligence system strengthened / established and operating	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	- Inspection of informer reports / database - Records and reports of training session - Whistle-blower system reports - Records / reports	Established over the first year, then ongoing	- Staff salaries - Vehicles and S&T - Rewards and payments to informers - Telecommunications costs -	ZPWMA, FC ZRP
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines in collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	- Court records - Law enforcement data base	SOPs to be established within 3 months. On going	Training costs Expert costs Specialized equipment	ZPWMA, FC, ZRP Judiciary NGOs
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using	- Databases bases established and operational - Recording protocols in place and being used	- Database system being used and operational - Reports from database	Immediate and ongoing	Computers and software Database design and roll out	ZPWMA, FC

1. Protection and Law Enforcement (Northwest Matabeleland)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
	standardised recording forms and procedures					
1.5 Joint law enforcement operations within the NWM region	- Conduct joint operations - Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing)	- Number of joint operations leading to arrests and successful prosecutions - Number of meetings held per year - Number of successes from shared wildlife crime information -	- Minutes - Joint operation reports - Records - Manpower involved (by agency)	Immediate and on going Meetings: Quarterly and Monthly (cross-border)	Meeting costs (travel, etc.) Operational costs	ZPWMA ZRP ZDF FC
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the NWM	Proceedings of hunting workshop and revised models Record of infringements and penalties and analysis of trends	Immediate and ongoing	Staff time and meeting costs	ZPWMA, FC SOAZ, ZPGHA ZHA
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the NWM that are settled has not increased, or has declined, from 2015 levels	Satellite monitoring records	Immediate and ongoing	Satellite imagery Meeting costs Awareness and educational materials	ZPWMA, FC, RDCs Traditional Leaders
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	Minutes of joint meetings Record of agreed SOPs Reports of cross border operations Record of arrests and prosecutions	Immediate and ongoing	Travel and meeting costs	ZPWMA, FC ZRP JOC

2. Biological Monitoring and Management (North West Matabeleland)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations, forest areas, and RDCs in NWM - Introduce ranger-based monitoring across all stations in NWM - Analyze the data and report on trends - Annual water hole count continued	- Information on trends in elephant numbers, structure and mortality analysed and available	- Databases and reports	Aerial surveys every 3 years Ground and waterhole counts annually Illegal activities and ranger patrol ground counts reported monthly Database and monitoring ongoing	Aerial survey – USD 150,000 Computers and software Training in SMART, MIKES, etc. Travel & Subsistence and equipment	ZPWMA FC Research Partners
2.2 Impacts of elephants on selected habitats, selected indicator plant and animal species, and water use and supplies monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands - Measure and assess water use and its sustainability	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported Sustainability of water use completed	Copies of research and monitoring reports	2016-2019	Staff salaries and S&T Field equipment	ZPWMA FC Research partners
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, and HWC in the region - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research reports completed - PCP consultation results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	- Copies of reports, papers and recommendations -	Provisional TPCs provided with in 3 years	Staff salaries and S&T Aerial photos Satellite imagery Stakeholder meetings	ZPWMA FC Research partners

2. Biological Monitoring and Management (North West Matabeleland)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	- Monitoring records and reports - Use of monitoring and research results in determining management actions - Management action taken in respect of TPCs being approached or exceeded	2018	Monitoring and implementation of management actions	ZPWMA, FC RDCs SOAZ ZPGHA ZHA Traditional Leaders
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Age, sex and tusk sizes for all elephant killed recorded Elephant trophy quality is maintained or improved in relation to the stipulated desired age and trophy size.	Record of trophy quality of elephants obtained in each year	Immediate and ongoing	Staff training and time, Safari operators training and time	ZPWMA, FC SOAZ ZPGHA ZHA
2.6 Elephant range defined and managed to maintain (and/or recover) habitats and elephant populations, and connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	Elephant range use maps and reports	2016 - 2019	Staff time, S&T, satellite imagery and mapping, GIS software	ZPWMA, FC RDCs Traditional Leaders Neighbouring countries
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Record of reports submitted	Ongoing	Staff time	ZPWMA RM, AM

3.Social, Economic and Cultural Framework (North West Matabeleland)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in NWM adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	Policy framework document Record of operational Joint ventures / PPCPs	2016-2018	Workshops, facilitating PPCPs, drafting policy	ZPWMA, FC RDCs Traditional Leaders CAMPFIRE Association
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	Records of revenue earned by and disbursed to communities Report on annual consultation with Traditional Leaders Audit reports	By Dec 2016	Meetings, Drafting Legal review	ZPWMA, FC RDCs CAMPFIRE Association Traditional Leaders
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	Reports and records of implementation Database records and trend analysis reports	Immediate and ongoing	Equipment Review costs Monitoring costs	ZPWMA RDCs Traditional Leaders
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	Database records and reports	Immediate and ongoing		ZPWMA, FC RDCs, Community leaders

3.Social, Economic and Cultural Framework (North West Matabeleland)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for NWM - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in NWM - Proportion of schools within or neighbouring elephant areas receiving and using information provided	Elephant information items produced and distributed Reports/ records of delivery and use of elephant conservation information packages	By June 2016 and ongoing	Design and production of educational material Printing and distribution costs	ZPWMA, FC NGOs Min Education RDCs Traditional Leaders

4. Building Conservation Capacity (North West Matabeleland)						
Output	**Activities**	**Key Performance Indicators**	**Means Of Verification**	**Time Frame**	**Indicative inputs/Costs**	**Lead Agencies**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- Value of funding and support in kind for conservation of elephants in NWM realised each year	Records maintained by ZPWMA, NGOS, RDCs, Tour and Safari Operators	Annual assessment		ZPWMA, FC, NGOs, RDCs Tour and Safari Operators
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	Capacity needs assessment report	By June 2016	Time and travel costs of lead agencies and travel costs Consultant costs?	ZPWMA, FC
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the NWM - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify and provide needed equipment - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for the LZV developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	- Copy of research Strategy - Trained personnel in place for stipulated minimum period of time - Project proposals Technical reports and research papers - Annual State of the LZV Report - Event Book records / reports	Immediate and ongoing Annual NWM report commencing with baseline report for 2015	A range of training costs	ZPWMA, FC, Universities, NWM Working Group, NGOs
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. of communities trained and implementing elephant management programmes d) No. of elephant management campaigns conducted	Record of training modules Record of training courses completed Records of personnel / communities trained Individual staff files	Initiated by March 2016	Cost of training staff and re-training	ZPWMA, FC NGOs Universities

4. Building Conservation Capacity (North West Matabeleland)						
Output	**Activities**	**Key Performance Indicators**	**Means Of Verification**	**Time Frame**	**Indicative inputs/Costs**	**Lead Agencies**
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the NWM developed	- Rebuild / refurbish all main access and internal roads within NWM wildlife areas . - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the NWM - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	- Roads, bridges, airstrips refurbished and maintained as planned - Feasibility study of required field stations completed by June 2016 - Identified infrastructure requirements prioritized and required developments undertaken and completed by 2018	Housing, field units, feasibility study review report On site inspection of roads, airstrips and constructed housing units	Immediate and ongoing through 5-year period	USD 3 million+	ZPWMA FC RDCs ZINARA Donor support
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the NWM (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational secure communications system in place and being maintained	Reports and tests of system	Immediate ongoing	USD 310,000	ZPWMA, FC NGOs/Donors

5. Coordination, Collaboration and Programme Management (North West Matabeleland)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time Frame**	**Indicative inputs/costs**	**Lead Agencies**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	- Timely minutes of each bi-annual meeting produced and circulated - Number of committee resolutions and actionable points initiated and acted upon	Meeting minutes Actions and recommendations approved and implemented	Immediate and ongoing	Costs of meetings (venue and travel)	ZPWMA, FC Private sector agencies, RDCs Traditional Leaders
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA & FC	- Functional team established - Technical support provided in keeping with TORs and planned activities implemented	Meeting minutes Technical activities implemented	Immediate and ongoing	Costs of meetings (venue and travel) Equipment	ZPWMA, FC NGOs
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA and FC - Establish terms of reference and recognition as a formal entity - Establish effective engagement with RDCs, and Traditional Leaders in NWM and neighbouring communities	- Formal recognition by ZPWMA / FC achieved - Meetings held - Effective engagement with neighbours	Minutes of meetings	By early 2016	Costs of meetings (venue and travel	NGOs, Private Sector ZPWMA, FC
5.4 Links with neighbouring Botswana, Namibia and Zambia to confer on the management of shared elephant populations established / strengthened	- Establish links with Botswana, Namibia and Zambia to confer on cross border elephant management issues	- Links established and operating	Records of meetings and any joint elephant management initiatives	By June 2016 and ongoing	Costs of meetings (venue and travel	ZPWMA, FC RDCs NGOs Researchers
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	- At least one awareness campaign conducted each year - Annual progress reports produced - Number of briefs / news releases on major developments or progress released - Funds raised to support elephant conservation	Reports Campaign materials Press releases Funds raised	Initial campaign by June 2016	Preparation of campaign material	ZPWMA NGOs Private sector

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY

Sebungwe Region Elephant Management Plan

(2015-2019)

1. Protection and Law Enforcement (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
1. Joint operation reaction team established and existing base renovated at Bumi Hills old ZRP Camp as primary base. Followed by 3 others (Binga, Siabuwa, Old Chizarira Lodge/ Sengwa Wildlife Research Institute) *Manpower* *Vehicles* *Aircrafts* *Communication – eg radios* *Equipment eg firearms, boats* *Training* *Central database* *Intelligence networks*	**Manpower** – Draw up 20 man reaction team from law enforcement agencies and other stakeholders from the whole Sebungwe sub-region. (Prioritise Bumi, Sengwa) **Refurbish main base** **Training** – Initial database training Refresher course **Transport and Equipment** Procurement of 3 vehicles (land cruisers) Procurement of 3 boats (speedboats – 1 mothership and 2 patrol boats) **Communications** – establish an independent inter-agency communication network	- Number of arrests - Number of cases detected - Number of recoveries made (eg ivory, firearms etc) - Number of patrols conducted - Number cases finalized (convictions) - Number of carcasses detected - Number of joint operations carried out - Number of refresher courses carried out - Number of failed cases	Population census (elephant carcass ratios) MIKE site data Patrol effort indices Number of arrests and convictions Number of reports received from communities Number of reports on training sessions carried out	1 year June 2015 to May 2016 and then ongoing	S&T, Incentives - $54,000 Good accommodation – $100,000 Medical aid support , insurance - $30,000 year trained medic on deployment, CASEVAC – $165,000 Assistance benefits on bereavement Transport – $333,000 Boats – $182,000 Aircraft hire – $25,000 year Communications – $120,000 Total Capex - $600,000? Recurrent = $300,000? Sub-station budget considerations	ZRP/ZPWMA
1.2 Informer network, Investigation and intelligence system strengthened	- Recruit informers and contacts - Maintain hotline for whistle-blowers - Procurement of 2 vehicles and 2 motorbikes - Recruit investigators (6) and deploy strategically - Train investigators - Constant liaison with informers - Rewards to informers standardized	- Number arrests and successful convictions based on information from intelligence system - Number of incursions reported on/reacted to by local communities - Number of informer reports per informer leading to arrests and convictions	Validation of informer record Records and reports of training session Whistle blower system reports	1 year and then ongoing	Transport – $132,000 Rewards and payments to informers – $40,000 Telecommunications costs -$60,000 Repair and Maintenance, fuel - $66,000 Total $298,000	ZRP/ZPWMA

1. Protection and Law Enforcement (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
1.3 Zambezi Valley deployment tactics revisited and implemented	- ZV deployment tactics revised - Identification of OP sites, crossing points etc - Identification and procurement of specialized equipment (eg night vision) - Provision of dry rations for operations - Introduction of aerial surveillance flights	- Resource books - Number of successes on detections - Number of contacts - Number of recoveries - Patrol effort (surveillance)	Exhibits register Crime register Reports Briefing and debriefing register	3-4 months	Field allowances – $30,000 Specialised equipment costs – $80,000 Aircraft hire and maintenance Staff dry rations costs $100,000 pa Camping equipment costs – $60,000 Total $270,000	ZRP/ZPWMA
1.4 Ranger patrols strengthened	- Establish effective patrolling force of deployable rangers - Establish (or review) standard operating procedures (SOP) - Establish well-equipped reaction teams - Honorary Officer system re-established to support ranger patrols - Increase support for establishing/ improving dedicated APU for every concession.	- Number of deployable rangers at any one time - Total man-days spent on patrol - SOPs in place - Area patrolled each month - Reaction time to incidents - Number of APUs established	Monthly reports Subsistence claims Number of approved honorary officers Monthly Reports from APUs	SOPs to be established in 3 months Staffing established within 6 months Ongoing Six Months?	Salaries Equipment Vehicles	ZPWMA
1.5 Training of staff enhanced	• Establish regular training and retraining schedule (includes training on weaponry, bushcraft, tracking, information gathering, crime scene management, Judiciary procedures etc • Training on standard operation procedures (harmonization)	• Number of training and retraining sessions carried out	• Individual training records	Immediate and ongoing	$100,000	ZRP/ZPWMA
1.6 Conviction rates improved	• Judiciary sensitization (incl. workshops) • Formulation of proper charges, indictment and summons • Gathering all evidence available using legal means • Completion of dockets timeously, submission and concluding cases in a reasonable time • Creation of a district sub-committee on elephant and wildlife issues • Hold workshops to share information on wildlife issues	• Number of successful prosecutions • Decrease in number of crimes committed • Number of workshops or meetings held	• Crime records • Dockets	Ongoing	$50,000	ZPWMA/ZRP

2 . Biological Monitoring and Management (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
2.1 Viable population, geographical distribution, and habitat connectivity targets established.	- Establish TPC for all areas to set viable population target. - Collect spatial data (livestock densities, human population densities, forest cover, and agricultural cover) to map potential geographic distribution of elephants - Identify potential connectivity areas and promote wildlife-based land uses in those areas.	- Viable population target of minimum 5,000 for the region with minimum and maximum thresholds in different land categories - Updated geographical distribution map and spatial datasets - Number of conservancies approved/ green-lighted by communities	Censuses of elephants Distribution and records of elephant movement Records of meetings to establish conservancies	One year, then ongoing	Computers and software, transport for ground surveys and truthing $50,000 Meeting logistics, and transport, $15,000	ZPWMA with participation from the Tashinga Initiative, WWF HSBCP, and the private sector
2.2 Monitoring system for population trends, habitat, and impacts designed and implemented.	- Establish regional database for data on population, habitat, HEC, patrolling, poaching, and trophies (for trophies, see also Output 5). - Design and adopt standardized reporting formats. (i.e. MOMS) - Report to the regional management committee to review data and decide on management actions. - Conduct annual aerial surveys for the “core area” (to be defined).	- Regional database operational - Number of reporting formats designed and distributed - Number of persons, patrols, and sectors submitting data - Quarterly reports - Quarterly reviews	Database Reporting formats Records of data submitted Reports and reviews	One year for having the database established and the first committee meeting, then ongoing Immediate, quarterly and ongoing	For the first year, $300,000, with $150,000 for subsequent years	ZPWMA, with participation by RDCs, NGOs, and safari/tour operators
2.3 Direct and indirect causes of decline (2006-2014) researched.	- Causes of mortality quantified using the regional database. - Gather information from local communities and experts. - Examine potential socio-economic factors related to decline - Research habitat changes. - Publish research in scientific publication.	Data and analyses	Reports and publications	One year (published or submitted to peer reviewed journals)	$25,000	ZPWMA

2 . Biological Monitoring and Management (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
2.4 Viable population, geographical distribution, and habitat connectivity achieved and maintained.	- Establish wildlife-based land-use system (not a land use plan) with community conservancies acting as corridors between protected areas - Reduce human-elephant conflict to acceptable levels. - Implement responsible habitat management (with regard to fires, REDD+, mining, illegal and legal settlement) - Conduct integrated land-use planning. - Support extension of REDD initiative	- Number of operational conservancies/ corridors - Elephant Population data - Number of elephants and people involved in "serious HEC incidents" - Effective, non-lethal elephant deterrents in place - Regional land-use plan - Number of stakeholders, meetings in planning process - Utilization of corridors by elephants	Censuses of elephants Distribution and records of elephant movement Records of meetings to establish conservancies Legal instruments for conservancy establishment (*e.g.* via Town & Country Planning Act, Communal Land Act)	Starting in 2016 and ongoing	Unknown, but large expenditure	ZPWMA, conservancies, etc.
2.5 Sustainable offtakes established through participatory quota setting and monitored through adaptive management.	- Establish a database of offtakes, trophy qualities, and age classes (See Output 2, Activity 1). - Using participatory quota setting following best practices, set optional quotas based on scientific survey data, with no more than 0.5% of the estimate as the elephant quota for the region. - Revisit quota system and establish optional quotas as opposed to fixed quotas - Set minimum trophy size and a variable trophy fee with large increments based on size - Identify and enforce best hunting practices through a code of conduct incorporated in lease agreements and hunting permits.	- Trophy quality improving - Record of hunting practice transgressions	Trophy database	Database and code of conduct review within 6 months Revised quotas set annually Minimum trophy size defined before first revised quota	$20,000	ZPWMA and RDCs

2 . Biological Monitoring and Management (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
2.6 Robust and comprehensive research program enhanced and maintained.	- Research the impact of decline on population dynamics. - Investigate migration hypothesis. - Develop applied research projects, especially interdisciplinary and multidisciplinary research. - Establish research oversight body, building on existing approval processes.	Publications, particularly with management guidance	Publications and raw data	Ongoing and long-term	Annual budget: $200,000	ZPWMA, local government, and academic institutions

3 .Social, Economic and Cultural Framework (Sebungwe)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative Inputs / Costs**	**Lead agencies**
3.1 Transparent and equitable distribution of benefits established	- Develop an instrument to increase elephant revenues at the ward level. - Instrument to provide for traditional leaders to be involved in management and distribution of elephant related benefits. - Revise CAMPFIRE guide lines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodic auditing of the revenue sharing system.	- Instrument approved. - CAMPFIRE guidelines revised and approved - Revenue accountability system established - Number of audits	Publication of instruments and guidelines. Audit documents	One year		ZPWMA/ CAMPFIRE
3.2 Economic management of consumptive and non-consumptive tourism of elephants in Sebungwe improved.	- Preventing human settlement in protected areas - Review length of concession leases to encourage greater investment. - Rehabilitate the depleted Safari areas - Promote PPCPs	- Number of eviction notices issued. - Number of reviewed leases - Number of safari areas under proper management/concessions - Record of PPCPs established.	Records and reports of the points (6)KPI	Over a year		ZPWMA/ CAMPFIRE, Safari/ tour operators
3.3 Land use strategies to mitigate human elephant conflicts (HEC) established	- Review of human elephant conflict measures (consultancy) - Increase sense of ownership of wildlife as a mitigation measure to HEC (review) - Traditional leaders to set up a compensation scheme for land holders directly affected by HEC. - Support review and development of land –use plans to optimize agricultural livestock and farming activities	- Reports - Link with activity 1 and 2 output1(benefits) - Compensation scheme functioning and record of HEC in place. - Land use plans supported	Reports endorsed at local level Revenues increased. Records of HEC available Plans approved and published.	1 to 3 years		ZPWMA/ CAMPFIRE
3.4 Investment of wildlife revenue in income generating community products established	- Revitalize technical support services to communities/ community initiatives - Participatory business plan at community level. - Explore micro financing opportunities - Explore markets for community projects related to elephant conservation	- Technical support services established through proper instrument. - Participatory business plan adopted.	Micro finance projects Record of business plan Inventory of support services	Ongoing		CAMPFIRE Private Sector

3 .Social, Economic and Cultural Framework (Sebungwe)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative Inputs / Costs**	**Lead agencies**
3.5 Relationship and communication mechanism established	- Sebungwe WG to include Traditional leaders and RDCs - Methodologies for regular communication with communities and their leaders established	- Traditional leaders and RDC included in the WG - Communication strategy developed	Reports of the WG, Communication strategy reports.	6 Months		CAMPFIRE/ZP WMA/RDC/ Traditional Leaders
3.6 Education on elephant conservation in the community increased	- Information campaign explaining reasons for quota decrease (see Biological Component for cross check) - Explain what trophy hunting means and how it links to benefits - Share census results and explain implications - Extend conservation education to Sebungwe wards (NGOs?)	- Number of Outreach meetings with Traditional leaders / Wards/ RDC including the 4 key activities	Outreach meetings reports	One Year		CAMPFIRE/ZP WMA/RDC/ Traditional Leaders

4.Building Conservation Capacity Component (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
4.1 Capacity needs for elephant management in Parks and CAMPFIRE areas analysed and identified	- Draw up TOR - Appoint consultant	Report produced	Report	3 months	10,000	Sebungwe WG
4.2 Training provided	- Analyse training needs - Prioritise and develop training curricula if not already available - Implement in-service training and re-training	Numbers of people trained and certified	Training reports	Ongoing over 5 years	500,000	Sebungwe WG
4.3 Best practice standards for elephant management in place	- Standards defined by and through National Elephant Policy and CAMPFIRE Principles and Guidelines - Define clear objectives for elephant management in the Sebungwe - Support CITES MIKES site(s) and application of SMART and RBM	- MIKES PIKE database - SMART database	CITES MIKE Reports SMART Reports	Minimum 5 years	10,000	Sebungwe WG
4.4 Research and monitoring capacity strengthened	- Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring systems - Identify equipment needs, source and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- 2 persons trained per annum - 5+ people in mentoring system each year - Equipment procured and in place - Active community research programme underway - Event Book System functional and operationalised	Trained personnel in place for stipulated minimum period of time Technical reports and research papers Annual State of the Sebungwe Report	Immediate and ongoing Sebungwe report annually commencing with baseline report 2015		ZPWMA, Universities, Sebungwe WG (Also in many paces in plan SWG)
4.5 Funding secured	- Complete Sebungwe Elephant Management Plan and disseminate for funding purposes - Development of funding proposals for each of the components, if necessary - Identify donors (e.g. bilateral, WB GEF, NGO, other) - Submit proposals - Develop Sebungwe branding and marketing campaign	Number of successfully funded proposals	Record of funding proposals developed and funded	Immediate and ongoing		ZPWMA, Sebungwe WG NGOs Universities

4.Building Conservation Capacity Component (Sebungwe)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative inputs/Costs**	**Lead agencies**
4.6 Infrastructure refurbished and functioning	- Roads rehabilitation: Parks and CL - Karoi-Binga road - Airstrips	- 2,000 km repaired to standard - Airstrips registered and functioning	Roads in regular use	5 years	10,000,000 7,500,000 1,200,000 **~20,000,000**	Min Transport, DDF, RDCs ZPWMA Private Sector Sebungwe WG
4.7 Communications	- Procure and install radio communications systems	System installed and operational	Effective repeater linked radio communication throughout Sebungwe	1 year	500,000	Sebungwe WG

5 .Coordination and Programme Management (Sebungwe)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative Inputs/Costs**	**Lead agencies**
1. Sebungwe Management Committee with an Elephant Working Task Force and Project Coordinator established	-Identify committee members, select WTF and appoint Coordinator -ToR for each institution (from national plan)	Committee meeting twice yearly; WTF meets quarterly, identifies priority activities and oversees implementation by Coordinator	Meeting minutes Identified implementation activities completed as per milestones	Annual	3,000 3,000 50,000	ZPWMA & CAMPFIRE to establish structures
2. Coordination and communication between Traditional Authorities, their communities and the elephant management programme and plan strengthened	-Address the community through CAMPFIRE and traditional leadership -Introduce elephant management plan in easily understandable format – maps and graphs – and disseminate through all levels/actors in Sebungwe	• Management plan documents for dissemination	Record of meetings	On-going process	20,000 pa	SEWTF and RDC
3. Coordination between Sebungwe safari operators and implementation of the elephant management plan strengthened	-SOAZ, ZPHGA appoint liaison officer for Sebungwe elephant management plan -Encourage non-members of associations to participate in plan implementation	Liaison officer appointed and operating and non-members of associating participating in implementation of the action plan	Report by Liaison Officer	Immediate and ongoing		SOAZ, ZPHGA, ZPWMA
3. Links with neighbouring states established – shared elephant management	-Establish relationship with KAZA Secretariat -Establish links and synergies with transboundary natural resource mgmt -Bilateral JOC to focus on illegal wildlife trade and trade routes -Establish links with TRAFFIC	• KAZA Secretariat aware of Sebungwe elephant management plan • TBNRM established and functional • Reduced illegal trade	• Correspondence • Records of minutes meetings held	Ongoing	Nominal	SEMG JOC Permanent Commissions etc ZPWMA

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY

South East Lowveld Elephant Management Plan

2015-2019

1. Protection and Law Enforcement (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Agencies**
1.1 Highly trained rapid response anti-poaching units strengthened	– Appoint anti poaching coordinator (for region and/or separate areas) – Recruit staff – Train staff – Procure vehicles and equipment – Deploy unit – Support existing units	Trained and fully equipped units established and operating with relevant security agency by June 2016	Inception reports Daily and monthly reports, including details on patrols, arrests, and incursions Training reports	Established where needed by June 2016	US$ 230,000	ZPWMA ZRP Conservancies + MT
1.2 Informer and intelligence systems established and/or strengthened	– Identify and recruit informers – Establish and implement incentive protocols – Set up, implement hotline for anonymous reports and communicate it to the public – Analyse and use information – Ensure information is included in database outlined in Output 1.6	An active informer system/network operating within the SEL by Jan. 2016 Hotline widely advertised and operational by Jan 2016	Operational reports Recoveries Records of arrests and successful prosecutions Records of payments for information Records of hotline reports	By Jan 2016	Informer incentives Airtime Cost of setting up hotline	ZPWMA Security agencies Conservancies + MT
1.3 Investigation of wildlife crime improved	– Implement training programmes for investigation personnel – Ensure collaboration between Parks, ZRP and intelligence officers – Recruit more investigators – Put in place Investigator incentive system – Collaborate with forensic scientists and ballistic experts, as well as agencies such as EMA and approved universities (e.g. Chinhoyi University of Technology, University of Zimbabwe, National University of Science and Technology)	At least two law enforcement staff trained in scene of crime collection and preservation of evidence, ballistics evidence, etc. in SEL. Percentage of investigations resulting in successful prosecutions in SEL greater than in 2014	Reports on intelligence-led operations (arrests, dockets, convictions, multi-agency involvement) Training reports, including investigators wildlife crime manual	3 Months Ongoing 3 Months Ongoing Ongoing	$25,000	ZRP ZPWMA
1.4 Prosecution of wildlife crimes improved	– Train prosecutors on legislation and processes available to deal with wildlife crimes – Conduct awareness / outreach programs with Prosecution, Judiciary – Utilize ancillary laws, such as those dealing with economic crime, organized crime, money laundering, – Communicate status of prosecutions to the public via ZPWMA website – Clear backlog of wildlife cases – Explore the possibility of appointing dedicated wildlife crime prosecutors at Regional and National level	Monthly liaison sessions on wildlife crime and law enforcement held with members of the judiciary Relevant legislation available and being used Wildlife crime prosecutors available and being used in SEL	Reports on arrests, dockets, convictions, sentences Court records Monthly liaison meeting reports ZPWMA website	Starting 3 months, and fully operational by December 2016		ZPWMA Judiciary Prosecutor-General's Office District and Provincial Public Prosecutors
1.5 Law enforcement in collaboration with communities enhanced	– Engage and collaborate on curbing wildlife crimes (ZRP & Communities) – Establish anti-poaching clubs/ community natural resource monitors that collaborate with ZPWMA and	Incentive schemes that encourage the public and members of rural communities to contribute	Reports received through informers or hotlines Trends in reporting from	Ongoing Ongoing	$5,000	ZPWMA RDCs

1. Protection and Law Enforcement (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Agencies**
	ZRP – Lobby support from Chiefs to deal with local poachers – Hold workshops with Chiefs and communities about wildlife and wildlife crimes – Establish incentives for communities to provide information	to law enforcement (e.g. through informer hotline) established in SEL Increasing number of incidents of community contribution to law enforcement (e.g. whistle blowers) by Dec. 2017	communities Intelligence reports and minutes of meetings Reports on poaching incidents dealt with through traditional leaders Reduced levels of wildlife and environmental crime in the SEL			Traditional Leaders ZRP
1.6 Local wildlife law enforcement database established	– Set up database, as per national database – Ensure inclusion of prosecution status in database – Implement national data recording protocols – Train data entry staff and crime analysts	Local database established and operating Illegal activities recorded and analyzed	Inspection of database Operational database Monthly and annual analysis reports	6 months	$10,000 -Computer -Software -Training	ZPWMA Conservancies + MT Security agencies
1.7 Illegal settlements / grazing in wildlife areas reduced [Links to activities on land use mapping and planning in Component 2 – Output 2.2 and incentivization / alternative livelihood activities in Component 3]	– Liaise with RDC, Traditional Leaders and ZRP, DA's Office – Conducted Education programmes – Regular updated satellite mapping	Illegal settlements reduced to less than 5% of wildlife areas by 2020 (i.e. state protected areas, conservancies and community wildlife areas)	Records and maps of illegal settlements and of wildlife land recovered	Ongoing to 2020		ZPWMA CAMPFIRE RDCs Conservancies + MT

2. Biological Monitoring and Management (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Lead Agencies**
2.1 Research programme to understand temporal and spatial drivers of elephants established	– Create enabling opportunities and environment for research – Prioritise research needs – Conduct localised case studies and research projects – Monitor and evaluate poaching and other drivers - hunting, water, food, human disturbance – Explore possibility of GLTFCA flagship research programme for elephants [linked to Component 5] – Carry out ground surveys to monitor distribution and density	Research programme that enables local and international researchers, and links with the GLTFCA research programme, in place and producing reports	Annual summary research report Number of research projects Number of essential research projects Number of affiliations with national, regional and international institutions Reports and reviews Publications	5 year plan and annual review	Aerial surveys Ground counts Satellite collars Remote sensing data layers Research operations Research permit costs	ZPWMA Conservancies + MT Universities FZS GLTFCA Joint Management Board / Coordinator RDCs Technical colleges
2.2 Current elephant range defined and options for extending range and maintaining connectivity between fragmented populations explored	– Define elephant range use, and existing and potential connectivity – Identify priority corridors and human land use barriers – Conduct spatial analyses to inform land use planning – Advocate land use planning to facilitate connectivity and reduce human wildlife conflict – Explore options for translocating elephants to under-stocked areas	Identified priority corridors for elephant connectivity within SEL, between SEL and other areas in Zimbabwe, and with neighbouring countries	Elephant and human range use reports and maps	December 2016	Aerial surveys Satellite collars Remote sensing data layers Research operations Permit costs	ZPWMA Conservancies + MT Universities FZS DA's Office RDCs
2.3 Elephant population numbers, structure, mortality and trends monitored, quotas adjusted, and desired levels of trophy quality maintained	– Undertake standardised, regular, aerial and ground surveys of the elephant range – Explore methods to monitor elephant presence and abundance in Mozambique (to Zinave) and up to the Chimanimani range – Undertake trend analysis – Define elephant age and sex structures and extract birth and death rates – Establish annual monitoring plans – Record and analyse elephant mortalities (all causes e.g. poaching, PAC, natural, hunting, etc.) – Monitor trophy quality and age – Develop and implement an age-based and size-based trophy quota	Elephant range surveyed at regular intervals Demographic data available and analysed Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers and used in quota setting	Aerial survey reports Minutes of the elephant management committee meeting Minutes of quota setting meetings Reports on mortality, population structure, and trophy quality and age	Aerial surveys - at least every three years Ongoing monitoring Annual reports	Aerial surveys Remote sensing data layers Monitoring operations Permit costs	ZPWMA Conservancies + MT Universities FZS International donors

2. Biological Monitoring and Management (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Lead Agencies**
2.4 Elephant impacts on their habitats and selected indicator species of biodiversity monitored	– Establish annual monitoring plans – Measure vegetation indicators such as woodland cover – Measure other functional biodiversity indicators e.g. bird responses to structural changes to woodlands – Measure ecosystem functions – Relate desired impact to measures of elephant abundance and spatial use – Research other drivers of ecological impact (climate change, change in land use, water provision, and fencing, amongst others) – Use research findings, expert opinion and informed public opinion to establish thresholds of potential concern (TPC or limits to change) to initiate management action in respect of elephant impacts in protected areas and effects in communal land – Identify areas with key vegetation communities that are utilized by elephants	Annual monitoring plans defined and implemented for selected indicator species of biodiversity TPC's established Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	Annual ecological impact monitoring reports Published research papers and reports Minutes of the elephant management committee meeting	Annual	Ecological surveys Remote sensing data layers Monitoring operations Permit costs	ZPWMA Conservancies + MT Universities FZS GLTFCA Coordinator
2.5 Costs and benefits of elephants to local and national economy monitored and costs of elephants to local communities reduced	– Monitor and evaluate extent and costs of human-wildlife conflict incidents – Relate human-wildlife conflict to elephant abundance and spatial use – Understand drivers and social and economic consequences of human-wildlife conflict – Evaluate the direct and indirect contribution (financial, economic and social) and the direct and indirect costs of elephants to the well-being of people and to conservation, through both consumptive and non-consumptive uses – Implement ongoing and new mitigation for human-wildlife conflict	Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	Annual monitoring reports Human Wildlife Conflict Reports Research reports provided to managers Minutes of the elephant management committee meeting	Annual	Questionnaire Surveys Centralized database setup and maintenance Monitoring operational costs	ZPWMA Conservancies + MT Universities FZS
2.6 Adaptive elephant management framework adopted and implemented	– Ensure collaboration between Regional Elephant Management Committee and regional and local resource management committees (e.g. LOCAL Forum) – Implement annual process of adaptive planning, implementation and monitoring in line with elephant management objectives and TPCs within the SEL – Develop and implement localised management plans (e.g. SVC plan) – Ensure alignment and harmonisation with other Zimbabwean, regional and international plans	Annual elephant management plans developed, adopted and implemented	Elephant Management Committee Minutes Planning and monitoring reports Annual elephant management plans	Annual	Meeting costs Monitoring and analysis costs	ZPWMA Regional Elephant Management Committee

2. Biological Monitoring and Management (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Lead Agencies**
2.7 Alternative outcomes modelled	– Develop framework for examining and modelling potential linked impacts between biodiversity issues, elephant issues, and societal issues, including any 'surprises', such as disease or extreme weather events. – Implement the modelling framework to define the outcomes of various management scenarios	Established modelling framework being used to guide adaptive management Scenario outcome recommendations and being used in management	Elephant Management Committee Minutes Reports on models and scenarios Recommendations	Begin immediately Ongoing annual reports through 2020	Meeting costs Staff and consultants costs Software costs	ZPWMA Regional Elephant Management Committee Research institutions Researchers
2.8 SEL reporting to meet national / international standards achieved	– Advocate key summary set of elephant KPIs/outcomes for national reporting (e.g. potential population sizes against actual population sizes) – Comply with national and international legal obligations – Explore the designation of GNP as a MIKE site	CITES reporting requirements met National reporting compliance requirements	SEL regional Reports CITES Reports	Annual	Monitoring costs	ZPWMA Regional Elephant Management Committee

3. Social, Economic and Cultural Framework (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Agencies**
3.1 Community partnerships and joint venture oportunities are incentivised and facilitated	– Establish protocols, policies and models for development of joint ventures (PPCPs) – Identify potential areas – Facilitate development of new, and strengthen existing, institutional frameworks and legal entities for beneficiaries at sub-district level – Develop concepts, business plans and prospectuses for different areas through consultative processes with Communities – Develop a SEL Tourism plan and review potential concessions within the framework of this Plan – Develop mechanisms for inclusive and transparent engagement and selection of operators and JV partners. – Facilitate communication, endorsement and support of JVs – Explore potential incentives and avenues of material and technical support that can be provided by Local Government and Authorities to promote establishment and sustainability of Community JVs – Promote access to affordable capital funding – Enhance capacity of community members to engage in wildlife and tourism management through training and employment	Models and protocols for joint ventures established Community institutions to engage in joint ventures established Joint ventures established and operating, resulting in financial benefit to communities SEL tourism developed and potential concessions identified Mechanisms of support and incentivisation to JVs established	Community institution documents (e.g. Trust deeds) Concept notes, business plans and prospectuses for JVs JV agreements and leases Records of meetings, negotiations and consultations SEL Tourism Plan RDC resolutions Community resolutions Record of incentives Project reports & accounts Training reports	Within 12-24 months, and then ongoing	Travel Meetings Drafting Consultants NGO support	RDCs Traditional Leaders and relevant community institutions NGOs Pvt Sector ZPWMA
3.2 Elephant management in community wildlife areas improved	– Promote improved and professionalized elephant management and security in community wildlife areas through establishment and maintenance of improved capacity, infrastructure, security and management systems – Develop and implement a transparent Performance Based Quota system which incentivises improved management and security systems for elephant in community hunting areas and which promotes effective buffering of source populations – Update terms of lease agreements in community wildlife areas to confer a broader range of roles and responsibilities on operators including resource management and protection; re-investment and infrastructure development; employment targets; local sourcing; etc. – Review key cooperation opportunities across different land uses and countries within GLTFCA, e.g. Sengwe-Tshipise Wilderness Corridor	Infrastructure, equipment and systems for elephant management in community wildlife areas established and operational Reduced human-elephant conflict Community capacity for wildlife management improved Opportunities for cooperation within GLTFCA identified	Project reports Asset / infrastructure register Number of rangers / employees Leases, Business Plans Resource monitoring data Trophy data Number of people / locals employed Invoices and receipts for local goods and services Meeting records Constitutions and agreements signed Workshop reports	Ongoing Within 12 months	Capital expenditure on infrastructure and equipment Maintenance Electricity Communications Operational costs: Staff and trraining, Travel, Research and Monitoring, Workshops	JV partners NGOs & donors Local authorities GLTFCA
3.3 3.3 Additional elephant-based tourism and sustainable utilisation oportunities explored	– Promote awareness and marketing of iconic tuskers – Explore opportunities for expansion of community wildlife areas in viable wildlife corridors to enable establishment of additional sustainable utilisation areas and enterprises. [Links to Output 2.2 – identification of corridors]	Corridors identified and Agreements concluded Tourism and awareness campaigns undertaken	Tourism records Marketing materials Business plans Meeting and workshop	As part of SEL Tourism Plan Within 12	As part of SEL Tourism Plan, workshops and consultations	All stakeholders RDCs

3. Social, Economic and Cultural Framework (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Agencies**
			reports Agreements signed Reports and maps of corridors	months and ongoing		Communities
3.4 Transparent distribution of the benefits and costs of elephant management and conservation facilitated [Links to Output 2.5]	– Conduct regular and comprehensive Community Awareness campaigns regarding quotas, revenues and distribution within Communities – Capacitate and incorporate direct community involvement in management of Community Wildlife Areas, enterprises and JVs. – Diversify downstream natural resources enterprises to multiply the revenues from CBNRM, e.g. NTFPs	Awareness campaigns conducted Community structures have improved capacity to manage NRs and wildlife areas CBNRM revenues are invested in establishment of natural-resource based enterprises Community realises greater employment and financial benefit from CBNRM revenues	Meeting records Training materials & records Number of enterprises established Books of account Number of employees & beneficiaries	Within 12 months and ongoing	Consultations Scoping and feasibility studies Awareness campaigns Company set up and administration	ZPWMA Traditional leaders Communities RDCs Pvt Sector NGOs
3.5 Effective techniques and land use strategies to mitigate human-elephant conflict are implemented	– Review land use zonation through consultative processes [link to Output 2.2] – Promote awareness and adoption of effective HEC mitigation measures – Promote improved rangeland rehabilitation and grazing management to reduce competition between livestock and wildlife. – Promote improved and rationalised crop production and alternative mechanisms to promote food security to reduce habitat destruction for inefficient dry land cropping (e.g. irrigation development; carbon sequestration credits to generate income & purchase of staple grains).	HEC is effectively reduced Availability and application of HEC mitigation measures improved There is participation in effective grazing management schemes Grazing is better managed and rangeland health is improved There is increased uptake of improved cropping techniques Crop yields are improved Alternative land uses evaluated	Land use plans Meeting records Land use plans & agreements concluded Training & awareness materials HEC data Pasture monitoring data Crop production data	Within 12 months and ongoing	Workshops and consultations Training materials Consultants Input costs Irrigation development	Communities RDC ZPWMA Pvt Sector NGOs (technical & financial support)
3.6 Information on elephants and their conservation is included in school curriculae and environmental education	– Promote awareness of elephant conservation (and other issues) through cultural events, art, plays, sport, etc. – Participate in syllabus review of national environmental science curriculum approved by the Ministry of Education – Develop approved environmental training and extension	School children and communities have greater appreciation of elephant conservation issues Greater participation in	Test Results Competitions Community focus groups Attendance registers	12 months and ongoing	Consultants Endorsements Community consultations	NGOs RDCs ZPWMA DEO

3. Social, Economic and Cultural Framework (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Agencies**
adjacent to key elephant populations in the SEL is promoted	material and promote dissemination to different stakeholder groups within the community – Promote the formation of environmental science clubs at schools – Coordinate various education, training and extension campaigns operating within the district	environmental clubs at schools with greater understanding of environmental issues More social events linked to environmental and conservation awareness are held Elephant conservation messages are conveyed through art and cultural events & competitions Parallel education programmes are coordinated through stakeholder planning sessions at district level	Event documentation Number and type of events Workplans Meeting outputs & records		Materials and dissemination School visits Training of trainers / teachers Event costs Marketing Sport kit Coordination costs	Communities
3.7 Cultural tourism is developed and marketed as a centre-piece of SEL attractions and linked explicitly to conservation of flagship species including elephant	– Promote existing cultural tourism events and attractions and promote incorporation of messages of elephant conservation within these – e.g. Machangana Cultural Festival; GL-Cultural Festival – Explore and develop additional cultural tourism opportunities – including development of interpretive centres, craft centres, museums, monuments, events, etc. and market these – Document and communicate the specific cultural importance of elephant to communities in the SEL and incorporate this into education, marketing, event and cultural messages and interpretative centres.	Community participation and tourist attendance of cultural events is increased Messages relating to elephant conservation and environmental issues are key themes The number of cultural tourism developments and enterprises is increased Anecdotes, artifacts and oral tradition regarding cultural importance of elephants are recorded and insinuated into marketing strategies and event messages	Tourism records Event records & themes Number of enterprises registered Documents compiled	Ongoing	Costs for : Cultural events Planning Awareness and marketing Travel and events Scoping, feasibility and planning Workshops and consultations Establishement and registration Capex, Opex Marketing Travel & meeting costs Workshops and publications	Communities Traditional leaders Local authorities, Private sector NGOs JV partners Consultants
3.8 Regional tourism is promoted	– Promote the development of infrastructure critical to accessibility of the region: e.g. border crossing at Pafuri; road development and maintenance; scheduled flights to Chiredzi; etc. – Promote diversification, branding and marketing of SEL-specific tourism products linked within the region and with other attractions in Zimbabwe and neighbouring countries.	Increased tourism traffic and arrivals Infrastructure upgrades Scheduled flights established Pafuri border crossing	Tourism & economic data Upgraded infrastructure Border post Flight schedules Tourism enterprise info Marketing materials	ongoing	Scoping studies Tenders Workshops and consultations Scoping studies Consultants	Central Government Local Authorities Communities GLTFCA

3. Social, Economic and Cultural Framework (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Agencies**
	– Focus special attention on development of community-led tourism initiatives that contribute to the sustainability of the STWC as a movement corridor for elephant – Clear mines from STWC	operational Tourism products are diversified Marketing and branding consultants engaged to develop branding and strategy Scoping, feasiblilty studies are undertaken Increased number of CB enterprises are operational	Scoping and feasiblity documents Business plans and registrations		Development of business plans Infrastructure, equipment, operational costs Marketing	Donors Private sector RDCs NGOs JV partners
3.9 Policy framework for conservation and CBNRM is well understood by communities and other stakeholders in SEL	– Compile factsheets on policy framework for conservation and CBNRM and disseminate to communities and other stakeholders	Communities have access to existing CBNRM and Policy frameworks	Awareness materials Focus groups & attendance registers Enterprise records Employment records	12 months ongoing	Consultation & document compilation Drafting and production of awareness materials Dissemination of materials	Traditional Leadership Communities RDCs ZPWMA NGOs
	– Consider innovative mechanisms for transboundary resource sharing and expanding “space for elephants	Workshops conducted	Workshop outputs and resolutions	Within 12 months	Stakeholder workshops (and attendant costs) Community consultations (AAC)	All stakeholders GLTFCA

4 . Building Conservation Capacity (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Agencies**
4.1 Funding to implement the plan secured	– Implement variable / graduated trophy fee structure based on trophy size [national-level decision] – Review levy / fee structure for elephant hunting and the distribution of these revenues for conservation and communities – Develop and submit bankable project proposals to potential funders – Explore potential business partnerships – Increase capacity and law enforcement coverage by ensuring that all key stakeholders contribute to and are engaged in law enforcement activities: hunting operators, tour operators, and community anti-poaching teams [Links to Output 1.1] – Explore the potential for a dedicated elephant fund for SEL.	Revised trophy fee structure developed, resulting in increased funds available or secured for elephant conservation Number of project proposals developed submitted and funded Number of developed and functional partnerships contributing to improved elephant management	Record of funds available for elephant conservation Record of project proposals	2016 and ongoing		ZPWMA Conservancies + MT NGOs
4.2 Current capacity analyzed and needs identified	– Analyze current capacity – Carry out a needs assessment across the full range of human resources – Carry out a needs assessment for equipment and infrastructure – Develop a strategy to address the identified needs	Needs assessment report	Records and reports	2016 and ongoing		ZPWMA
4.3 Capacity for research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	– Develop and implement a multi-disciplinary research and monitoring strategy – Develop and implement a research programme based on that strategy, including graduate studies, post graduate and external researchers as well as ZPWMA researchers – Undertake periodic research meetings / conferences – Recruit and meet demands and requirements for research personnel in Parks and surrounding areas – Collaborate with external research institutions – Develop and implement a mentoring programme for researchers – Procure relevant research equipment	Functional research programme in place Research meetings held Publications Number of research projects developed and implemented Number of research personnel on the ground Number of collaborative projects Mentoring plan / number of days spent with experienced researchers Inventory of equipment for research procured	Reports and publications Minutes of meetings Records of field personnel	2016 and ongoing	USD 100,000?	ZPWMA, Universities, NGOs, External Researchers ZPWMA, Universities, NGOs, External Researchers, SVC

4 . Building Conservation Capacity (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Agencies**
4.4 Training and retraining programmes established	– Carry out a training needs assessment for law enforcement, resource and wildlife management, research and monitoring, education and awareness, community elephant management, etc. – Develop and implement strategies based on the needs assessment – Standardise and harmonize training in law enforcement	Training needs assessment report Training programmes established	Inventory records / assets check list	2016 and ongoing		ZPWMA, RDCs, NGOs, Universities

5 . Coordination, Collaboration and Programme Management (South East Lowveld)						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Time frame**	**Indicative costs**	**Lead Agencies**
5.1 SEL Regional elephant conservation and management steering committee of 8 established (ZPWMA, SVC, MT, Bubi Conservancy, Chiefs' rep, GCP, ZRP, RDC) This committee should include a core set of competencies (and can co-opt expertise if needed).	– Develop TOR for the steering committee – Identify members – Oversee the implementation of the regional elephant strategy as per national mandate – Meet biannually – Attend national elephant management meetings	Functional committee meetings held biannually with adequate attendance	Minutes with action points	Established within 60 days of the Regional strategy final document	$1500 (Fuel, Accommodation) $3,000 (Biannual Meeting) National Elephant Management Meeting - Cost Total Budget $4500.00	Regional Manager, Southern Region, ZPWMA
5.2 Links with neighbouring states to confer on the management of shared elephant populations strengthened	– GLTFCA coordinator to identify relevant stakeholders to participate in the implementation of the regional elephant action plan – Sustain collaboration with regional partners+(one committee member for the regional committee meetings) – Share knowledge / data of all 5 key components of the plan with the regional partners	Number of consultative meetings held Tangible regional collaboration and participation	Minutes and action items	Ongoing	*To get confirmation from the GLTFCA coordinator.* 1xcommitte member travelling to SA or MZ MZ=$1440 SA=$1320 Zim=$1540 Total=$4500	Regional Manager, Southern GLTFCA Coordinator
5.3 Coordination between the tourism industry (consumptive and non-consumptive) and the elephant management programme strengthened	– Identify consumptive and non-consumptive operators in SEL – Liaise with SOAZ, ZPHGA, ZATSO, ZHA, etc. – Encourage non-members to be affiliated to relevant associations – Hold quarterly meetings with operators – Consider scale of operations in non-consumptive tourism	Regular meetings and workshops convened with the operators	Record of meetings and workshop proceedings Database of operators	Immediate and ongoing	-Sunk -Sunk -Sunk -11 people x one night x 4 times/year=$3080 Fuel=$546x4times=$2184 Total Budget=$5400	Regional Manager, Southern-ZPWMA ZPHGA SOAZ ZATSO ZHA
5.4 Effective information dissemination and communication strategy implemented	– Ensure clear communication of progress against action plan to all relevant stakeholders – Identify target groups, i.e. traditional leaders, school groups, amongst others – Develop a communications strategy, making use of relevant media (print, social, road shows) – Implement communication strategy – Monitor and evaluate	Outreach programmes conducted	Community strategy document Flyer, brochure, websites, published papers, videos, dramas	Ongoing	-Sunk -Sunk -Website setting, double side flyers and media, outreach costs=$10,000	Regional Manager, Southern Steering Committee

From:	Olivia Mufute
To:	"Vannorman, Tim"
Subject:	Su-Regional Elephant Managemnt Plans
Date:	Monday, February 15, 2016 7:21:14 AM
Attachments:	North West Matebeleland.pdf Sebungwe.pdf Lower Zambezi Valley.pdf South East Lowveld Plan.pdf

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Dear Tim,

Further to our submission of the National Elephant Management Plan for Zimbabwe, please find attached separate Sub-Regional Action Plans.

Regards

Olivia Mufute
Zimbabwe Parks and Wildlife
Chief Ecologist
Direct line: +263-4-790570

Click here to view our website
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-----Original Message-----
From: Thelma Mahachi [mailto:tmahachi@zimparks.co.zw]
Sent: Monday, February 15, 2016 2:16 PM
To: 'Olivia Mufute'
Subject: Emailing: North West Matebeleland, Sebungwe, Lower Zambezi Valley, South East Lowveld Plan

Please find attached documents

From:	Regina A. Lennox
To:	Vannorman, Tim
Cc:	John J. Jackson, III
Subject:	Fwd: Zambian poacher shot in Zimbabwe
Date:	Monday, February 22, 2016 5:33:48 PM

Dear Tim,
Please see the article below on recent anti-poaching efforts in Zimbabwe.
Kind regards,
Regina

---------- Forwarded message ----------
From: **Regina A. Lennox** <regina.lennox@conservationforce.org>
Date: Mon, Feb 22, 2016 at 12:01 PM
Subject: Zambian poacher shot in Zimbabwe
To: John Jackson <jjjiii@att.net>, "John J. Jackson, III" <jjw-no2@att.net>

Interesting because it refers ton a "new hit-and-run tactic." The good news is that ZimParks was quick to respond.

Zambian poacher shot dead in Zimbabwe

news/africa /

22 February 2016 at 11:22am

By: Oscar Nkala [this guy writes for the National Geographic Wildlife Watch blog]

Gaborone - A Zambian poacher was killed by Zimbabwean game rangers in a gun-battle that led to recovery of a rifle and 13 rounds of live ammunition at the Matetsi National Park, near the resort town of Victoria Falls on Saturday morning, a leading conservation group has reported.

According to a statement released on Sunday by Trevor Lane, chairman of the Victoria Falls-based conservation group Bhejane Trust, two other suspects escaped arrest and abandoned their cellphones after being ambushed by game rangers.

The rangers recovered the carcass of an elephant the poachers had just killed. The tusks were still intact.

“Two shots were reported early on Sunday morning, and parks rangers immediately reacted by deploying patrols in the area,”said Lane, adding that “two more shots were then heard, and the patrol went to investigate and found a dead elephant with the tusks intact”.

Giving further details Lane said: “They went into ambush and three Zambians showed up. The rangers killed the gunner in the ensuing gun-battle, but the other two escaped. They recovered the body, a .375 rifle, 13 rounds and two cell phones”.

Further, he said the poaching operation confirmed a new hit-and-run tactic developed by Zambian poachers, who enter Zimbabwe in small groups and escape back to their country immediately after committing poaching crimes.

The fatal shooting of the poacher came a few days after the bodies of two more Zambian poachers were found floating on the Zambezi River near Victoria Falls.

Police believe the two dead poachers could have been shot in a February 14 gun-battle with game rangers.

The relatives of the deceased have since collected the bodies for burial in Zambia.

Another Zambian poacher who was arrested with 25 rounds of ammunition, two axes, butcher knives and 2kg of dagga was due to appear at the Victoria Falls Magistrates Court on Monday.

Christopher Malasa Mandanya is facing charges of illegal possession of firearms, possession of drugs and illegal entry into Zimbabwe.

African News Agency

http://www.iol.co.za/news/africa/zambian-poacher-shot-dead-in-zimbabwe-1987901

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Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

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504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

From:	Cogliano, Mary
To:	FWHQ AIA-STAFF
Subject:	Fwd: [African-elephant] Great Elephant Census: Two Years Later
Date:	Monday, February 29, 2016 9:22:21 AM

---------- Forwarded message ----------
From: **Save The Elephants News Service** <stenews@elephantnews.org>
Date: Sun, Feb 28, 2016 at 10:45 AM
Subject: [African-elephant] Great Elephant Census: Two Years Later
To: african-elephant@elephantnews.org

Great Elephant Census: Two Years Later

February 26, 2016

See link for photos

February 26th marks the two year anniversary of the Great Elephant Census' very first survey over the iconic Tsavo National Park in Kenya. Since this first flight, 19 countries, 95% of the known savanna elephant range, have been surveyed for the first pan-African elephant survey in over 40 years.

It was fitting that the surveys began in Kenya, home of the legendary Iain Douglas-Hamilton who conducted the 1975 Pan Africa Survey. Sir Douglas-Hamilton joined Principle Investigator Dr. Mike Chase, founder of Elephants Without Borders, and the rest of the Great Elephant Census team in Tsavo to begin the new survey and fill critical gaps in data, which will help inform conservation strategies for national parks and reserves.

Tsavo is an area of nearly 55,000 sq. km and is historically home to one of the largest elephant populations in Kenya. An iconic elephant habitat, Tsavo's sheer size and teeming wildlife make it an excellent barometer for elephant conservation. The flights in Tsavo were not without struggles. At one point, after a "bush break" the plane would not cold start and the team had to get a "jump" from their friends at the Kenya Wildlife Service!

Our memories of the Tsavo survey are bittersweet. It marked the first of over 506 days in the air, and it marked the last time anyone would see the mighty Tsavo tusker Satao alive. During the Tsavo census, we counted the great tusker as he trundled across his habitat. But just a few short months after the Tsavo census was completed, Satao was discovered dead and mutilated at the hands of poachers, his magnificent tusks ripped from his skull and his body left to rot.

Even as we mourn the loss of Satao, we are hopeful of what the census results can do for conservation in Tsavo and all of Africa's vital elephant landscapes. The Great Elephant Census has one less elephant, but it is our hope that a future census will include many more.

The total results for each elephant landscape, including Tsavo, will be peer reviewed and published later this year.

http://www.greatelephantcensus.com/blog/2016/2/10/great-elephant-census-two-years-later

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at http://www.savetheelephants.org

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All Scientific Papers:
http://elephantnews.org/mailman/listinfo/allpapers_elephantnews.org

--
Mary Cogliano, Ph.D.
Team Leader
Division of Management Authority
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803
Phone: (703) 358-2505

Fax: (703) 358-2276

From: John J. Jackson, III
To: Bryan Arroyo - FWS
Cc: Tim Vannorman; Rosemarie Gnam
Subject: Fwd: Re: Zimbabwe Update
Date: Monday, March 06, 2017 10:18:36 AM

Bryan,

This is the status of Zimbabwe from my end . I hope we can get some movement from FWS.

Thanks,

John

On Mar 3, 2017, at 2:53 PM, John J. Jackson, III <jjj@conservationforce.org> wrote:

-------- Forwarded Message --------
Subject: Re: Zimbabwe Update
Date: Fri, 3 Mar 2017 22:40:21 +0200
From: Mupazviriho (b) (6)
To: John J. Jackson, III <jjj@conservationforce.org>

We have submitted all the documentation required relating to
Non detrimental findings for both lions and leopards
Elephant management plans showing priority areas
Budgets for conservation arising from hunting
Community livelihoods from hunting

It would be important to ask Bryon Arroyo what is the next step since Zimbabwe submitted what they asked for and we are willing to collaborate closely so that the matter is resolved in the interest of conservation
Best regards
Prince Mupazviriho

Sent from my iPad

On 03 Mar,2017, at 6:13 PM, John J. Jackson, III <jjj@conservationforce.org> wrote:

Prince,

I'd like to speak with you about any conversations you have had with the USFWS at the SCI convention. I expect to be meeting with Bryan

Arroyo the Director of International Affairs next week. I want to arm myself with the facts so I can ask the right questions. What is your Skype number?

I need to be updated on lion, elephant and leopard in Zimbabwe. So that I can make the most of the new U.S. Administration.

Thank

--
<mime-attachment.jpg>

From: John J. Jackson, III
To: Chrissie Jackson; Regina Lennox; Marco Pani
Subject: Fwd: Re: Mana poacher shot
Date: Thursday, March 10, 2016 12:46:06 PM

-------- Forwarded Message --------
Subject: Re: Mana poacher shot
Date: Thu, 10 Mar 2016 11:39:32 -0600
From: John Jackson <jjjiii@att.net>
To: John J. Jackson, III <jjw-no2@att.net>

Lynne, Conservation Force will pay the 1, 500.00 as suggested. Please send wiring instructions.
Arron, open cc Chrissie, Regina, Marco. Bcc Louie Muller, TyS DEfreeze(sic), Ken Barr, Tim Van Norman, to Success 2016
Sent from my iPad

On Mar 10, 2016, at 8:49 AM, John J. Jackson, III <jjw-no2@att.net> wrote:

> -------- Forwarded Message --------
> **Subject:**Re: Mana poacher shot
> **Date:**Thu, 10 Mar 2016 13:24:25 +0200
> **From:**Lynne Taylor <lynne@thetashingainitiative.org>
> **To:**John J. Jackson, III <jjw-no2@att.net>
>
> John
> Thank you for writing. I am on site at Nyakasikana antipoaching base which we are developing. Have spoken to the leader of the team concerned. They have received USD250.00 each from Zambezi Antipoaching Volunteers and there were 5 parks guys involved. In discussions it is agreed that a total of 500 each is an accepted figure. Therefore we are asking for a further 5x 250.00 each = USD1250.00 That said, if not possible, another 500 in total = USD100 each of course would be fantastic.
>
> Best wishes
> Lynne
>
> Sent from my iPhone
>
> On 08 Mar,2016, at 16:44, John J. Jackson, III <jjw-no2@att.net> wrote:

Are you talking of 500.00 per team member or what?

Thanks,

John

On 3/6/2016 6:08 AM, Lynne Taylor wrote:

> John,
>
> News just in from the Ops leader based at Nyakasikana Gate, Mana Pools via whatsapp to say they have just shot and killed a poacher in Mana Pools. This is a long-awaited breakthrough for this team.
>
> Can Conservation Force take the lead here in a reward to the Parks team concerned?
>
> Best wishes
> Lynne
>
> <mime-attachment.gif>

--
John J. Jackson, III
CONSERVATION FORCE
3240 S. I-10 Service Road W., Suite 200
Metairie, Louisiana 70001
Tel: (504) 837-1233
Fax: (504) 837-1145
jjw-no@att.net
www.conservationforce.org

From:	John J. Jackson, III
To:	Tim Vannorman
Subject:	Mana Pools National Park: Death of Wildlife Conservation
Date:	Wednesday, March 16, 2016 10:23:08 AM

Tim,

Two wildlife conservation volunteers, father and son, that we have been working with to control the poaching have been tragically killed by Rangers on an anti poaching patrol that they were in route to replace.

http://www.zamsoc.org/?p=2121

Thanks,

John

FACTUAL REPORT ON THE TRAGIC DEATHS OF TWO WILDLIFE CONSERVATION VOLUNTEERS IN MANA POOLS NATIONAL PARK

Richard Maasdorp and Gary Layard of The Zambezi Society today visited the scene of the tragic incident which took place in Mana Pools National Park on Sunday 13th March and resulted in the deaths of Claudio Chiarelli and his son Max Chiarelli.

The two deceased died instantly when caught in the mistaken fire of a National Parks patrol of three rangers at about 3.30p.m. yesterday afternoon – Sunday 13th March.

Claudio and Max, together with Francesco Marconati were providing voluntary support to deploy two National Parks anti-poaching patrols consisting of 6 rangers with the intention of uplifting the three rangers who were in the field following fresh spoor of poachers.

The group had parked their vehicle on the side of the road in the middle section of the Mana Pools National Park to await the arrival of the three Park rangers who had been tracking poachers in dense bush since 9.00a.m. that morning.

The intention was to meet at the road and hand over three fresh rangers to continue the follow-up.

Claudio and Max Chiarelli with Francesco Marconati took the opportunity to open the bonnet of their vehicle to inspect the engine. Meanwhile, the 6 Park rangers they were transporting had dismounted from the vehicle and arranged themselves next to it while waiting for their three colleagues to arrive.

Unbeknown to them, the vehicle had been parked within just 15 metres of where the poachers' tracks had crossed the road.

Meanwhile, the anti-poaching patrol in hot pursuit, heard voices,

crouched down, and slowly moved forward through the thick undergrowth.

Through a gap in the bushes, they saw part of a blue shirt. They assumed this was a poacher and let off a burst of gunfire.

Tragically, both Claudio and Max were killed instantly.

As the anti-poaching patrol rangers were crouched, they were unable to see the road at all.

Fortunately, the 6 rangers awaiting deployment did not return fire.

Richard Maasdorp, Strategic Director of The Zambezi Society stated: “Today (Monday 14th March 2016), we witnessed a thorough on-site investigation by the Zimbabwe Police CID and members of the National Parks Investigations Branch and Senior Management.

The Zimbabwe Parks & Wildlife Management Authority and other state organs now, more than ever, need support and resources to contain their battle against wildlife poaching.

We, the Zambezi Society, extend our very deepest sympathy to Mrs Chiarelli and her daughter and the family on this terrible tragedy. We posthumously thank Claudio and Max Chiarelli, as a father and son combination, for the years of dedication that they have shown in support of wildlife conservation in Zimbabwe. This tragedy is deeply regretted.”

--
John J. Jackson, III
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Metairie, Louisiana 70001
Tel: (504) 837-1233
Fax: (504) 837-1145
jjw-no@att.net
www.conservationforce.org

From: John J. Jackson, III
Subject: Zimbabwe justify sale of live elephants to China as US hunting-trophy ban bites
Date: Thursday, March 17, 2016 9:36:27 AM

FYI

http://us.blastingnews.com/world/2016/02/zimbabwe-justify-sale-of-live-elephants-to-china-as-us-hunting-trophy-ban-bites-00788713.html

--
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Fax: (504) 837-1145
jjw-no@att.net
www.conservationforce.org

From: Vannorman, Tim
To: Olivia Mufute
Subject: Fwd: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
Date: Monday, April 04, 2016 1:06:36 PM

Dear Olivia,

I hope all is well with you. I am trying to finalize our finding for 2016 for Zimbabwe elephant trophies and a question arose.

An article in Newsweek (below) raised questions about how funds are used by RDC. It is my understanding the funds generated from trophy hunts goes back to the community for activities to benefit the communities, such as clinics, schools, and salaries for game scouts. I have some doubts about what the article identifies, but could you or someone on your staff elaborate on the article?

In addition, in reviewing the 2015-2020 Management Strategy, it states that the plan, if fully implemented, would require a greater amount of money than is currently available. I would assume that part of the reason for this statement is because for the last two years, US hunters have declined to hunt in Zimbabwe and therefore less money has been generated than in previous years. Fully recognizing the financial situation that your department is in, what aspects of the management plan is do you anticipate could not be carried out at this time? Also, is it anticipated that if the US again allowed imports of elephant trophies in 2016, sufficient revenue would be generated to facilitate full implementation of the plan in 2017?

Thank you for assistance in this matter.

Sincerely,

Tim

---------- Forwarded message ----------
From: **Save The Elephants News Service** <stenews@elephantnews.org>
Date: Tue, Mar 22, 2016 at 5:03 PM
Subject: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
To: african-elephant@elephantnews.org

Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
Conor Gaffey, Newsweek
March 22, 2016

The construction of a football stadium in rural western Zimbabwe is being stalled by a dispute over its unusual source of funding—elephant hunting.

Zimbabwe's environment minister Oppah Muchinguri has been forced to deny claims that she is blocking pre-sanctioned elephant hunts, the funds from which would be used to start

building the stadium in Tsholotsho.

Under Muchinguri's predecessor Saviour Kasukuwere, the Tsholotsho Rural District Council (RDC) was issued with hunting permits for some 70 elephants, with the funds raised from the hunt to be put towards building the stadium, Zimbabwe's state-owned Chronicle newspaper reported.

The chairperson of Tsholotsho RDC, Cde Alois Ndebele, accused Muchinguri of holding up the process on Sunday, according to the Chronicle. "We have all the documents in the office but after the new minister was appointed, things just started stalling, there has not been any movement," said Ndebele, referring to Muchinguri's replacement of Kasukuwere as environment minister in July 2015 in a cabinet reshuffle by President Robert Mugabe.

But Muchinguri dismissed the criticism on Monday, saying that the hunts had been suspended after elephants were killed in the area by poachers laying cyanide. "The country suffered bad publicity from the cyanide poisoning and it was felt that the hunts be stopped while the poaching issue was being handled," said Muchinguri, according to the Chronicle.

Tsholotsho borders Hwange National Park, where scores of elephants were killed by poachers using the poison in 2015, with most of the elephants having their tusks removed. Hwange is overpopulated with elephants, currently hosting twice its carrying capacity with 53,000 of the creatures, and hunting is often cited as a means of generating funds for local communities impacted by elephant populations. Elephant hunting packages sell for around $30,000 online.

http://www.newsweek.com/zimbabwe-elephant-hunting-dispute-slows-football-stadium-construction-439504

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Michelle Gadd, Ph.D.
Program Officer, African Elephant and African Rhino Programs
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5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803
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--

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

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From:	Regina A. Lennox
To:	Vannorman, Tim
Cc:	John J. Jackson, III
Subject:	Fwd: Donation
Date:	Wednesday, April 27, 2016 2:59:16 PM

Dear Tim,
John asked me to forward this email, which shows the payment of a reward for another anti-poaching success in Zimbabwe. In the past, we have forwarded other emails from this area, which has an active private-sector anti-poaching system that teams and coordinates with ZPWMA. This is one example -- Parks rangers arrested poachers, and the private sector is thanking their hard work and good service.
Best regards,
Regina

On Apr 26, 2016, at 3:36 PM, John J. Jackson, III <jjw-no2@att.net> wrote:

-------- Forwarded Message --------
Subject: Donation
Date: Tue, 26 Apr 2016 07:30:00 +0200
From: Lynne Taylor <lynne@thetashingainitiative.org>
To: John J. Jackson III <jjw-no2@att.net>, John J. Jackson <cf@conservationforce.org>
CC: Regina A. Lennox <regina.lennox@conservationforce.org>

Good morning John,

Just to let you know that I will be delivering the final incentive to Ranger John Pedzi, currently based at Doma, tomorrow, Wednesday. This will bring to conclusion the implementation of your excellent donation. I am sorry it has taken so long, but it has meant that the process has been very thorough, with everyone in the picture that needed to know, and everyone is extremely happy. Investigations Branch at Parks HQ thanked me very sincerely for the donation, for their Officer, Cosamu Mwasebu who was one of the 5 recipients and I have confirmed that he has received the donation.

It quite remarkable how these incentives have such a powerfully positive effect on morale.

I am just embarking on a liaison with Ian Stevenson, Conservation Lower Zambezi, Zambia, on the request by Director General on 19th April 2016. I will be working with my colleague Chris Pakenham, and we will establish our first meeting hopefully at Mana Pools together with Parks Area Manager Chibaya.

So thank you again John, the particular implementation was a great success, as indeed all your donations are!!

Best wishes
Lynne

<mime-attachment.gif>

--
Regina A. Lennox
Conservation Force
3240 S I-10 Service Road W, Suite 200
Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

From:	Regina A. Lennox
To:	Vannorman, Tim; bryan_arroyo@fws.gov; dan_ashe@fws.gov
Cc:	John J. Jackson, III
Subject:	Fwd: Zimbabwe: Safari operators see 20% revenue decline
Date:	Monday, May 02, 2016 5:21:44 PM

Good afternoon,
Please see the article below about continued losses to Zimbabwe's safari industry due to the elephant import suspension among other factors.
This is a 20% projected loss on top of the actual 30% loss they reported last year (we previously sent you that article as well, available at http://allafrica.com/stories/201512180502.html).

---------- Forwarded message ----------
From: **Regina A. Lennox** <regina.lennox@conservationforce.org>
Date: Mon, May 2, 2016 at 6:59 AM
Subject: Zimbabwe: Safari operators see 20% revenue decline
To: John Jackson <jjjiii@att.net>, "John J. Jackson, III" <jjw-no2@att.net>, Marco Pani (b) (6) >

Zimbabwe Independent

http://www.theindependent.co.zw/2016/04/29/safari-operators-see-20-revenue-decline/

Safari operators see 20% revenue decline

April 29, 2016 in Business

The Safari Operators Association of Zimbabwe (Soaz) has projected a further 20% slump in revenue this year owing to various internal and external challenges affecting the sector, businessdigest has learnt.

By Kudzai Kuwaza

Safari operators last year suffered a 30% reduction in revenue as the continued ban on the importation of sport hunted elephant trophies from Zimbabwe imposed in April 2014 by the United States government took its toll on the sector.

Soaz president Emmanuel Fundira told businessdigest last week that the tightening of regulations by the government since the killing of the famous lion, Cecil, last year, among other challenges, is having adverse effects on their operations.

“The season has commenced in earnest albeit with many challenges which are both internally and externally driven,” Fundira said. “Internally, the demise of Cecil the Lion has prompted the authorities to introduce a myriad of controls and measures not conducive to the running of efficient and profitable operations. For example, of late there has been a tightening of controls over the issuance of permits and supervision of hunts which have become both costly and cumbersome.”

He added that externally there has been “massive” lobbying against sustainable wildlife use compounded by the continued ivory ban and the decision by the United States in January this year to uplift lions by introducing a cumbersome permit system “has not helped either”

Given the challenges, Fundira said although it was too early in the year to forecast revenue projections, a decline of not less than 20% was forecasted from last year’s figures.

The Soaz president said the sector continues to develop new markets, adding responses from Central Europe and Russia “are somewhat a bit encouraging.”

He said developing new markets was a long drawn exercise and is bound to take time.

Fundira expressed relief that the attempt by the European parliament members to stop the import of hunting trophies earlier this month had failed.

“The Safari Operators Association of Zimbabwe noted with relief that a move by a group of European Parliament members to pass a Written Declaration that would restrict the import of all hunting trophies to the European Union failed to achieve the requisite number of votes to be considered at the Parliament’s next sitting,” Fundira said.

“Reason and common sense prevailed over emotions and populist sentiment.

Sweeping changes to hunting practices in Africa can have a detrimental impact on conservation models and marginalised poverty-stricken communities that depend on hunting for their livelihoods.

--
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919-452-8652 (cell)
regina.lennox@conservationforce.org

From: Kohn, Frank
To: FWHQ AIA-STAFF
Subject: Facing Drought, Zimbabwe Says It Is Selling Off Wild Animals
Date: Thursday, May 05, 2016 7:26:33 AM

HTTP://WWW.NPR.ORG/SECTIONS/THETWO-WAY/2016/05/04/476749207/FACING-DROUGHT-

ZIMBABWE-SAYS-IT-IS-SELLING-OFF-WILD-ANIMALS

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY

Telephone : 263-4-792786-9
: 707624-9

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: 793867, 250658

Email : info@zimparks.co.zw

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Cnr Borrowdale Rd/Sandringham Dr
P.O.Box CY 140
Causeway
Harare

www.zimparks.org

Ref: B/3/15

09 May 2016

Chief Branch of Permits
U.S Fish and Wildlife Service
Division of Management Authority
Washington D.C 20240
USA

Attention: Mr Timothy J. Van Norman

Dear Sir

I make reference to your email of 25 April 2016.

As you may be aware Zimbabwe subscribes to the sustainable utilisation principle and this has been the practice in Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) areas where proceeds from wildlife utilisation have been used to develop rural communities. The Tsholotsho case is one such initiative where proceeds from the sustainable utilisation of natural resources in the area has had a positive impact on the Tsholotsho community.

With reference to the article which appeared in the Newsweek of March 22, 2016, alleging that hunting permits for 70 elephants were issued, the correct position is that a hunting permit was issued for only 10 elephants with only one elephant having been utilized to date. It is true that the funds generated from trophy hunting go back to the community for activities that benefit communities such as schools, clinics etc. However, it is not the prerogative of the Parks Authority at any time to determine the priority list of community development projects which can be funded from CAMPFIRE proceeds.

It is important to note that Tsholotsho has been one of the communal areas linked to cases of elephant poisoning in Hwange National Park and it is critical that such communities are assisted in seeing the positive benefits of wildlife conservation in general, and sustainable utilisation of elephants in particular.

It goes without saying that before the ban on imports of sport hunted elephant trophies into USA, the US market contributed approximately 60% of all big game hunters coming to Zimbabwe.Equally, it is true that full implementation of the Elephant Management Plan would require a greater amount of money than is currently available. It was clear from the outset that additional resources would be mobilized externally as usual, and as is the case with many other countries with similar plans.

With regards to your question as to which aspects of the Elephant Management Plan will be negatively impacted by the US ban, every aspect of the plan requires funding and any decline in income will ultimately affect it. However, in our case, while we are diversifying our markets, this was exacerbated by the lack of prior communication and/or engagement on the part of the US, prior to the ban, as this was done abruptly.

We hope that the above will suffice regarding your enquiry.

E. Chidziya
DIRECTOR GENERAL

From:	Simukai Nyasha
To:	"Vannorman, Tim"
Subject:	RE: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
Date:	Monday, May 09, 2016 9:03:34 AM
Attachments:	ZimParks Response.pdf

My apologies for responding late to your email. Herewith attached please find a response letter to the issues raised in your email.

It's true Olivia is no longer with Zim Parks and we had not seen the correspondence that you emailed on 4th April. For all future correspondences, please communicate through my email and copying the Director General also if need be.

Regards

Simukai Nyasha
International Conventions Manager
Cell: +263-772 678 351

From: Vannorman, Tim [mailto:tim_vannorman@fws.gov]
Sent: Monday, April 25, 2016 4:18 PM
To: snyasha@zimparks.co.zw; Edson Chidziya <wsithole@zimparks.co.zw>; Edson Chidziya <eceddiepasi@gmail.com>
Subject: Fwd: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction

Dear Edson,

I was informed last week by John Jackson that Olivia is no longer with ZPWMA. If this is the case, I am concerned that the e-mail I sent her on April 4th may not have been seen. I am hoping that this additional information can allow me to finalize the USFWS position for imports of 2016 elephant trophies.

If you have any questions, please let me know.

Sincerely,

Tim

---------- Forwarded message ----------
From: **Vannorman, Tim** <tim_vannorman@fws.gov>
Date: Mon, Apr 4, 2016 at 1:06 PM
Subject: Fwd: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
To: Olivia Mufute <omufute@zimparks.co.zw>

Dear Olivia,

I hope all is well with you. I am trying to finalize our finding for 2016 for Zimbabwe elephant trophies and a question arose.

An article in Newsweek (below) raised questions about how funds are used by RDC. It is my understanding the funds generated from trophy hunts goes back to the community for activities to benefit the communities, such as clinics, schools, and salaries for game scouts. I have some doubts about what the article identifies, but could you or someone on your staff elaborate on the article?

In addition, in reviewing the 2015-2020 Management Strategy, it states that the plan, if fully implemented, would require a greater amount of money than is currently available. I would assume that part of the reason for this statement is because for the last two years, US hunters have declined to hunt in Zimbabwe and therefore less money has been generated than in previous years. Fully recognizing the financial situation that your department is in, what aspects of the management plan is do you anticipate could not be carried out at this time? Also, is it anticipated that if the US again allowed imports of elephant trophies in 2016, sufficient revenue would be generated to facilitate full implementation of the plan in 2017?

Thank you for assistance in this matter.

Sincerely,

Tim

---------- Forwarded message ----------
From: **Save The Elephants News Service** <stenews@elephantnews.org>
Date: Tue, Mar 22, 2016 at 5:03 PM
Subject: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
To: african-elephant@elephantnews.org

Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
Conor Gaffey, Newsweek
March 22, 2016

The construction of a football stadium in rural western Zimbabwe is being stalled by a dispute over its unusual source of funding—elephant hunting.

Zimbabwe's environment minister Oppah Muchinguri has been forced to deny claims that she is blocking pre-sanctioned elephant hunts, the funds from which would be used to start building the stadium in Tsholotsho.

Under Muchinguri's predecessor Saviour Kasukuwere, the Tsholotsho Rural District Council (RDC) was issued with hunting permits for some 70 elephants, with the funds raised from the hunt to be put towards building the stadium, Zimbabwe's state-owned Chronicle newspaper reported.

The chairperson of Tsholotsho RDC, Cde Alois Ndebele, accused Muchinguri of holding up the process on Sunday, according to the Chronicle. “We have all the documents in the office but after the new minister was appointed, things just started stalling, there has not been any movement,” said Ndebele, referring to Muchinguri’s replacement of Kasukuwere as environment minister in July 2015 in a cabinet reshuffle by President Robert Mugabe.

But Muchinguri dismissed the criticism on Monday, saying that the hunts had been suspended after elephants were killed in the area by poachers laying cyanide. “The country suffered bad publicity from the cyanide poisoning and it was felt that the hunts be stopped while the poaching issue was being handled,” said Muchinguri, according to the Chronicle.

Tsholotsho borders Hwange National Park, where scores of elephants were killed by poachers using the poison in 2015, with most of the elephants having their tusks removed. Hwange is overpopulated with elephants, currently hosting twice its carrying capacity with 53,000 of the creatures, and hunting is often cited as a means of generating funds for local communities impacted by elephant populations. Elephant hunting packages sell for around $30,000 online.

http://www.newsweek.com/zimbabwe-elephant-hunting-dispute-slows-football-stadium-construction-439504

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From:	Cogliano, Mary
To:	Tim Vannorman; Craig Hoover
Subject:	Fwd: [African-elephant] Zimbabwe: Cyanide Poachers - Chihuri Demands Name of Implicated Senior Officer
Date:	Tuesday, May 10, 2016 9:11:44 AM

FYI,,,
---------- Forwarded message ----------
From: **Save The Elephants News Service** <stenews@elephantnews.org>
Date: Mon, May 9, 2016 at 8:25 PM
Subject: [African-elephant] Zimbabwe: Cyanide Poachers - Chihuri Demands Name of Implicated Senior Officer
To: african-elephant@elephantnews.org

Zimbabwe: Cyanide Poachers - Chihuri Demands Name of Implicated Senior Officer
New Zimbabwe
May 6, 2016

NATIONAL police spokesperson, Friday told court that her boss, Commissioner General Augustine Chihuri sent her to demand the name of a senior cop involved in cyanide poaching which killed over 100 elephants last year.

Being led by the state as the trial proceeded, Charity Charamba said only this could prove the truthfulness of the story which saw Sunday Mail editor and scribes dragged to court.

"I have a message for this court from the Commissioner General, he said we require the name of the Assistant Commissioner involved in this case. We have extensively carried out investigations but failed to establish the truthfulness of the allegations in the article. Until otherwise proven, this story remains a false story," she said.

The Sunday Mail team include the editor, Mabasa Sasa, investigations editor, Brian Chitemba and a reporter, Tinashe Farawo.

They are being charged with publishing falsehoods.

The trio were arrested after publishing a story which implicated a senior Assistant Commissioner in cyanide poaching, claiming investigations were under way.

Charamba told the court she never confirmed that any investigations against a senior police officer were being carried out when Farawo contacted her for a comment.

She said the story had serious implications on her carrier as well as the country's economy.

Charamba blamed Sasa for failing to seek clarity over a matter which was so serious and something which happens occasionally.

"There are no rules barring editors to verify with the police when there is such a serious case. If he had such information we were equally worried about it and if he could furnish us with the name it would be helpful, we require the name so that we can proceed," she said.

Charamba told court that following the publication of the story, the public lost confidence in the police.

"The public had a picture that we were protecting a wrong Assistant Commissioner. When such a thing happens, people can even revolt against the police," she said.

However during cross examination, the journalists' defence, Advocate Fadzayi Mahere, said the whole story was not wrong.

She insisted that that the story did not imply that the police were carrying investigations.

She queried Charamba if it was only the police mandated to investigate or if other officials in parks and wild life authority had such a privilege.

Charamba said some authorities from national parks would carry initial investigations before engaging the police.

In that regard, Advocate said so it was true that some investigations involving a senior cop were being carried out.

"Preliminary gathering of information is a form of investigation even if the police are not involved," she said.

Charamnba said it was logical.

She also asked Charamba if she was testifying to protect the image of the police force.

Charamba also told court that she did not know for a fact if any senior officer was involved as investigations were still under way.

http://allafrica.com/stories/201605070163.html

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Falls Church, VA 22041-3803
Phone: (703) 358-2104

From:	Michelle Gadd
To:	tim_vannorman@fws.gov; craig_hoover@fws.gov; monica_horton@fws.gov; anna_barry@fws.gov; laura_noguchi@fws.gov
Subject:	Zimbabwe: elephant hunts to pay for soccer stadium
Date:	Thursday, June 08, 2017 4:34:34 AM

Begin forwarded message:

From: Save The Elephants News Service <stenews@elephantnews.org>
Date: June 7, 2017 at 5:16:08 PM GMT+2
To: <african-elephant@elephantnews.org>
Subject: [African-elephant] Zimbabwe: Tsholotsho Jumbo Saga Sucks in Two Ministers
Reply-To: <stenews@elephantnews.org>

Zimbabwe: Tsholotsho Jumbo Saga Sucks in Two Ministers
Mashudu Netsianda, The Herald
June 7, 2017

See link for photo.

The High Court has ordered Tsholotsho Rural District Council to suspend hunting permits to a company tasked to hunt elephants in Tsholotsho North to fund the construction of a football stadium, the brainchild of local MP Professor Jonathan Moyo.Prof Moyo is also Higher and Tertiary Education, Science and Technology Development Minister. The deal to fund the construction of the facility was negotiated when under fire Zanu-PF political commissar Cde Saviour Kasukuwere was still Minister of Water, Climate and Environment.

Cde Kasukuwere issued hunting quotas for 50 elephants to the Tsholotsho RDC to support the first stages of the construction of the stadium for Tsholotsho Football Club.

The ruling by Bulawayo High Court judge Justice Maxwell Takuva follows an urgent chamber application by Matupula Hunters (Pvt) Ltd through lawyers, Job Sibanda and Associates, challenging the issuing of hunting permits to Lodzi Hunters to hunt elephants on a pice of land exclusively leased to it by Tsholotsho RDC.

Lodzi Hunters and Matupula Hunters are both legitimate holders of permits in the Tsholotsho North and Tsholotsho South areas respectively and have been locked in a dispute over the hunting rights of elephants in Tsholotsho North.

Matupula Hunters (Private) Limited successfully sought, and was granted, a court order barring Lodzi Hunters from conducting elephant hunting in the area for the purpose of raising funds for the construction of the football stadium.

Justice Takuva ruled that Matupula Hunters had established that it has prima facie

rights that need to be protected and subsequently issued an order interdicting Tsholotsho RDC from issuing any hunting permits for the area covered by Matupula Hunters.

The order also suspended the hunting permits already issued to Lodzi Hunters.

"In casu, it is undisputed that these agreements are of a commercial nature in the sense that all parties are in it for financial gain or benefit," said Justice Takuva.

"It is common cause that despite the existence of an agreement with applicant in respect of safaris for Tsholotsho North, the first respondent (council) has entered into another agreement with second respondent (Lodzi Hunters) who was supposed to hunt only in Tsholotsho South to conduct safaris in applicant's (Matupula Hunters) concession area, namely Tsholotsho North."

Justice Takuva said in the event that Tsholotsho RDC had already issued the permit to Lodzi Hunters prior to the court order, the safari company should stop operations forthwith.

"It is not clear how first respondent expects the second respondent and the applicant to operate simultaneously in the same geographical area," he said. "What is clear is that on being faced with these facts, a reasonable man might entertain a reasonable apprehension of injury.

"Accordingly, it is ordered that Tsholotsho RDC is interdicted from issuing to Lodzi Hunters any hunting permits over the land exclusively leased by applicant from first respondent in Tsholotsho North in terms of the agreement."

Matupula Hunters contested the decision by Tsholotsho RDC to give Lodzi Hunters a permit to conduct elephant hunting in the same area in which it has exclusive safari rights for five years.

This caused friction between the two companies as Lodzi Hunters, which has the right to hunt in Tsholotsho South, encroached into the northern side, where it claims it is entitled to do so for the purpose of fulfilling the elephant quota for the stadium.

In 2013, Matupula Hunters entered into a five-year agreement with Tsholotsho RDC that ran from January 2013 to December 2018.

The contract gives the firm "the sole and exclusive rights to conduct all safaris" within the Tsholotsho North Concession. The council has a similar agreement with Lodzi covering Tsholotsho South.

However, in 2015, when the need to fund the construction of the stadium arose, the local authority decided to give Lodzi permission to hunt in the whole of Tsholotsho district, including the area exclusive to Matupula Hunters.

Matupula Hunters engaged the council to settle the matter to no avail, as the local authority, together with Lodzi insisted that they had the right to bring hunters to

shoot elephants in Tsholotsho North.

http://allafrica.com/stories/201706071023.html

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Minimising the Illegal Killing of Elephants and other Endangered Species (MIKES)

MIKES Sub-Project Document:

Strengthening Law Enforcement in Mana Pools National Park and Chewore and Sapi Safari Areas, Zimbabwe

<u>Cooperating Management Agency</u>:
Zimbabwe Parks & Wildlife Management Authority (ZPWMA)

<u>Implementing Partner</u>:
The Tashinga Initiative Trust (TTI)

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2.2 Development of protected area law enforcement, management and monitoring systems, protocols and capacity of selected sites (Result 2) 4

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3.1 Introduction 5

3.2 Sub-Project results & activities 5

Result 1: Wildlife law enforcement patrol staff capacity and performance improved. 5

Result 2: Organisation and effectiveness of law enforcement operations management strengthened. 6

Result 3: Contribution of ranger-based monitoring information to area management and the MIKE Programme enhanced. 6

Result 4: Collaboration with local communities in information sharing to improve wildlife law enforcement strengthened. 7

1. Introduction

1. This sub-project document has been developed as part of the Minimising the Illegal Killing of Elephants and other Endangered Species (MIKES) Project, which will be implemented by the CITES Secretariat in collaboration with elephant range States and other partners over a four-year period commencing January 2015, with financing provided by the European Union and under the overall leadership of the MIKE Programme Central Coordination Unit (CCU) based at UNEP Headquarters in Nairobi. The sub-project document details the support for strengthening wildlife law enforcement in the Mana Pools National Park and Chewore and Sapi Safari Areas that will be provided under Result 2 of the project, in cooperation with the Zimbabwe Parks and Wildlife Management Authority (ZPWMA – the Cooperating Management Agency) and with the implementation support of the Tashinga Initiative (TTI – the Implementing Partner).

2. Section 2 of this sub-project document provides general information on this MIKES sub-project, including background information on the overall MIKES project objectives and activities, in particular Result 2 on support for the MIKES focal sites. Section 3 provides detailed information concerning the sub-project itself, including the specific results and activities to be delivered by the sub-project, the contributions these results and activities are expected to make to the overall MIKES Project.

2. MIKES Project background information

3. The Minimising the Illegal Killing of Elephants and other Endangered Species (MIKES) Project builds on and supports the highly successful Monitoring the Illegal Killing of Elephants (MIKE) Programme, which has been implemented together with African Elephant range States by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) with the support of the European Commission from 2001 until the present day, and which was designed to generate reliable and impartial data on the status and trends in African elephant popu-

lations, illegal killing and illegal trade in ivory, as a basis for international and range State decision making and action concerning elephant conservation.

4. The MIKE Programme has documented alarming increases in levels of elephant poaching and highlighted the urgent need for action to reduce the increasing threat to elephant populations across Africa as a result of the escalating international illegal trade in their ivory, as well as similar threats that are being faced by other CITES-listed flagship species. The MIKES Project will respond to this need by leveraging the strong foundation established and successes that have been achieved by MIKE over the past decade, but with an expanded focus to include: a) initiatives aimed at minimising the impact of poaching and the illegal trade on the target species, in particular through efforts to strengthen the capacity and capabilities of law enforcement agencies to combat poaching at both site and national levels; b) other flagship CITES-listed flagship species threatened by international trade; c) piloting of the MIKE Programme's successful adaptive management and monitoring approaches in selected sites in the Caribbean and Pacific regions.

5. This sub-project document primarily addresses point a) above relating to the support for initiatives aimed at minimising the impact of poaching and the illegal trade on the target species, specifically with regard to African elephants, being delivered at the MIKES Result 2 law enforcement focal sites.

2.1 MIKES Project objectives

6. The **overall goal** of the MIKES project is:

   Illegal killing of elephants and other CITES-listed flagship species and the illegal trade in their products are reduced

7. The overall goal shows that while an important focus of MIKES will continue to be to the protection and sustainable management of Africa's elephant populations, the scope of the project will broaden to **also address the illegal killing and trade in other CITES-listed flagship species**, such as rhinos and great apes in Africa, and marine turtles in the Caribbean and Pacific regions. This reflects the fact that these species are also threatened by escalating illegal harvesting and trade, and that many of the challenges to be addressed and activities to be implemented under the MIKES project are also applicable to the protection of these species.

8. The MIKES **project purpose,** which aims to contribute towards the delivery of the overall objective, is:

   Management systems, capacity, information and decision-making processes supporting the protection of elephants and other CITES-listed flagship species and combatting the illegal trade in their products are strengthened at site, national, subregional and international levels

9. This project purpose underscores the MIKES project's emphasis on the four key strategies to be implemented through the project – concerning the strengthening of management systems, capacity, information availability and decision-making processes – which are central to the achievement of the project's overall objective. The project purpose also emphasises the four key stakeholder levels that the project will be active: site, national, subregional and international.

10. The five project results designed to achieve the project purpose, and that respond to the lessons learnt from previous phases of the MIKE Programme, are as follows:

    - Result 1: Information on status and threats to elephants and other flagship species and benchmarks on law enforcement and management effort

- Result 2: Development of protected area law enforcement, management and monitoring systems, protocols and capacity of selected sites
- Result 3: National and subregional information, decision making and intelligence systems
- Result 4: International awareness, cooperation, and action in the conservation and protection of elephants and other flagship species
- Result 5: Piloting of law enforcement, management and monitoring systems, protocols and capacity building approaches in Caribbean and Pacific protected area sites

This sub-project specifically relates to Result 2, which is described in the following section.

2.2 Development of protected area law enforcement, management and monitoring systems, protocols and capacity of selected sites (Result 2)

11. This sub-project will contribute to MIKES Result 2, which will allow the MIKES Project to respond to major current and emerging hotspots for illegal killing of elephants and other target species. In selected priority sites (called the MIKES focal sites), MIKES will provide technical and operational support for the strengthening of law enforcement capacity and systems of the concerned protected area agencies, through the provision of law enforcement-oriented training, technical support for the design of appropriate law enforcement patrol systems, and key operational support where required. The Result will also support efforts to strengthen the involvement of local communities in the law enforcement effort, alongside other local law enforcement agencies and the judiciary. The MIKES focal sites have been selected in accordance with their importance for the protection of key populations of elephants and/or other CITES-listed flagship species, the scale and nature of the threats to these species, and the likelihood of mitigating these threats through targeted support for the protected area's law enforcement and management systems.

12. The key activities identified to deliver this result are as follows:

- Activity 2.1 Develop and support the establishment of systems for improving the relevance of RBM to adaptive protected area management, including planning RBM operations and responding to information generated
- Activity 2.2 Develop or revise protected area management plans for selected target sites as a basis for planning and implementing effective law enforcement and adaptive management systems and improving accountability
- Activity 2.3 Provide technical, operational and material support for the strengthening of existing law enforcement and adaptive management systems and capacity at target sites, incorporating lessons learnt and best practice solutions
- Activity 2.4 Develop protected area law enforcement capacity to respond to major current and emerging target species poaching crises at hotspots for illegal killing within priority protected areas
- Activity 2.5 Develop and support initiatives designed to strengthen collaboration between neighbouring local communities, local authorities and protected area management in law enforcement initiatives in target protected areas
- Activity 2.6 Develop mechanisms for sharing of intelligence information between target sites concerning illegal killing of elephants and other flagship species

13. The specific sub-project results and activities are described below, and summarised in the activity plan in section 4.7.

3. Sub-Project Detail

3.1 Introduction

14. This sub-project relates to the provision of support for strengthening wildlife law enforcement at the Mana Pools National Park and Chewore and Sapi Safari Areas MIKES focal site, in cooperation with the Zimbabwe Parks and Wildlife Management Authority (ZPWMA – the Cooperating Management Agency) and with the implementation support of the Tashinga Initiative (TTI – the Implementing Partner).

15. This section provides details of the objectives, results and activities of the sub-project and the specific contributions towards the overall MIKES Project, the deliverables to be produced, and the implementation arrangements, including reporting, monitoring and evaluation of the sub-project.

16. The overall objective of for Mana Pools National Park, Sapi and Chewore Safari Areas sub-project mirrors the project purpose of the overall MIKES project, as follows:

    Management systems, capacity, information and decision-making processes supporting the protection of elephants and other CITES-listed flagship species and combatting the illegal trade in their products are strengthened at site, national, subregional and international levels

17. In addition, the specific objective of the Mana Pools National Park and Chewore and Sapi Safari Areas sub-project is as follows:

    Law enforcement capacity and systems aimed at reducing the illegal killing of elephants and other wildlife species in Mana Pools National Park and Chewore and Sapi Safari Areas are strengthened.

3.2 Sub-Project results & activities

18. This section describes the results to be delivered by the sub-project and the activities to be undertaken under each result. The sub-project has four main expected results:

    - Result 1: Wildlife law enforcement patrol staff capacity and performance improved
    - Result 2: Organisation and effectiveness of law enforcement operations management strengthened
    - Result 3: Contribution of ranger-based monitoring information to area management and the MIKE Programme enhanced
    - Result 4: Collaboration with local communities in information sharing to improve wildlife law enforcement strengthened

    The activities to be implemented under each result are detailed in the following sections:

Result 1: Wildlife law enforcement patrol staff capacity and performance improved.

19. Field-based patrol staff are the foundation of effective wildlife law enforcement efforts at Mana Pools, Sapi and Chewore. Although below the optimal requirement for the site, there are currently patrol staff based in Mana Pools, Chewore, and that are regularly deployed to parts of Sapi. However, these staff currently face a number of challenges that are impacting their performance and ability to prevent wildlife crimes. These include: a lack of basic field equipment and

rations to support effective patrols, and, particularly in some of the more recent recruits, a lack of key field skills (e.g. tracking). This result aims to begin addressing these challenges with the aim of improving patrol staff capacity, performance and motivation across the site. The main activities to be implemented under Result 1 are as follows:

- Activity 1.1: Identify and prioritise basic ranger field equipment needs in collaboration with site-based patrol staff, and provide equipment to 80 rangers based across Mana Pools, Sapi and Chewore
- Activity 1.2: Define key patrol staff training needs in collaboration with Mana Pools and Sapi/Chewore Area Managers, and carry out four training courses for selected patrol staff
- Activity 1.3: Develop new vegetable garden at Kapirinengu to provide fresh produce to supplement patrol rations, and identify key maintenance and management issues with Mana Pools vegetable garden and rehabilitate once addressed
- Activity 1.4: Review communication equipment needs with Area Managers, and purchase and provide VHF radio handsets and spare batteries in line with requirements

Result 2: Organisation and effectiveness of law enforcement operations management strengthened.

20. In order to make best use of the patrol staff available and respond to wildlife crime incidents, law enforcement managers need to be able to efficiently organise operations and deploy law enforcement staff throughout the site. Unfortunately, large parts of Mana Pools, and particularly Sapi and Chewore Safari Areas, are remote and difficult to access, especially during the wet season. This can make deploying patrol staff, and resupplying operational bases difficult, expensive and time-consuming. To help address these issues, this result will focus on activities designed to improve the mobility and coverage of law enforcement operations, and to improve the management facilities and skills that operations managers can call upon to facilities this. The main activities to be implemented under Result 2 are as follows:

- Activity 2.1: Purchase one Pelikan boat and deploy to Chewore North (Kapirinengu), and organise training for two coxswains in boat operation and maintenance
- Activity 2.2: Provide support for Lower Zambezi law enforcement coordination and rapid response operational base planning and architectural design, and periodic coordination meetings
- Activity 2.3: Carry out assessment of existing operational control rooms at Mana Pools and Chewore Headquarters, and rehabilitate facilities in line with findings
- Activity 2.4: Review optimal outpost construction type, facilities and location with area managers, and construct outposts in accordance with agreed plans
- Activity 2.5: Review capacity needs of senior law enforcement staff based at Mana Pools and Chewore, and support training opportunities to meet defined needs

Result 3: Contribution of ranger-based monitoring information to area management and the MIKE Programme enhanced.

21. Information collected by rangers on patrol is not only essential for the MIKE Programme, but can also play a critical role in informing area management of adaptations needed to improve the effectiveness of law enforcement operations. However, of the three areas in the site, at present only Chewore Safari Area has been collecting ranger-based monitoring information as part of the MIKE Programme for a number of years. The expansion of the collection of this information to Mana Pools and Sapi, has the potential to enhance both the effectiveness of law enforcement operations and increase the site's contribution to the MIKE Programme. As such, this result focuses on building on the significant progress in ranger-based monitoring made in Chewore, and

leveraging this progress to support its rollout in the Mana Pools and Sapi areas. The main activities to be implemented under Result 3 are as follows:

- Activity 3.1: Provide laptop computers and basic SMART training (led by Chewore administrator) on data management to selected staff at Mana Pools and Chewore North Offices
- Activity 3.2: Carry out basic training of wildlife law enforcement patrol staff based at Mana Pools National Park in ranger-based monitoring principles and practices
- Activity 3.3: Identify key staff in Mana Pools and Chewore operational bases for further training in SMART data management and reporting, with a particular focus on generating management orientated reports and MIKE data
- Activity 3.4: Review GPS needs, identify optimal GPS model and supplier, and provide units to patrol staff involved in ranger-based monitoring data collection in Mana Pools, Sapi and Chewore

Result 4: Collaboration with local communities in information sharing to improve wildlife law enforcement strengthened.

22. Accurate and timely intelligence on wildlife crime activities can play a critical role in optimising the effectiveness of wildlife law enforcement. At present the greatest poaching threats in the site are in the south and east of the site, which are mainly accessed through communal areas. As such, community members have the potential to play a critical role in supporting area management to both prevent wildlife crime and apprehend potential criminals. However, at present intelligence gathering activities are based a significant distance away from the site, and neither the institutional structures or the incentives necessary to enable and encourage park-community engagement are in place locally. This result aims to address these shortfalls and increase the opportunities and incentives for site-community collaboration. The main activities to be implemented under Result 4 are as follows:

- Activity 4.1: Support the establishment of community conservation neighbourhood watch committees in areas adjacent to Chewore North involving the traditional leadership, linked to the establishment of new ranger outposts (Activity 2.5)
- Activity 4.2: Provide transport and fuel to selected staff to support the establishment of an informer network, in collaboration with ZPWMA Investigations Office
- Activity 4.3: Establish an auditable fund and payment schedule for rewards made for information on wildlife crime that leads to encounters, arrests or prosecutions, in collaboration with ZPWMA Investigations Office

From:	John J. Jackson, III
To:	Tim Vannorman
Subject:	Zimbabwe Elephant Plan Implementation
Date:	Tuesday, July 19, 2016 11:21:11 AM
Attachments:	MIKES Sub-Project Document - Mana Chewore Sapi Focal Site - Extract.docx

Tim,

More documentation of elephant plan implementation in Zimbabwe.

Thanks,

John

-------- Forwarded Message --------
Subject: Re: New MIKE Project in Mana Pools, Chewore and Sapi, Zimbabwe
Date: Tue, 19 Jul 2016 16:57:42 +0300
From: David Henson <dave.henson@citesmike.org>
To: Julian Blanc <julian.blanc@citesmike.org>
CC: John J. Jackson, III <jjj@conservationforce.org>, Marco Pani (b) (6), Lynne Taylor <lynne@thetashingainitiative.org>

Dear John

Thanks for your interest in the work the MIKE Programme is supporting in the Mana Pools, Sapi and Chewore World Heritage Site.

I have attached to this email an extract from the project document that details the main results and activities being supported with EU funds. This should hopefully provide the kind of detail you are looking for, but if not please do let me know. The results and activities were defined by senior and experienced ZPWMA staff based in the areas, with the inputs of three regional managers, as well as staff from the Tashinga Initiative Trust. Section 3 of the document is most relevant, but I have left the preceding information in on the parent project (MIKES) in case you are interested.

With regard the Zimbabwe Elephant Action Plan, I believe there are a number of areas where this project will contribute to the plan's implementation in the Lower Zambezi Area. For example, under the Protection and Law Enforcement objective, activities are planned to focusing on ranger training and supporting intelligence operations and the establishment of informer networks (outputs 1.1. and 1.2 in the Zimbabwe Elephant Action Plan).

As you may also expect there is also a strong element of monitoring in the MIKE Programme supported work, this corresponds well with a number of activities under the plan's Biological Monitoring and Management objective, notably: 2.1 Elephant population numbers, structure, mortality regularly monitored; 2.5 Age and quality of all elephant killed monitored; while other areas of complementarity focus on building capacity, such as Output 4.6: secure communications network across the region established.

I hope this summary has given you the information you require, but if I can be of any further assistance please do let me know. I have also copied Lynne Taylor of Tashinga Initiative Trust So that she can add anything I may have missed.

All best
Dave Henson

From:	Vannorman, Tim
To:	Craig Hoover
Subject:	Revised Zimbabwe finding
Date:	Tuesday, June 27, 2017 12:10:44 PM
Attachments:	Zimbabwe enhancement finding 2017 revised (CH SOLrh comments and responses) v2.docx

---

Craig,

Attached is the revised Zimbabwe finding will all of SOL and your comments included - messy looking as it is.

I still need to track down some examples that Russ asked about on page 27. Also as I mentioned this morning, thinking about Russ' comment about moving the conclusion section after the evaluation section. Your thoughts on that?

I have not sent this to Russ yet. Do you want me to wait for your review or go ahead and send it?

Tim

--
Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

Sign up for our e-newsletter to learn how we're working around the globe to protect species and their habitats!

From: Gadd, Michelle
To: Michelle_Gadd@fws.gov; Tim Vannorman
Subject: Former Campfire director blames rampant poaching on land reform
Date: Thursday, June 29, 2017 1:18:07 PM

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https://www.thestandard.co.zw/2011/05/01/former-campfire-director-blames-rampant-poaching-on-land-reform/

Former Campfire director blames rampant poaching on land reform

Unless some corrective measures are put in place urgently, the country risks losing a whole lot more, to the point of some animals becoming extinct.A drive around Zimbabwe`s game parks and most remote areas that used to be infested with wildlife is not as interesting as it used to be as there is evidently no longer as much wildlife to talk about. So bad is the situation that it has become necessary to reflect on the wildlife management stance that the country has adopted for so many years and discuss whether it is not about time that it is relooked at and reviewed, seeing the strategies are not working.Through much lobbying and advocacy, the Communal Areas Management Programme for Indigenous Resources (Campfire) in Zimbabwe gained much momentum from as early as the 80s in its fierce fight for ``sustainable utilisation`` of local wildlife resources and the need to grant locals licences to hunt and trade in animal products. This was welcomed by many Zimbabweans, most of who saw it as a chance to fully utilise the country`s resources for financial enrichment. Unfortunately, most appear to have missed the bit about utilising the resources in a sustainable manner.Although the Campfire programmes might genuinely have been positive as it is undoubtedly of paramount importance that the indigenous people be financially empowered through the locally-based God-given resources, results show the prevailing trend has proven to be highly detrimental to the livelihood of one the country`s most valuable treasures.In a one - on- one interview with The Standard, Steven Kasere, the former Campfire director who resigned in 2001 under circumstances he described as ``political`` had a lot to say about the present state of affairs, as far as wildlife management is concerned.Kasere, who took over the directorship of Campfire in 1999 and became a major player in the fight for the sustainable utilisation of the wildlife resources in Zimbabwe, expressed great disappointment and concern over the rapid deterioration of the country`s wildlife.``Everywhere I go; people ask me if Campfire still exists. This is a very sad situation when considering that it was mainly because of the Campfire programme that the downlisting of the elephants from Cites (Convention on International Trade in Endangered Species of Wild Fauna and Flora) Appendix 1 to Appendix 2 was granted,`` he said as he reflected on the Campfire`s past achievements.With the rate of wildlife poaching in Zimbabwe, it would appear as though Campfire is losing grip of the programmes that it once promoted with so much. This could be because there isn`t much wildlife to talk of anymore. Kasere blamed the apparent failure of Campfire`s programmes on greed nature, which he said had seen so many animals getting killed for financial gain without as much as allowing them a chance to regenerate. Kasere was however quick to point out that failure of the Campfire programmes to realise the intended results also had much to do with the land reform programme that the government embarked on more than a decade ago.``The land reform, though necessary, brought about human resource changes that had to be accommodated. Urbanites who were never part of the Campfire structures for management of natural resources suddenly became farmers. “Naturally, they started to cut down trees and kill animals because they had no knowledge of other viable land use options other than agriculture,`` he said.
`In the former Campfire areas, key personnel that commanded higher natural resource posts

moved to new resettlement areas, leaving Campfire institutions on the ground ineffective. “So in a way, the land reform was not accompanied by the necessary institutional arrangements to save wildlife. Hence a lot of wild animals were killed while natural resource institutions collapsed,`` Kasere said.However, the real issue here is not whether to place the blame on Campfire for the leading role that it played in propounding the idea of resource utilisation that has now clearly gone out of hand or if the blame should instead rest on the government’s land policies that have seen the settlers causing unprecedented degradation to the areas they settled in. What is important is to admit that the wildlife management strategies that Zimbabwe has adopted are just not working and to urgently seek to rectify the situation, if the country`s wildlife is ever to be saved.

From:	Gadd, Michelle
To:	Vannorman, Tim
Subject:	Re: revised Zimbabwe elephant finding
Date:	Thursday, June 29, 2017 2:58:43 PM
Attachments:	Zimbabwe enhancement finding 2017 revised (CH SOLrh comments and responses) v2 plus MG 20170629.docx

Herewith my comments in track changes, with the suffix MG and the date at the end of the file name.

On Thu, Jun 29, 2017 at 8:28 AM, Vannorman, Tim <tim_vannorman@fws.gov> wrote:

> Morning,
>
> I will catch up with you when I get back from MIB. While it may make the document uglier, go ahead and make your suggestions on the document I sent to you - that way all the comments are together.
>
> Tim
>
> On Wed, Jun 28, 2017 at 4:54 PM, Gadd, Michelle <michelle_gadd@fws.gov> wrote:
>
> > I don't leave early, I will be hear after 2:30, that would be fine. Or 3 - whenever you get back.
> > Would you like me to make comments in track changes on the revised electronic file that you just sent, or is it getting too ugly? -mg
> >
> > On Wed, Jun 28, 2017 at 4:22 PM, Vannorman, Tim <tim_vannorman@fws.gov> wrote:
> >
> > > Michelle,
> > >
> > > thanks for looking at the document and meeting tomorrow afternoon. I just realized that Craig and I are briefing the new Acting Director on our permitting process for lion trophies (not sure what more he wants to talk about) at 1-2 tomorrow. Are you around the office between 2:30 or so to meet? If you leave early, we can meet next week.
> > >
> > > Tim
> > >
> > > --
> > > Timothy J. Van Norman, Chief
> > > Branch of Permits
> > > Division of Management Authority
> > > U.S. Fish and Wildlife Service
> > > (703) 358-2350
> > >
> > > ***Sign up** for our e-newsletter to learn how we're working around the globe to protect species and their habitats!*

--
Michelle Gadd, Ph.D.
Program Officer, African Elephant and African Rhino Programs
Division of International Conservation
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5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803
michelle_gadd@fws.gov

--
Timothy J. Van Norman, Chief
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Division of Management Authority
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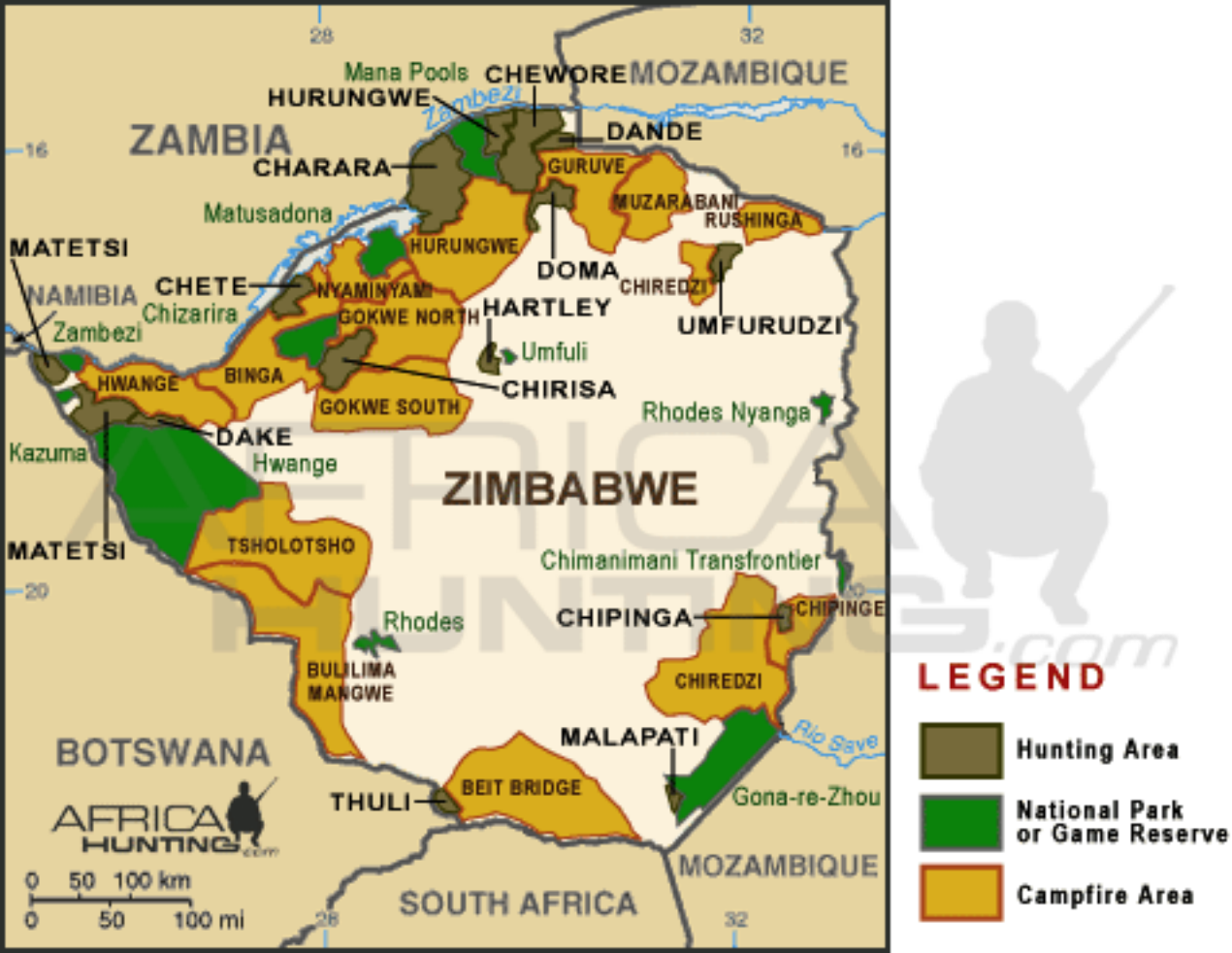
28
32
Mana Pools
CHEWORE
MOZAMBIQUE
HURUNGWE
Zambezi
ZAMBIA
DANDE
16
16
CHARARA
GURUVE
MUZARABANI
RUSHINGA
Matusadona
HURUNGWE
MATETSI
DOMA
CHIREDZI
NAMIBIA
CHETE
NYAMINYAMI
HARTLEY
Chizarira
GOKWE NORTH
UMFURUDZI
Zambezi
Umfuli
HWANGE
BINGA
CHIRISA
GOKWE SOUTH
Rhodes Nyanga
DAKE
Kazuma
Hwange
ZIMBABWE
MATETSI
TSHOLOTSHO
Chimanimani Transfrontier
20
CHIPINGA
CHIPINGE
Rhodes
BULILIMA
MANGWE
CHIREDZI
MALAPATI
Rio Save
BOTSWANA
THULI
BEIT BRIDGE
Gona-re-Zhou
AFRICA HUNTING.com
MOZAMBIQUE
0 50 100 km
0 50 100 mi
SOUTH AFRICA
28
32
LEGEND
Hunting Area
National Park or Game Reserve
Campfire Area

RIFA SAFARI AREA
0 100
Kilometres
MANA POOLS
Kariba
LAKE KARIBA
CHARARA SAFARI AREA
MUZARABANI
MATUSADONA
Karoi
CHAMINUKA
UMFURUDZI
Chinoyi
CAPRIVI STRIP
ZAMBEZI
Victoria Falls
GOKWE NORTH
Harare
HARTLEY
Marondera
MATETSI
BINGA
CHIRISA
Hwange
GOKWE SOUTH
Kadoma
RHODES NYANGA
KAZUMA PAN
MATETSI
DEKA
Kwekwe
Mutare
HWANGE
Gweru
CHIMANIMANI
TSHOLOTSHO
BOTSWANA
Bulawayo
Masvingo
CHIPINGE
BULILIMA MANGWE
Plumtree
RHODES MATOPOS
CHIREDZI
LOWVELD
GONAREZHOU
BEITBRIDGE
Beitbridge
MOZAMBIQUE
ZIMBABWE
HUNTING AREAS
National Park (Non-Hunting)
Safari Area (Hunting)
Campfire Area (Hunting)

From:	Gadd, Michelle
To:	Tim Vannorman
Subject:	Zimbabwe: information that should be available and could be required
Date:	Friday, June 30, 2017 11:06:56 AM
Attachments:	hunting_zimbabwe.gif j_sharp_hunt_map_2009.jpg

Hi Tim,
Attached please find some maps I found which show CAMPFIRE areas, national parks, and some hunting blocks.

I would think it would be possible for Zimbabwe (and any country requesting export to the US) to provide us with
a) an updated map of land uses, like these
b) estimated elephant population for each area
c) quota for each area
d) elephant hunts executed in each area, by year

Thanks, mg

--
Michelle Gadd, Ph.D.
Program Officer, African Elephant and African Rhino Programs
Division of International Conservation
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803
michelle_gadd@fws.gov

From: John J. Jackson, III
Subject: Elephant anti-poaching reward
Date: Wednesday, July 06, 2016 2:11:36 PM

Subject: Re: Elephant anti-poaching reward
Date: Wed, 6 Jul 2016 13:00:39 -0500
From: John J. Jackson, III
To: Lynne Taylor <>

Lynne,

Conservation Force will send USD 750.00, although I do have some reservations when poachers are killed instead of convicted.

Thanks,

John

On 7/6/2016 7:11 AM, Lynne Taylor wrote:

> John,
>
> I am writing in the hope that it may be possible please to secure USD750.00 or USD1,000.00 for Ranger incentives for the AP Unit who have recently despatched a poacher, armed with a .458 and carrying 10 brand new rounds for the .458, as well as recovering 3 tusks. The Ranger Unit concerned is certainly the most predominant Unit for successes.
>
> We are trying to move down to the field (Mana, Nyakasikana) on Friday. The nation wide stay away continues to be successful. Quite amazing. Silence outside in this area, and it is 2.00p.m. in the afternoon on a business day.
>
> Best wishes
> Lynne

THE TASHINGA INITIATIVE
A Wildlife Protection Trust

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DIRECTOR

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www.conservationforce.org

From:	Gadd, Michelle
To:	Hoover, Craig; Rosemarie Gnam; Laura Noguchi; Pamela Scruggs; Tim Vannorman; Horton, Monica; Richard Ruggiero; Dirck Byler
Subject:	Edson Chidziya Zim wildlife boss fired after $3m rhino horn goes missing
Date:	Thursday, July 06, 2017 5:11:05 PM

Zim wildlife boss fired after $3m rhino horn goes missing
http://www.thezimbabwean.co/2017/05/zim-wildlife-boss-fired-3m-rhino-horn-goes-missing-report/15.5.2017
by News24

Harare - The head of Zimbabwe's wildlife authority has been fired following the disappearance of rhino horns worth $3 million two years ago, it was reported on Sunday. Edson Chidziya was suspended last year on full pay after he was accused of failing to alert the police when it was discovered that the horns were missing in 2015.

Now the Sunday Mail is reporting that Chidziya has been fired. Said the paper: “Mr Chidziya was fired for maladministration and abuse of office.”

A report from the board of Zimbabwe’s Parks and Wildlife Management Authority (Zimparks) quoted by the Sunday Mail said that Chidziya “failed to put in place security and control measures to prevent pilferage of rhino horns”.

The authority has a stash of more than 4 000 confiscated rhino horns at its headquarters. Some of them have been in the authority’s custody since 1989, according to official media. There are periodic calls for Zimbabwe to be allowed to sell off its horn. That move is opposed by those who feel it would fuel the trade in the horn, which is used in traditional Asian medicine.

Zimbabwe has around 800 black and white rhinos in total. They are in danger from poachers, as they are throughout the southern African region.

Police spokesperson Charity Charamba told the paper she didn’t know anything about the investigations into Chidziya.

Zimparks is now looking for a new director general, according to a job advert placed separately in the Sunday Mail.

The recruitment agency acting on behalf of Zimparks says the candidate must be 40 years or older and must have a Masters in conservation or ecology, an MBA and possibly a PhD.

--

Wildlife and Politics: CAMPFIRE in Zimbabwe

Jocelyn Alexander and JoAnn McGregor

ABSTRACT

CAMPFIRE programmes have been hailed internationally for the innovative ways in which they have sought to confront the challenges of some of Africa's most marginal regions through the promotion of local control over wildlife management. In Zimbabwe, CAMPFIRE has been cast as an antidote to the colonial legacy of technocratic and authoritarian development which had undermined people's control over their environment and criminalized their use of game. This article explores why such a potentially positive programme went so badly wrong in the case of Nkayi and Lupane districts, raising points of wider significance for comparable initiatives. Local histories and institutional politics need careful examination. The first part of the article thus investigates the historical forces which shaped attitudes to game, while the second part considers the powerful institutional and economic forces which conspired to sideline these historically formed local views. CAMPFIRE in Nkayi and Lupane was further shaped by the legacies of post-independence state violence in this region, and the failure of earlier wildlife projects. This range of factors combined to create deep distrust of CAMPFIRE, and quickly led to open confrontation.

INTRODUCTION

In the mid-1990s, mention of the development programme known as CAMPFIRE was enough to provoke threats of violence from the residents of the Gwampa Valley in southern Nkayi and Lupane districts of Zimbabwe. District Councillors associated with the project were afraid to travel to the valley, police monitored meetings and detained protesters, angry denunciations were recorded in the press, and fear and insecurity

This article is based on research conducted between 1994 and 1996. It forms part of a broader collaborative project undertaken by Jocelyn Alexander and Terence Ranger, funded by the Leverhulme Trust, and JoAnn McGregor, funded by the Economic and Social Research Council, Grant No. R00023 527601. Our research would not have been possible without the assistance of our Matabeleland research team to whom we are most grateful, including Japhet Masuku, Penoni Mkandla, Calistus Mkwananzi, Nathaniel Mpofu, Nicholas Nkomo and Martin Sibanda. We would also like to thank the University of Zimbabwe and officials of the Ministry of Local Government for their support. A version of this paper was originally presented to the International Conference on the Historical Dimensions of Democracy and Human Rights in Zimbabwe, Harare (9–14 September 1996). Grateful thanks are owed to this journal's reviewer for valuable comments.

Development and Change Vol. 31 (2000), 605–627. © Institute of Social Studies 2000. Published by Blackwell Publishers, 108 Cowley Road, Oxford OX4 1JF, UK.

pervaded the atmosphere. Yet CAMPFIRE (the Communal Areas Management Programme for Indigenous Resources) has been hailed internationally for its participatory approach and its innovative strategies for confronting the developmental and environmental problems of some of the most marginal rural areas, by promoting local control over wildlife management and use. Within Zimbabwe, CAMPFIRE has been praised as a means of overcoming the legacies of colonial development initiatives which focused on technical prescription, coercive implementation, and, through a battery of rules and regulations, undermined people's control over their environment and legal rights to resources.

This article takes the case of the Gwampa Valley CAMPFIRE initiative in Nkayi and Lupane districts of Matabeleland North as a basis for reassessing assumptions about attitudes to game and the legacies of the colonial period which appear in some of the literature on CAMPFIRE. It also explores the economic and institutional constraints on the capacity of Zimbabwe's elected district councils to meet the aspirations of communal area residents. Although the case is a specific one, it reveals wider issues pertinent to an understanding of the political, economic and ideological forces at work in struggles over rural development.

We begin with a brief introduction to the tenets of CAMPFIRE, before turning to an historical analysis of attitudes to game in Nkayi and Lupane and then to the political and institutional context in which CAMPFIRE has functioned. Finally, we bring these strands together in an effort to explain how a development effort with such potentially positive attributes reached such a bitter impasse in the Gwampa valley case.

CAMPFIRE: ORIGINS AND TENETS

CAMPFIRE programmes are intended to rectify the legacies of the colonial period when African hunting was outlawed and local communities were prohibited from managing or benefiting from wildlife.[1] Colonial conservation laws dating from the turn of the century effectively classified Africans' use of game as poaching. Even European farmers faced strict restrictions on hunting until the Parks and Wildlife Act of 1975 allowed landholders to exploit game on their land as 'appropriate authorities' (Mackenzie, 1987: 56–7). White commercial farmers were the main group to benefit from this legislation, though the Department of Parks and Wildlife Management also initiated a programme in 1978 known as WINDFALL (Wildlife Industries New Development for All) through which African communities bordering

1. Detailed statements of the history and objectives of CAMPFIRE can be found in, *inter alia*, Child and Pederson (1991), Environmental Consultants (1990), Hasler (1996), Martin (1986), Murombedzi (1992) and Thomas (1991).

on game parks were to be given a proportion of returns from elephant culling.[2]

Two years after independence, the Parks and Wildlife Act was amended to allow the then Ministry of National Parks and Tourism to grant 'appropriate authority' status to the newly-established district councils. This laid the legal basis for CAMPFIRE by giving councils the right to exploit wildlife and other natural resources within their jurisdiction.[3] The prime movers in developing CAMPFIRE were the Department of National Parks along with a number of NGOs — notably Zimbabwe Trust and the World Wide Fund for Nature (WWF) — and the University of Zimbabwe's Centre for Applied Social Sciences. They were motivated in part by the persistence of 'conventional modes of development that ignored existing indigenous resources, and indeed contributed to their destruction' (Environmental Consultants, 1990: 5–6). By stressing the importance of local management and institutional development, CAMPFIRE was designed to rectify the shortcomings of its predecessor, WINDFALL, 'by ensuring that communities participated in the generation of wildlife revenues rather than simply acting as passive recipients of the revenue' (Murombedzi, 1992: 13).

The Department of National Parks set out the objectives of these programmes in 1986. They included: 'the long term *development, management and sustainable utilisation of natural resources in the Communal Areas*'; managing resources through placing 'the *custody* and *responsibility* with the resident communities'; allowing 'communities to *benefit directly* from the exploitation of natural resources'; and, finally, establishing 'the *administrative* and *institutional* structures necessary to make the programme work' (Martin, 1986, quoted in Thomas, 1991: 1, emphasis in original). CAMPFIRE was intended to apply to forests, grazing and water as well as wildlife. However, it was wildlife which attracted the most attention, partly because of the lead role played by the Department of National Parks, and partly because wildlife appeared to have the greatest financial potential, fed into conservationist concerns,[4] and seemed to offer a sustainable form of land use in some of the most arid communal areas.

The first major CAMPFIRE project was undertaken under the aegis of the Nyaminyami District Council, which was granted appropriate authority status in late 1988. CAMPFIRE spread rapidly thereafter: by the end of 1989 a full eleven district councils had signed up. These projects encountered a range of problems and by the early 1990s had given rise to much debate, particularly over the appropriate way to define and organize the beneficiary

2. Critical reviews of WINDFALL can be found in Hasler (1996: 32–3) and Petersen (1991: 21–2).
3. Other legislation also impinged, sometimes in contradictory ways, on resource use in communal areas. See Thomas (1991: 13–16).
4. On concern over the wave of poaching which followed independence, see Hill (1995: 339 and *passim*).

'community' (Child and Pederson, 1991; Murombedzi, 1991; Thomas, 1991). Other concerns included the long term economic viability of the projects without donor funding, especially in areas with small game populations, and where a majority of the revenue came from photo safaris rather than hunting (e.g., Murombedzi, 1991: 14–15). More recently, researchers have questioned the 'empowerment' aspects of CAMPFIRE by arguing that it has the potential to re-centralize state authority, and to extend state power to remote and marginal areas (Hill, 1996; Murombedzi, 1992). A final body of work has raised human rights concerns over forced population removals in the context of CAMPFIRE projects (Patel, 1998).

The institutional interests shaping these debates demand further elaboration. While the Department of National Parks had initially acted fairly independently, it began to liaise with the powerful Ministry of Local Government. The interests of the two differed: whereas National Parks was concerned that 'producer communities' should control the bulk of wildlife revenue, the Ministry of Local Government was more concerned with the overall financial viability of the councils (Thomas, 1991: 22–3). In practice, 'producer communities' tended to be defined in terms of the administrative wards and villages delineated in 1984, either directly through the ward and village development committees (wadcos and vidcos) which represented them, or through newly established wildlife committees. These institutions had weaknesses. Vidco boundaries did not necessarily coincide with geographical or social divisions, and the vidcos faced competition from a range of traditional authorities. The wildlife committees were new and untried while the division of revenues between the council and subordinate levels remained unclear (Child and Pederson, 1991; Murombedzi, 1991: 17–21; Thomas, 1991). Moreover, the assumption that ward councillors effectively represented their communities increasingly came under critical scrutiny (Derman and Murombedzi, 1994: 126).

Most commentators on CAMPFIRE have stressed economic solutions to these problems. They argue that if local communities become 'stakeholders' in wildlife, conservationist attitudes towards game and a basis for institution building would follow (Environmental Consultants, 1990; Murombedzi, 1991; Thomas, 1991). Some analyses, such as that of Child and Pedersen (1991: 67), assume that financial returns alone will deliver the desired changes in attitude and practice.[5] The assumption that local communities' hostility to wildlife — historically and at present — lies principally in their exclusion from its economic benefits underlies much writing on CAMPFIRE. So does the assumption that economic returns will solve institutional quandaries. Both assumptions bear closer examination.

5. Murombedzi (1992: 41) provides an excellent critique of the idea that 'cash is the best extension agent'.

CHANGING ATTITUDES TOWARDS GAME IN NKAYI AND LUPANE DISTRICTS

Attitudes towards game in Nkayi and Lupane were powerfully shaped, first, by African participation in the colonial era slaughter of game through which tsetse was eradicated and, second, by the social, economic and political strategies and aspirations of the waves of migrants who settled the districts. The colonial period was not simply about the exclusion of Africans from the benefits of game — no generic interpretation of the colonial legacy can thus hold — and attitudes towards game were, and are, based on much more than economic calculation.

At the beginning of this century, Zimbabwe's northwestern region, of which Nkayi and Lupane form a part, was described by John Ford (1971: 341) as a 'Grenzwildnis' — an inhospitable, water scarce, infertile, disease and tsetse fly ridden frontier. European settlers avoided the region, much of which (outside the African 'reserves') was designated as Forest Land. African occupants were few, and largely of Tonga, Nyai and Rozwi origin. Many Tonga had migrated south, fleeing drought and famine in the overcrowded Zambezi valley. Some had been forced into the districts by tsetse-related constraints to settlement further north. Others had moved in to take advantage of the plentiful game and to escape unwanted European restrictions in other parts of the country. Nyai, Rozwi and Ndebele migrants moved north and westwards, settling in the eastern and southern parts of the districts in increasing numbers in the first decades of the twentieth century. For many of these early inhabitants, hunting comprised an important part of their livelihood. Cash incomes, however, were largely a product of labour migration, as agricultural production was limited by distances to markets and a lack of draught power. People in these areas lived in relative isolation from both the state and the market.[6]

The colonial government radically altered this situation by launching a tsetse clearance programme which involved the massive slaughter of wildlife. Game eradication in the name of tsetse clearance had started in the late 1910s and within a decade had all but eliminated the fly in the southern parts of today's Nkayi and Lupane Districts (Ford, 1971: 320).[7] Subsequent advances of the fly belt led to a new shooting campaign. Between 1930 and 1950, 'a policy of maintaining a cordon of hunters all around the periphery of the Zambezi tsetse belt was adopted with the intention of creating a protective zone in which the host populations would be reduced to a level too low to support a population of *Glossina*. Where it was necessary to push back the tsetse, hunting was intensified' (ibid.: 320). By 1950, the programme

6. See Alexander et al. (2000) for further discussion of these themes.
7. Game populations had already been radically reduced by primarily European, but also African, hunting; see Mackenzie (1987: 57 and *passim*).

had cleared the fly from a 10,000 square mile area around the periphery of the Zambezi tsetse belt, at the cost of tens of thousands of animals per year. By 1961, an estimated 750,000 animals had been killed (ibid.: 322–3).

In Nkayi and Lupane, Africans employed under the tsetse programme were known as *amagocha*. Very many — probably the majority — of early male settlers in the districts were recruited into this programme. Issued with guns and ammunition, they played a key role in killing game, particularly in northern Lupane which remained a sparsely settled frontier into the 1970s. They resented certain aspects of the programme such as their lack of choice in its acceptance, the fact that only whites could shoot elephants, and that hunting outside the confines of the programme was prohibited. Some also objected to the long-term loss of game, for economic reasons, because of their taste for game meat, or, for those possessed by hunting spirits, because hunting was a necessity. Former *amagocha* often distinguished between dangerous predators such as lions and hyenas — whose extermination was readily condoned — and animals such as the kudu whose disappearance was regretted.[8]

Despite these objections, former *amagocha* and early settlers found much that was positive in the game slaughter. They compared the whites who ran the programme favourably with other officials, and there were significant economic and social benefits to the programme. Some were immediate: the abundance of meat available as a result of the hunting enabled regular feasting and was remembered as a source of much enjoyment. There were also longer-term advantages. Some *amagocha* established themselves as 'big men' by converting their wealth in game meat into wives and, as the tsetse belt was driven north, into cattle. Even those who were not employed directly, such as chiefs, were given meat as tribute, and others with particular tracking skills, notably local Bushmen, were hired informally by less knowledgeable *amagocha* and 'paid' in meat.[9] Wild animals were at any rate widely considered a source of disease which made the environment unhealthy for humans. Predators presented a dangerous threat to humans and their stock, while baboons and other wild animals threatened crop production.[10] Prohibitions on hunting and discriminatory legislation were thus far from the sole or even the most important features of early African settlers' descriptions of the colonial period, as some of the CAMPFIRE literature suggests.

The early settlers' attitudes to game differed from those of later waves of evictees into the area. These arrived in their thousands in the 1940s and 1950s as a result of forced removals from 'white' farming land in Matabeleland

8. This is explored further in Alexander et al. (2000).
9. Hiring Bushmen as trackers was also a long established European hunting tradition; see Mackenzie (1987: 49).
10. A useful discussion of problem animals, and the changing costs and benefits of wildlife in the colonial period, is provided in Murombedzi (1992: 22–4).

South and the better watered lands of the highveld around Bulawayo (see Alexander, 1993; Alexander et al., 2000; Bhebe, 1989a, 1989b; Ranger, 1985). Many of these evictees were extremely successful farmers, and some owned large herds of cattle. They had a long history of producing grain and beef for the market, of migrant labour, and of interaction with the state and missions. They were often well-educated Christians, and saw themselves as civilized and progressive. Most were not hunters, were not accustomed to living with game, and did not aspire to do so — quite the opposite, in fact.

The evictees suffered greatly in adapting to their new environment. If their cattle survived the northward trek, they often then died from exposure to the poisonous plant *mkauzaan* (*Dichapetalum cymosum*), new types of grass, diseases, or to the depredations of wild animals. People succumbed to malaria on a large scale. Not surprisingly, the evictees regarded the natural environment of Nkayi and Lupane as wild, dangerous and uncivilized — and they often regarded the area's earlier settlers in much the same light. They cite their lack of European clothing, small *amanjanja* cattle, poor farming methods, illiteracy, small houses, uncleanliness and traditional beliefs as marking them apart. Sometimes evictees described them as living 'like animals' in the forest. By contrast, the evictees were resolute in their belief in their own progressiveness. The clearing of game was for them both a necessity for stock rearing, and an important part of 'taming' a wild place. It was only through great hardship that the evictees succeeded in 'civilizing' their new environment: they struggled to clear fields in the forest, to keep cattle alive and build up herds, to erect grinding mills, to build schools, churches and roads (Alexander and McGregor, 1997).

The evictees were not only self-consciously modern, but also intensely political. They brought with them experience of activism in trade unions, in the African National Voice Association and, later, in the nationalist parties. Their anger over their often brutal eviction was central to their commitment to political mobilization. Those present when the evictees arrived describe them as having been dumped at boreholes in the forest 'just like cattle'. As one veteran nationalist from Filabusi explained:

> It was my duty to make people aware that the land belongs to the people. My grave is supposed to be in Filabusi not Nkayi. Because of a white man I'm here. This place was for animals, and because the animals had no leaders, they couldn't speak for themselves, so they were driven to another place.[11]

Reduced to an animal-like status by the eviction, he sought to re-assert his human right to a voice and thus to reclaim his rights to land and to dignity. Nationalist mobilization centred on the goals of freedom, equality and land — not game.

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11. Interview, Mjena, 8 December 1995. Interview references throughout the article site date and place, but not the names of those interviewed.

Over the course of the 1960s and 1970s, the evictees developed and dominated the local nationalist party, pulling the earlier settlers along with them. They inculcated an ideological commitment to progress, and to some extent to their agricultural strategies and use of cattle. The earlier settlers were sometimes successful in out-modernizing the evicted modernizers: 'being modern' and accumulating cattle became important markers of status for both groups.

The hardship of the evictions and the commitment to progress meant that attitudes to game in Nkayi and Lupane were shaped by more than the loss of rights to hunt, and more than an economic calculation, although of course the latter was important. In comparison to other parts of Zimbabwe's northwestern frontier, the production of cotton and other cash crops has been limited by poor soils and a lack of access to markets. Remittances from migrant labour continue to be an important source of cash. However, many have profitably developed cattle and cropping, either alongside labour migration or independently. In Nkayi and Lupane, cattle and agricultural production were and are preferred to wildlife management as an economic strategy. The same has been reported in other districts, such as Gokwe, where people proved to be more interested in cattle and cotton than game, and amongst recent immigrants to Binga who sought to take advantage of abundant pasture and agricultural land for crop and cattle production.[12]

In Nkayi and Lupane, people's economic aspirations have been shaped by ideas about modernity, by a desire to leave behind a life of suffering in the bush with animals. People associate game with the primitive and backward, with neglect and hardship. In addition, attitudes to land were powerfully shaped by colonial evictions, and the sense that the nationalist struggle and guerrilla war were fought to right these past wrongs. The notion that the land had been stolen from its rightful owners was much more strongly developed than any comparable notion of lost proprietorship over game.[13] Such views powerfully impinged on the CAMPFIRE programme in Nkayi and Lupane.

EXPECTATIONS AND CAPACITIES: NATIONALISTS AND THE COUNCIL

Historically shaped attitudes to game, land and development interacted with institutional factors in shaping the fate of the Gwampa Valley CAMPFIRE Programme. The key local institution in the CAMPFIRE programme is

12. On Gokwe, see Petersen (1991: 52); on Binga, see Madzudzo and Dzingirai (1995).
13. Child and Pedersen (1991: 73–4) also note the weakly developed sense of ownership of game, which they see as a product of the colonial period.

usually the district council. It is the council which gains appropriate authority status and, within certain guidelines, reaches an agreement with the 'producer communities' regarding the management of, and division of benefits from, wildlife and other natural resources. The council also must negotiate agreements with third parties — in this case, the Forestry Commission, foreign donors, and the central government. Given this central role, we first consider the nature of Nkayi and Lupane's councils before turning to the problems which beset the Gwampa CAMPFIRE project.

Two factors were particularly important in shaping the attitudes of the Nkayi and Lupane councils to CAMPFIRE (as well as to development more widely). The first concerns their political history. To find the political roots of today's councillors, we must go back to the nationalist mobilization of the 1950s and 1960s. Nkayi and Lupane became hotbeds of the Zimbabwe African People's Union (ZAPU) as a result of the evictions discussed above. The evictees were instrumental in establishing rural party committees, often mobilizing around state interventions in production such as the Native Land Husbandry Act and contour ridging. For them, such interventions added insult to the injury of eviction. They cast their resistance as part of a broader struggle for freedom, and a life of dignity and humanity. The evictees made common cause (not without some problems) with the people they found resident in Nkayi and Lupane, and presented the Rhodesian state with some of the most intransigent resistance it faced anywhere.[14] The activists of the 1960s often paid a heavy price, spending long terms in jail, or suffering torture, beatings and heavy fines. With the arrival of guerrillas from ZAPU's military wing, ZIPRA (the Zimbabwe People's Revolutionary Army), they again played a key role in organizing logistical support, and again suffered terribly for their efforts.[15]

During the 1960s and the war years of the 1970s, the ZAPU hierarchy developed a powerful monopoly on political authority. When independence came, these seasoned veterans of over twenty years of political struggle dominated the new district councils. They quickly discovered that their most important task was the control of sometimes wildly optimistic expectations, not their fulfilment. Although the first years of independence did see some reconstruction and an expansion of services, councillors had little time to practise governance: from 1982, they were driven underground as renewed conflict broke out. State military and paramilitary units were moved into the area in great numbers, ZAPU leaders were hunted down and the notorious Fifth Brigade of the Zimbabwe National Army indiscriminately slaughtered civilians as part of a grotesquely heavy-handed state campaign against a small number of armed 'dissidents' in Matabeleland and the Midlands.

14. On Matabeleland North, see Alexander (1993: 59–67); Alexander et al. (2000); Bhebe (1989a: 107–8). On resistance elsewhere in the country, see Ranger (1985: 137–77).
15. On ZAPU in the war, see Brickhill (1995).

During the conflict, at least 1,500 people in the two districts lost their lives at the hands of state forces, including five councillors.[16] Nkayi and Lupane could not enjoy the early fruits of independence in the context of this extreme violence. Instead, development was limited, and where it did take place, there was little sense that it was the product of people's choices: many councillors sought refuge in the relative safety and anonymity of Bulawayo city, leaving the council's developmental duties in the hands of appointed officials. People were afraid to participate in development projects, and were suspicious of all meetings after the mass beatings, humiliation and killings which had characterized gatherings organized by the Fifth Brigade in 1983 (Alexander and McGregor, 1996). In the period of Zimbabwe's most dramatic investments in rural infrastructure and services, as well as in land redistribution, the councils of Nkayi and Lupane were unable to act effectively. Rather, councillors — and many others — lived in fear for their lives.

The Unity agreement of December 1987 rapidly returned the Matabeleland region to peace, and provided for the unification of the ruling ZANU (PF) — the Zimbabwe African National Union (Patriotic Front) — and ZAPU under the name ZANU (PF). The (now former) ZAPU hierarchy of Nkayi and Lupane quickly re-emerged to take control of the district councils. Councillors felt it incumbent upon them to deliver development to Matabeleland. They hoped to make up for what they perceived to be post-independence neglect, and to compensate for the destruction and constraints on development imposed by the violence of the 1980s (Alexander and McGregor, 1996). However, they operated in a context in which delivery of resources was far more difficult than it had been for councils elsewhere in the early 1980s.

This context comprises perhaps the most important factor in understanding the councils' views during the implementation of the Gwampa Valley project. Central government grants to councils had declined steadily over the 1980s.[17] In 1990, the government formally adopted a structural adjustment programme which further curtailed funds available for state investment in the communal areas. In terms of local revenue, the Nkayi and Lupane councils relied heavily on beer and, particularly, timber. But timber was not a sustainable source of funds, and beer revenues were hard hit in times of drought when rural purchasing power declined. Droughts in fact

16. We have explored the nature of this conflict in detail elsewhere. See Alexander (1998); Alexander and McGregor (1996); Alexander et al. (2000); also Catholic Commission for Justice and Peace and Legal Resources Foundation (1997).

17. In 1980, central government grants on average comprised over 85 per cent of councils' budgets per capita. By 1986, this had declined to under 45 per cent. See Petersen (1991), cited in Hill (1996: 114). Changes in the financial basis of councils are discussed in more detail in Helmsing (1991).

repeatedly reduced large parts of Nkayi and Lupane's population to dependence on state-supplied drought relief or grain loans. Unlike the districts where CAMPFIRE was pioneered, in which revenues from game were significant before CAMPFIRE was initiated, Nkayi and Lupane never received substantial revenue from game.

It was thus no easy task for the districts' councillors to meet expectations for a post-Unity boom in development. The councils' failure in this respect led to widespread disenchantment. While the ZANU (PF) government and ethnic discrimination were popularly held responsible for much of Matabeleland's neglect, the councils also came in for harsh criticism. At local levels, their failure to deliver was often blamed at least in part on councillors' corruption and self interest.

With intense pressure on councils from central government to find alternative sources of income, and with the demands of councillors' constituents for development, CAMPFIRE appeared a godsend. Several aid agencies were involved with the project; they wielded tremendous influence through their control over funds in the context of financial crisis. When donors endorsed and agreed to fund CAMPFIRE, they gave it a momentum which it would otherwise have lacked. Funds, transport and other material resources were in this case supplemented by personnel on the ground whose *raison d'être* was the promotion of CAMPFIRE. The financial pressures and the desire to deliver development help to explain why local councillors with a long nationalist history of opposing eviction and coercive state development embraced a programme which involved eviction, and advocated coercion as a means of overriding resistance.

Councillors' attitudes toward development were further shaped by another set of influences. As has been well documented, Zimbabwe's councils function in an institutional and legal context which accords civil servants great sway (Alexander, 1993; Murombedzi, 1992; Thomas, 1991). Officials of the line ministries and of Local Government tender 'advice' to the council and its committees which strongly influences decisions. Until the changes introduced by the Rural District Council Act — which are still in the process of being implemented — civil servants dominated the District Development Committees, and often, by right of their technical knowledge and control over the dispersal of ministry budgets, greatly influenced the course of rural development. This is particularly significant in light of the fact that ministries such as the Ministry of Agriculture have continued to cleave to technocratic and authoritarian notions of planning (see Drinkwater, 1991).

We need thus to consider more than the attitude of local people to game and land in explaining the fate of the Gwampa CAMPFIRE programme. We also need to look at the history of, and current pressures on, the institutions and individuals charged with rural development. The following section turns to the specifics of the Gwampa CAMPFIRE programme and considers the role of a further actor — the Forestry Commission.

ANATOMY OF A CONFLICT: THE GWAMPA VALLEY CAMPFIRE PROGRAMME

We have thus far traced aspects of the history and institutional context of Nkayi and Lupane in broad brush strokes. Here we will seek to paint a more detailed portrait of the Gwampa Valley residents and to explore the perspectives and actions of those directly involved in the CAMPFIRE initiative.

The Gwampa valley, like other parts of Nkayi and Lupane, is populated by a small number of early settlers and a much greater number of evictees. The earlier settlers are mainly people of Nyai origin, though most were incorporated into the nineteenth century Ndebele state and settled in the valley in the early years of this century. They were joined over subsequent decades by small groups of people removed from 'white' farms around Bulawayo, Inyati, Insuza and Nyamandhlovu, and then, in the 1940s and 1950s, by groups forming part of the massive removals from Matabeleland South discussed above. Those who lived on the Gwampa river's southern banks and watershed fell under the jurisdiction of the Forestry Commission when the Gwampa and Lake Alice Forest Areas were designated in amendments to the Land Apportionment Act between 1936 and 1941 (Judge, 1975: Ch. 2). Between 1970 and 1972, many of those living inside Matabeleland North's state forest land (comprising both tenants and people regarded by the Forestry Commission as squatters) were evicted and those who remained were re-registered as tenants (Matose and Clarke, 1993).

In these evictions, sizeable numbers were moved from the Lake Alice and Gwampa forests (Judge, 1975: Ch. 6). Those moved felt betrayed by the Forestry Commission's changing policy with regard to tenants, as a resident of Mtupane explained:

> When the Forestry Commission first arrived in 1940, they said we could stay but only that we should not cut the trees. We weren't told we were only to be there temporarily. Later we were given orders [to move]. I had a very nice home — a six roomed home in the forest area. The [cement] floors are still there in the forest, shining. Even Le Humbe school, a London Missionary Society school inside the forest area, also had to move over the river. The FC didn't compensate us for the school or for our homes. They didn't even allow people to carry the bricks, saying 'you burnt them with our soil' ... We were very angry, but what could we do?[18]

Even communities settled within the communal area side of the Gwampa valley did not escape forced movement. People who cultivated land in the fertile valley soils were moved to the infertile, sandy 'gusu' watersheds under the aegis of conservationist regulations in the 1950s and 1960s. Many people now living in the Gwampa valley had to move their homes not once, but several times in the colonial period.

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18. Group Interview, Mtupane, 19 February 1996.

These colonial interventions were soon overtaken by the liberation war. During the war and in its aftermath, large numbers of people moved into the state forests once again, encouraged to do so by the ZIPRA soldiers and ZAPU leaders who controlled the greater part of Nkayi and Lupane's communal and forest areas during the war.[19] Not surprisingly, people expected their occupation to be sanctioned by the new government. However, it was only the military and political conflicts of the 1980s which for the most part prevented the Forestry Commission from taking action against these new occupants, or from preventing further movements into the forests. With the Unity agreement of December 1987, the Commission launched 'a new kind of war, a war waged ... against forest occupants ..., and forest neighbours, who come into the forest to collect minor forest products such as thatching grass or to hunt small game animals to meet their subsistence needs ...' (Matose and Clarke, 1993: 15–16). Local people called this the 'forest war'. The Forestry Commission adopted the view that all occupants should be removed from its land, and relied on a combination of prosecution and force to achieve this. The Commission's relations with forest occupants and neighbouring communal area residents at times turned violent (ibid.). In the course of evictions, homes and grain stores were burnt and people were gunbutted.

In Lupane, lengthy and acrimonious negotiations between the Forestry Commission and local councillors and MPs who tried to prevent evictions had reached an uncomfortable and temporary impasse by 1995. The Forestry Commission favoured excising a strip of infertile land neighbouring the communal area, redesignating it as communal land, and using it for resettling tenants and squatters, but it agreed to hold off on evictions until further land for resettlement could be found.[20] The Lupane Council deemed the excised land unsuitable for human settlement, and unsuccessfully lobbied the Ministry of Local Government for alternative land.[21] In the meantime, people in the forest areas were denied the right to use any natural resources within the area, were prohibited from making repairs or improvements to homes or schools, and had their grazing land drastically reduced. They lived with the constant threat of eviction.[22]

It was in this context that the Gwampa Valley CAMPFIRE programme, a joint project between the Forestry Commission and the two District Councils of Nkayi and Lupane, was introduced. The interests of the Forestry Commission were not in the development of the communal areas, but in

19. Interview, Mbembesi, 14 February 1996.
20. The Commission agreed to wait in part because evictions in 1987 and 1988 from other regions, in which people were dumped in arid areas of Tsholotsho communal area with little support, had resulted in the evictees trickling back to their former homes and much critical press coverage.
21. Kusile District Council, Minutes of Full Council Meeting No 7, 4 July 1994.
22. Interviews, Ilihlo, 29 March 1996; Masungamala, 7 February 1996.

establishing a buffer zone around its forests and curbing the poaching of game and other forest resources. From the point of view of Lupane's council, the project was greatly overshadowed by the negotiations with the Forestry Commission over land and eviction.[23] This was not the only harbinger of problems to come. The CAMPFIRE initiative followed in the wake of other wildlife schemes which had proved unpopular and had never reached fruition. The first had sought to create a bird sanctuary in the valley while the second had developed the idea of an animal sanctuary which was not unlike the later CAMPFIRE proposal. Lupane council minutes record an angry response to the animal sanctuary from valley residents when they were finally consulted in 1989: 'Gwampa Valley communities vehemently turned down the proposition ... Communities say they can't reside with animals in their midst'.[24]

The current Gwampa CAMPFIRE project has funding pledged, but as yet unsecured, from the Canadian International Development Agency (CIDA) and the central government. In addition, the Danish NGO, MS-Zimbabwe has, since 1993, provided support in terms of personnel and vehicles, largely for educational and training purposes. The project envisages benefiting local communities by stocking the Gwampa Valley with wildlife (little in the way of big game inhabits the area now) that would attract photo safaris. To create an environment suitable for the animals, substantial numbers of people living along the valley would be moved out of a strip of land running the valley's length, measuring 1.5 to 2 kilometres from the river itself.[25] This boundary would then be fenced so that game could move freely between the Forestry Commission's lands and the water sources of the valley.

Though the Gwampa Valley CAMPFIRE programme was justified in terms of benefiting local communities as well as fulfilling conservationist goals, it also served other purposes. The Forestry Commission saw it as a step towards resolving its ongoing battles over incursions from the communal areas. The councils saw it as a way to raise revenue, and were impressed by the large sums of money pledged by donors. In the rush to agree to the proposal, only cursory discussions took place at the local level. When people were subsequently asked to endorse the project, they adamantly refused at meeting after meeting.

When we carried out our field work in 1994 and 1995, CAMPFIRE was an explosive issue. As whites travelling in the valley, we had to explicitly distance ourselves from the project, to stress that we were working on history, and were not part of an aid agency. While this fact brought some disappointment — we were not able to provide material support — it also

23. Kusile District Council, Minutes of Full Council Meeting No 17, 28 September 1992.
24. Kusile District Council, Conservation Committee Minutes, 2 October 1989.
25. Whereas the Nkayi valley population would be moved out of the valley bottom up onto the watershed, Lupane's affected settlements would be moved to an as yet unidentified place due to land shortage.

meant we were privy to the angrily voiced objections to the Gwampa project. As part of our research focused on political history, we also spent considerable time interviewing those prominent nationalist leaders who dominated the councils. We thus gained their perspective on the project as well.

The view propounded by the councils, and the civil servants who supported them, was that the project was an unmitigated good that would bring vast wealth to the districts and provide a means for achieving 'real development'. The provincial governor, two district administrators and chief executive officers of the councils became ardently committed to the project. Nkayi's district administrator classed resistance as the work of a handful of troublemakers, people who were politically ambitious, or absentee cattle owners who were threatened by the loss of water sources and grazing land in the valley. He was quoted in the local press as attributing opposition to 'only 7 troublesome villagers' who were resident in the provincial capital Bulawayo and were 'busy discouraging villagers because they wanted cheap labour from the local communities'.[26] Executive officers and district administrators argued that development was necessarily coercive, and that obstructive local interests should not hold back entire districts. The provincial governor asserted that people in the valley were backward — they had nothing to lose because they lived in 'grass huts'.[27]

The views of valley residents could not have been more different. They drew on historical arguments which often likened the current initiative to the most hated of colonial interventions. CAMPFIRE was regularly portrayed as a betrayal of the promises of independence. Rather than seeing their opposition as backward or selfish, they regarded resistance as an attempt to preserve a modern, civilized existence — an existence which they had fought hard to achieve and defend for many decades. Living with animals once again was a drastic step in the wrong direction. Valley residents appealed to their democratic rights, stressing either that they had not been consulted with regard to the programme or that when consulted, they had refused.

The prospect of eviction under the programme caused grave concern, and raised for many people the wider issues of historical evictions and the lack of resettlement. Land as a goal of the liberation war was often stressed. In Mtupane, for example, people argued: 'Land is what we fought the war for. Squatters are clamouring for land. The government says no land is available, but there is this land for animals. Those squatters should be the first to be settled, but the government is only interested in animals'.[28] Two men, one a long time settler of the area and another an evictee from Filabusi discussed the issue. The long time settler argued:

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26. *Indonsakusa Ilanga* (weekly), 8 October 1995.
27. Cited in *The Chronicle* daily newspaper in mid-January 1995.
28. Interview, Mtupane, 19 February 1996.

> We fought here for these Filabusi people to be able to go back home, but none of this has happened. The places these people vacated are still there and it's said that the land is for sale. We didn't fight to stay in this sandy area, we fought for rich land. We are sixteen years independent, but nothing has been done — people are still piled up like these melons here.

The prospect of CAMPFIRE further reducing their land was met with horror. The Filabusi evictee commented:

> When we came here, we found people resisting destocking, and now comes this CAMPFIRE. Our cattle graze there, many people live there ... We're going to be grouped together like buffaloes while land is given to animals. This makes us think of war, this is terrible ... There's so much empty land — Forestry, commercial farms — and they come here to where people are living. We didn't fight for people to be put behind fences. Look at us — we don't sleep, we're so thin because of what is happening to us now, our souls are suffering now.

They stressed that the CAMPFIRE project was initiated without their agreement: 'We never sent a grievance saying we want animals in our area. The councillors go to meetings and agree to things without ever consulting the people ... We realize this CAMPFIRE has come to destroy people — where will people go?'[29] Their discussion encapsulated a range of issues: the unmet promises of the liberation war, the parallels with colonial interventions and resistance, the backwardness of living with animals, of being made to live as animals themselves, and the lack of consultation.

For people living in the Gwampa valley, the prospect of movement created severe insecurity, anger and distrust. In Mtupane it was described as 'another gukura', a reference to the extreme state repression of the 1980s.[30] Several schools, clinics, roads and boreholes lay within the area to be vacated, in addition to the many homes, and would have to be rebuilt. Based on prior experiences of eviction, people did not trust the government to compensate them for the investments they had made in community projects and homes. The threat of eviction also discouraged any new investments. An elder from Dwala complained:

> The pegs are about 1.5 kilometres north of here in the highland. So I'm expected to leave this home and live up there. This has disturbed the community, so we see no point in developing the school and clinic. I would like to thatch here — see the piles of grass? But I can't because we will be moved ... You see us so thin, we are over worried. Look at the energy I put into this home, look at my age — how will I build again? We even think the white government was much better than the government we're under now.

Moving up the watershed into infertile, sandy gusu soils would seriously affect agricultural production. As the old man continued: 'If we move up there, we'll have very little pastures, we'll have to destock to five animals and we'll have to open new fields in poorer soils'. He went on to contend that he and others had been given no choice in supporting CAMPFIRE:

> People were not consulted, it was a forced matter. They say we are in the communal area, so we can be moved anywhere, anytime, for any development project ... No one in this valley

29. Interview, Gampinya, 19 October 1995.
30. Interview, Councillor, Mtupane, 19 February 1996.

> supports [CAMPFIRE] — the people who support it are the committee members who we believe will gain in some way from the project, they are people who live outside the valley . . .[31]

The desperation of people in the Valley had led them to adopt a variety of tactics. They had contacted the local press and the Bulawayo *Chronicle* which then ran a series of articles on the conflict. They had contacted lawyers in Bulawayo.[32] They had proposed alternative development projects and, in the last instance, they declared themselves ready to resist.[33] In Lupane's Lake Alice ward, the councillor was elected on an anti-CAMPFIRE platform. Later, the community staged a large protest to greet a CAMPFIRE delegation from the council.[34] They carried placards announcing, 'Down with CAMPFIRE, Down with the council chair'. Women danced and sang, 'We don't want CAMPFIRE. Our sons didn't die for animals', while edging towards the delegation in a threatening manner. An ex-combatant from the liberation war was chosen to speak. He raised his arms, which had been amputated at the wrists, and asked, 'How am I going to build a new home? Who will help me?'. Youths threatened to smash the vehicle in which the delegation had arrived, shouting, 'Today you'll foot to the offices!'.[35]

All along the valley, there was great fear around the CAMPFIRE project. In Nkayi, fear was compounded by arrests.[36] Anyone associated with the project was branded a 'sellout' and feared for his or her life. The Mtupane councillor, who opposed the project, was an exception among the valley councillors. Those who backed CAMPFIRE refused to visit the valley on the grounds that they would be killed or beaten. One commented: 'I went to a meeting in Gwampa and I had to run away — the people wanted to kill me. I won't go down there again unless the police come with me'.[37] Lehumbe school in the Gwampa Valley staged a play about CAMPFIRE in which the councillor was portrayed as a malevolent trickster, a man distanced from the community by virtue of his education and interest in his own status and wealth, who abused his role as interpreter and community representative by falsifying local views, representing their opposition as compliance. The play ends with the community resolving to use violence if all else fails.[38]

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31. Interview, Dwala, 9 December 1995.
32. See 'Gwampa Harassment', *The Chronicle*, 13 October 1995.
33. For example, interviews, Dwala, 9 December 1995; Majaha, 5 October 1995; Nkayi, 1 October 1995; Gampinya, 19 October 1995.
34. The demonstration was described in a group interview, Mtupane, 19 February 1996, and in discussion with the Council Chairman.
35. The level of opposition was significant in altering the commitment of some to CAMPFIRE, notably the Lupane council chairman and party leaders more widely in Nkayi and Lupane. They argued that projects that provoked so much resistance did more harm than good to the legitimacy of the council and the party.
36. See 'Gwampa Harassment', *The Chronicle*, 13 October 1995.
37. Interview, Councillor, Lutsha, 4 October 1995.
38. Shylock B. Mathiya, 'A Play About Campfire', Lehumbe school, November 1994.

The councils' tactics in trying to enforce acceptance of CAMPFIRE included downplaying resistance, misrepresenting the attitudes of those in the valley to other parties, and falsifying minutes of meetings to make it appear that people had accepted the project. They called on the governor and district administrators to address meetings. They encouraged visits (funded by NGOs) by Gwampa residents to a CAMPFIRE project in Tsholotsho.[39] The Lupane council dissolved committees that resisted CAMPFIRE and handpicked new ones.[40] Arrests by police provided a more direct way of threatening resisters. The council called on the police for escorts; the attendance of police at meetings was a source of much fear. All too recent memories of state violence and abductions resurfaced and some people were afraid to voice their views: 'Once you are identified as outspoken — like at these CAMPFIRE meetings — the CIO [Central Intelligence Organization] is there, so the threat of abduction is still prevalent'.[41] Finally, the councils argued that all land in the communal areas belonged to the state, and that the council was the appropriate authority, vested with the legal right to decide what to do with it. They could thus force people to move should they so desire.[42]

Obviously, these events had brought CAMPFIRE a long way from its stated goals of giving people a stake in managing and benefiting from their own resources. A report compiled in December 1995 by the Zimbabwean CAMPFIRE adviser and Danish CAMPFIRE manager employed by MS-Zimbabwe in Nkayi revealed the levels of frustration and concern which had emerged (Sikuka and Thompson, 1995). Their concerns ranged over a number of issues. One had to do with the relationships among the Forestry Commission, the councils, central government, and donors. The report noted that the councils had not been adequately involved in planning meetings held by the Forestry Commission-chaired Steering Committee, and that the CAMPFIRE adviser and manager themselves had not been kept abreast of changes: 'When the CAMPFIRE Manager and Adviser attended a workshop where the Gwampa Valley Project was used as a case study, the adviser was given a very detailed project document which no one in Nkayi District had ever seen', and which differed significantly from information provided by the Forestry Commission (ibid.). Moreover, the CAMPFIRE manager and adviser complained, they and the councils had 'always been told by the

39. This group subsequently maintained that the situation in Tsholotsho was different, because people had not had to move, because game was already in the area and did not have to be introduced, and because people there were used to living with animals.
40. In Mtupane, committee members refused to acknowledge they were a committee, or that they could talk on behalf of the community. They were fearful that the mere existence of a committee could be used as evidence that the community supported CAMPFIRE. When the council went to Mtupane, they had to spend hours driving around in order to fetch the reluctant committee members from their homes.
41. Interview, group of party members, Mathendele, 13 September 1995.
42. 'Gwampa Harassment', *The Chronicle*, 13 October 1995.

Forestry Commission that CIDA [the main foreign funder] was not releasing the funds, but it is now clear that the reason for that is that the Government is not prepared to fulfill its obligation' to contribute a major sum to the Gwampa project (ibid.). Without the release of the CIDA funds, the project could not go ahead and it appeared that the Forestry Commission was looking to use the CIDA funds elsewhere. The viability of the project even with the donor funds was at any rate called into question by a study carried out by the WWF in 1994. The study 'was not very encouraging' and 'did not rate the proposed project as very viable' (ibid.). This apparently damning report, the CAMPFIRE adviser and manager noted, had never been officially published or distributed, despite their requests (see Cunliffe, 1994).

The report went on to outline serious misgivings regarding the councils' commitment to the CAMPFIRE philosophy. It elaborated this criticism with regard to the Nkayi council's management of the natural resources it already exploited, principally timber:

> Unfortunately the leadership of Nkayi District is of the opinion that although the District is involved in CAMPFIRE activities and has Appropriate Authority it only has to follow the CAMPFIRE principles in some wards. This has been evidenced through a lot of discussions ... where the [CAMPFIRE] Department has advocated that at least some of the revenue from the District's timber utilisation should be ploughed back.... Timber poaching is an increasing problem in Nkayi District, but the official opinion seems to be that this problem is solved now where the District's by-laws have been gazetted and the Council therefore can prosecute poachers. Time will show whether this is the case or the CAMPFIRE Department's argument that letting the producer community benefit directly is the solution. (Sikuka and Thompson, 1995)

In order to protect its most important source of revenue, the council had thus abrogated the most basic of CAMPFIRE tenets and sought to use legal penalties, not economic incentives, to control local people's use of timber resources. The Nkayi council was not alone in taking such measures: many other councils with timber resources have similarly ridden roughshod over local claims to control over forest resources (see Bird et al., 1993). The principal force behind these actions has, of course, been the pressure to fill the council coffers in a context of declining central government funding. Such attitudes were in keeping with colonial precedent, and did not augur well for democratic rural development.

The council's attitude to timber resources had in fact produced attempts on the part of local communities to use the CAMPFIRE rhetoric against the council itself. As one resident of a timber felling area commented:

> We noticed that all the royalties for timber were going to the council. We realised they all had jobs, all the people in the council, and they were making money. Now we want to change that so the money comes to the ward. We are writing a constitution, so we can control our own firewood, charcoal and sand. We want our own CAMPFIRE, not the council's CAMPFIRE.[43]

43. Interview, Sabhuku and Vidco Chairman, Mdlawuzeni, 11 September 1995.

The CAMPFIRE awareness meetings thus produced effects which the council had not anticipated.

To return to the Gwampa project, it seems the future of the scheme is now uncertain. The MS report noted that efforts to peg the CAMPFIRE boundary along the valley had 'met massive resistance' and concluded that, 'at the moment it looks like the project is in a deadlock situation' (Sikuka and Thompson, 1995). Even if the project is abandoned, however, the damage it has done may be difficult to overcome.[44]

CONCLUSIONS

Distrust and fear have been among the most important products of the Gwampa CAMPFIRE initiative. Valley residents did not believe that the councillors supporting the project were acting in their interests — they thought they must be benefiting somehow from CAMPFIRE at their expense. The programme's emphasis on game, and the necessity of eviction from the valley, threatened not only people's livelihoods but also their sense of having struggled for the land, and having brought development to a backward place where people had lived in the bush 'like animals'. Not only did they believe their voices were ignored, but they feared they would be persecuted for speaking out, a legacy of the 1980s' repression. Such views led to a breakdown of communication between the district councils and their Gwampa constituents. The finance-strapped councils, desperately seeking sources of revenue, not only created serious problems for their income generating initiatives, but also greatly undermined their own legitimacy.

The ironies of the situation are manifest. People who saw themselves as progressive and modernizing, who desired development, were cast as obstacles to development. A development project with democratic potential had become a focus of resistance and fear. An intervention promising a restoration of environmental rights threatened eviction from the land. The grassroots political leadership which had survived and mobilized through decades of resistance to oppression had, to those in the Gwampa Valley, taken on the mantle of the oppressor. In their eyes, district councils appeared to be playing the role of the colonial 'developers' they (along with many of the councillors) had fought so hard to dislodge.

The case of CAMPFIRE in Nkayi and Lupane has wider implications. The literature on CAMPFIRE has assumed that giving people an economic and managerial stake in wildlife would rectify the legacies of the colonial period when people were deprived of control over game, and create conservationist attitudes towards animals. But these assumptions ignore local

44. In 1998, a brief visit to Nkayi District revealed that the stand-off between Gwampa Valley residents and the pro-CAMPFIRE council was still underway, with no resolution in sight.

histories and aspirations. In the case of Nkayi and Lupane, exclusion from rights to hunt were not the only, or even the most important, colonial legacy. Attitudes towards game were shaped by the history of game slaughter in the process of tsetse clearance. People had reservations about the programme, but many remembered it as beneficial both at the time and in the long term: it had allowed the accumulation of cattle and made life less dangerous. Moreover, the choice of game as opposed to cattle and agriculture was seen as much more than an economic trade-off. Living with animals invoked images of the past, of disease and suffering, a life which many people felt they had struggled to leave behind in their commitment to progress. Finally, people argued that they had fought the liberation war not for animals, but for land and the freedom to make their own choices about how it was used.

If the CAMPFIRE literature has paid insufficient attention to the variable and powerful local histories which have shaped people's attitudes to game, it has also neglected the pressures and interests which have influenced the programme's institutional context. The transformation of CAMPFIRE's democratic and decentralizing ideals into authoritarian practice was owed to a complex interaction of political and economic forces. Politicians and councillors were anxious to be seen to be delivering development to make up for a history of neglect and violence. Elected councillors were strongly influenced by, and institutionally subordinate to, civil servants who continued to adhere to technocratic and authoritarian attitudes to planning. District councils were in desperate need of resources as structural adjustment austerity measures were implemented and central grants to local government declined. Donors offered funding for a project which had received national and international acclaim for its ability to reconcile environmental and developmental goals. The Forestry Commission supported the project for its own, very different, reasons. In this context, the wishes of those whom the project was designed to benefit were quickly marginalized. Feeling under threat, they turned to the tactics of protest so familiar from decades past — and CAMPFIRE became a word associated not with development, but with dispossession.

REFERENCES

Alexander, J. (1993) 'The State, Agrarian Policy and Rural Politics in Zimbabwe: Case Studies of Insiza and Chimanimani Districts'. PhD Dissertation, Oxford University.

Alexander, J. (1998) 'Dissident Perspectives on Zimbabwe's Post-Independence War', *Africa* 68(2): 151–82.

Alexander, J. and J. McGregor (1996) 'Democracy, Development and Political Conflict: Rural Institutions in Matabeleland North'. Paper presented to the International Conference on the Historical Dimensions of Democracy and Human Rights, University of Zimbabwe, Harare (9–14 September).

Alexander, J. and J. McGregor (1997) 'Modernity and Ethnicity in a Frontier Society: Understanding Difference in Northwestern Zimbabwe', *Journal of Southern African Studies* 23(2): 187–201.

Alexander, J., J. McGregor and T. Ranger (2000) *Violence and Memory. One Hundred Years in the 'Dark Forests' of Matabeleland*. Oxford: James Currey.

Bhebe, N. (1989a) *Benjamin Burombo: African Politics in Zimbabwe 1947–1958*. Harare: College Press.

Bhebe, N. (1989b) 'The National Struggle, 1957–1961', in C. Banana (ed.) *Turmoil and Tenacity: Zimbabwe 1890–1990*, pp. 50–115. Harare: College Press.

Bird, C., J. Clarke, J. Moyo, J. M. Moyo, P. Nyakunu and S. J. Thomas (1993) 'Was Mrs Mutendi Only Joking? A Critique of Timber Concessions in the Communal Areas of Zimbabwe'. Working paper. Harare: Forestry Commission.

Brickhill, J. (1995) 'Daring to Storm the Heavens: The Military Strategy of ZAPU, 1976–79', in N. Bhebe and T. Ranger (eds) *Soldiers in Zimbabwe's Liberation War*, pp. 48–72. Harare: University of Zimbabwe Publications.

Catholic Commission for Justice and Peace/Legal Resources Foundation (1997) *Breaking the Silence, Building True Peace. A Report on the Disturbances in Matabeleland and the Midlands 1980 to 1988*. Harare: CCJP and LRF.

Child, B. and J. H. Pederson (1991) *CAMPFIRE in Rural Development: The Beitbridge Experience*. Harare: Centre for Applied Social Sciences, University of Zimbabwe, and Department of National Parks and Wildlife Management.

Cunliffe, R. N. (1994) 'A Feasibility Study for a Proposed Wildlife Project Along the Gwampa Valley within Nkayi and Lupane Districts'. Project Paper No 45. Harare: WWF Multispecies Project.

Derman, B. and J. Murombedzi (1994) 'Democracy, Development and Human Rights in Zimbabwe: A Contradictory Terrain', *African Rural and Urban Studies* 1(2): 119–45.

Drinkwater, M. (1991) *The State and Agrarian Change in Zimbabwe's Rural Areas*. London: Macmillan.

Environmental Consultants (1990) *People, Wildlife and Natural Resources — The CAMPFIRE Approach to Rural Development in Zimbabwe*. Harare: Zimbabwe Trust, Department of National Parks and Wildlife Management, and CAMPFIRE Association.

Ford, J. (1971) *The Role of Trypanosomiasis in African Ecology: A Study of the Tsetse Fly Problem*. Oxford: Clarendon Press.

Hasler, R. (1996) *Agriculture, Foraging and Wildlife Resource Use in Africa: Cultural and Political Dynamics in the Zambezi Valley*. London: Kegan Paul.

Helmsing, A. H. J. (1991) 'Rural Local Government Finance. Past Trends and Future Options', in A. H. J. Helmsing, N. D. Mutizwa-Mangiza, D. R. Gasper, C. M. Brand and K. H. Wekwete *Limits to Decentralization in Zimbabwe: Essays on the Decentralization of Government and Planning in the 1980s*, pp. 97–154. The Hague: Institute of Social Studies.

Hill, K. (1995) 'Conflicts over Development and Environmental Values: The International Ivory Trade in Zimbabwe's Historical Context', *Environment and History* 1(3): 335–51.

Hill, K. (1996) 'Zimbabwe's Wildlife Utilization Programs: Grassroots Democracy or an Extension of State Power?', *African Studies Review* 39(1): 103–19.

Judge, G. (ed.) (1975) 'The Kalahari Sands Forests of Rhodesia: Management Report', draft manuscript. Bulawayo: Forestry Commission.

Kusile District Council (various dates). Minutes of Full Council Meetings and Conservation Committee Meetings.

Mackenzie, J. (1987) 'Chivalry, Social Darwinism and Ritualized Killing: The Hunting Ethos in Central Africa up to 1914', in R. Grove and D. Anderson (eds) *Conservation in Africa: People, Policies and Practice*, pp. 41–62. Cambridge: Cambridge University Press.

Madzudzo, E. and V. Dzingirai (1995) 'A Comparative Study of the Implications of Ethnicity on CAMPFIRE in Bulilimamangwe and Binga'. Working paper. Harare: Centre for Applied Social Sciences, University of Zimbabwe.

Martin, R. B. (1986) 'Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)'. Working Document 1/86. Harare: Department of National Parks and Wildlife Management.

Matose, F. and J. Clarke (1993) 'Who is the Guardian of the Indigenous Forests?' Working paper. Harare: Forestry Commission.

Murombedzi, J. C. (1991) 'Decentralizing Common Property Resources Management: A Case Study of the Nyaminyami District Council of Zimbabwe's Wildlife Management Programme'. Issues Paper No 30. London: IIED Dryland Networks Programme.

Murombedzi, J. C. (1992) 'Decentralization or Recentralization? Implementing CAMPFIRE in the Omay Communal Lands of the Nyaminyami District'. Harare: Centre for Applied Social Sciences, University of Zimbabwe.

Patel, H. (1998) 'Rhetoric or Reality? Sustainable Utilization and African Wildlife Policy: The Case of Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)'. Indigenous Environmental Policy Centre Report.

Peterson, J. (1991) *CAMPFIRE: A Zimbabwean Approach to Sustainable Development and Community Empowerment through Wildlife Utilization*. Harare: Centre for Applied Social Sciences, University of Zimbabwe.

Ranger, T. (1985) *Peasant Consciousness and Guerrilla War in Zimbabwe*. Harare: Zimbabwe Publishing House; London: James Currey.

Sikuka, A. N. and Ole Thompson (1995) 'Annual Report to MS, Second Year, for the Period November 1, 1994 to December 1, 1995'. Nkayi: CAMPFIRE Department, Nkayi Rural District Council and MS-DW.

Thomas, S. J. (1991) *The Legacy of Dualism and Decision-Making: The Prospects for Local Institutional Development in 'CAMPFIRE'*. Harare: Centre for Applied Social Sciences, University of Zimbabwe.

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The decline of a model community-based conservation project: Governance, capacity, and devolution in Mahenye, Zimbabwe

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Abstract

This paper reports the results of our research, conducted from June to August 2004, on the community-based conservation project in Mahenye, Zimbabwe. Previous studies have described this project as a model example of Zimbabwe's CAMPFIRE program. We explore the project's recent performance within the context of the country's post-2000 political and economic crisis and address the implications of our findings for arguments supporting devolution of authority for natural resource management to the community level. These issues are related in that calls for devolution are at least partly contingent on the demonstrated capacity of local institutions to manage projects in the community interest despite difficult circumstances. In our research, we found that outcomes in Mahenye have deteriorated sharply from conditions described in earlier studies. We found further that local failures of leadership combined with the withdrawal of outside agencies responsible for oversight and assistance may be more to blame for this decline than the ongoing national turmoil. Our results suggest that even in apparently successful conservation and development projects, local participatory decision-making institutions are fragile and require continuing external support. Consequently, we argue for caution in promoting full devolution of authority to the community level without safeguards to maintain good governance and adequate capacity.
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Keywords: Community; Governance; Capacity; Devolution; Zimbabwe; CAMPFIRE

1. Introduction

In the late 1980s, the government of Zimbabwe instituted a program known as CAMPFIRE (Communal Areas Management Programme for Indigenous Resources) to promote community-based natural resource management (CBNRM) in its rural districts. Mahenye Ward in Chipinge District, in the southeast corner of the country, was an early site for implementation. Both CAMPFIRE and the Mahenye project have been followed closely. CAMPFIRE has been studied repeatedly because it was one of the first examples of national level CBNRM and has served as a model for similar programs in other countries (Derman, 1995; Alexander and McGregor, 2000; Logan and Moseley, 2002; Newsham, 2002; Chaumba et al., 2003; Muchapondwa, 2003). Mahenye is of particular interest because it has frequently been cited as a strong CAMPFIRE project with a positive record (Peterson, 1991; Murphree, 1995; Bond, 2001; Murphree, 2001; Matanhire, 2003).

This paper reports the results of a study of the Mahenye project that we conducted from late June to mid August 2004. Our research focused on two sets of questions. First we wished to examine whether the project has sustained previously reported gains despite Zimbabwe's severe post-2000 political and economic crisis. Second, we wished to explore the implications of outcomes in Mahenye for the commonly stated argument (Matzke and Nabane, 1996; Murombedzi, 1999; Logan and Moseley, 2002; Mugabe, 2004) that a key flaw in CAMPFIRE design and implementation is the lack of full devolution of authority to the local level.

Arguments for devolution in natural resource management are commonly based both on political ecology theory

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and on empirical evidence from the field. Scholars bringing the perspective of political ecology to the study of CBNRM often build on foundational assumptions favoring the rights of communities to manage their own affairs. Bryant and Jarosz, for example, observe that diverse strands of political ecology share a point of view "that privileges the rights and concerns … of the poor over those of powerful political and economic elites" (Bryant and Jarosz, 2004, p. 808). And researchers reporting the results of fieldwork note that domination of local resource management decision making by external authorities can lead both to social injustices and to conservation and development failures (Neumann, 1998; Goldman, 2003).

Yet the literature in political ecology also reflects considerable skepticism concerning the idealization of rural communities as harmonious entities that if left alone will naturally promote sustainable ecological and social development (Zimmerer, 2000). For example, Gray and Moseley, citing among others Agrawal and Gibson (1999), Neumann (1997), and Ribot (1996), note, "Much work is now focused on how local community structures are frequently unaccountable, inequitable and non-participatory. Programmes overlook the fact that village social relations are based on conflict and competition, which, in turn, can lead to negative environmental and equity outcomes" (Gray and Moseley, 2005, p. 16). In related findings, empirical evidence from the field suggests that assumptions favoring local resource management regimes over state or multilevel management may be misplaced or oversimplified (Robbins, 1998).

Our research contributes to this debate. In our fieldwork, we examined whether gains in Mahenye have been maintained despite Zimbabwe's ongoing national crisis and, consequently, whether outcomes in this project continue to support broader calls for devolution in CBNRM. The issues of the sustainability of gains and the appropriate extent of power sharing are linked in that arguments for full devolution of authority are at least partly contingent on the demonstrated capacity of local leaders to manage projects in the community interest despite difficult circumstances.

To provide context the paper begins with brief histories of CBNRM and CAMPFIRE in general and the Mahenye project in particular. In this background section, we also review the recent political and economic disruptions in Zimbabwe and discuss their impact on rural conservation and development efforts. In the following section, we describe our methods and present the results of our field research. In the closing section, we consider the implications of our findings for debates over devolution in community-based natural resource management.

2. Background

2.1. CBNRM

Human communities in rural areas of the developing world are often poor. Yet in some cases the territories where these communities are located have significant national or global conservation value. In eastern and southern Africa, where conservation efforts often focus on wildlife and habitat, this is particularly likely to be true in communal areas bordering national parks or game reserves. Protected areas generally do not encompass the entire ecosystems of concern (Zimmerer and Young, 1998), and wild animals rely on corridors through adjacent territories to reach other areas of their range (Goldman, 2003). These protected areas and wildlife corridors are under increasing stress as external tourism and local populations expand and as current residents seek both to recapture or retain customary rights to nearby natural resources and to protect themselves and their property from wildlife predation (Neumann, 1998).

In principle, this convergence of pressing development and conservation needs provides opportunities to integrate socioeconomic and environmental objectives (Wainwright and Wehrmeyer, 1998). The idea is that if poor people who live near protected areas can earn significant income from the wildlife and habitat on their lands, local standards of living will improve and conservation threats will abate (Hackel, 1999).

Projects designed to take advantage of these opportunities are often referred to generically as community-based natural resource management, although various related concepts and terms are found in the literature (see Roe and Jack, 2001, for a review of terms in use). CBNRM programs typically attempt to foster community development through revenue sharing programs established by park management agencies or more significantly through the promotion of independent ventures on communal lands, typically linked to sport hunting or wildlife viewing and cultural tourism. Conservation gains are expected as local residents then have incentives to limit poaching and maintain wildlife habitat on their territory.

Although straightforward in principle, CBNRM in practice faces a variety of obstacles and complications, and projects implemented in the field have an uneven record of success (Songorwa, 1999; Twyman, 2000; Emerton, 2001). Researchers examining individual projects or reviewing overall trends report significant structural challenges relating to historical patterns, current social and ecological conditions, stakeholder relationships, and project design and implementation practices (Gibson, 1999; Hackel, 1999; Leach et al., 1999; Turner, 1999; Roe et al., 2000; Brown, 2002; Goldman, 2003). The problem of integrating conservation and development in rural communities appears to fall into the category of what are known as "wicked" problems, characterized by deep divisions among participants regarding social, economic, and environmental priorities; inherent complexity and uncertainty in predicting social and ecological outcomes; and the absence of optimal solutions (Allen and Gould, 1986; Berkes, 2004; Stewart et al., 2004).

2.2. CAMPFIRE

In 1975, the Rhodesian government devolved rights for management and commercial exploitation of game animals

from the state to private landowners, particularly white farmers and ranchers (Matzke and Nabane, 1996). The new law did not apply to the rural black majority, who generally held land in common without secure land tenure (Murphree, 2001). In 1982, the recently independent government of Zimbabwe amended the law to give the same rights to rural district councils (RDCs), sub-national government institutions with responsibility for development in the previously neglected communal areas (Jones and Murphree, 2001). This amendment provided the statutory framework for CAMPFIRE. While communities continued to lack legal standing to institute CBNRM independently, the RDCs could apply for authority to implement projects on their behalf. The first CAMPFIRE projects, which focused on trophy hunting in the Zambezi River valley, were approved in 1988.

CAMPFIRE was one of the earliest national CBNRM programs (Marks, 2001). It garnered strong positive reviews and served as a model for similar efforts in Zambia, Botswana, Namibia, and elsewhere (Jones and Murphree, 2001; Marks, 2001). Developing an overall judgment of the program is a complex task, however. On one hand, over the first decade of its existence CAMPFIRE absorbed more money in donor funding (approximately US$30 million) than it produced from local projects (approximately US$20 million) (Hasler, 1999; Muir-Leresche et al., 2003). Moreover, only about half the revenue directly benefited participating communities (Muir-Leresche et al., 2003). The remainder of the income was withheld to fund activities of the RDCs and the CAMPFIRE Association, a national non-governmental organization (NGO) established to support local projects. Consequently, actual cash disbursements to households were modest (Bond, 2001; Wolmer et al., 2004). On average in 2001, for example, each of the approximately 100,000 households around the country that participated in income-producing CAMPFIRE projects received the equivalent of about US$5 in direct earnings.

On the other hand, one estimate suggests that since its inception CAMPFIRE's contribution to Zimbabwe's gross domestic product may be on the order of five times greater than the direct revenue from constituent projects (Muir-Leresche et al., 2003). While only a small portion of these gains accrued to the rural poor (Emerton, 2001), the nation at large benefited as donor aid, project revenues, and visitors' additional non-CAMPFIRE spending flowed through the economy. Furthermore, households in communal areas with plentiful trophy animals and successful hunting concessions earned CAMPFIRE dividends significantly higher than the national average (Muir-Leresche et al., 2003). Benefits other than direct income including roadwork, grinding mills, school buildings, and other rural infrastructure improvements related to CAMPFIRE also enhanced community life and provided employment and entrepreneurial opportunities that for some residents multiplied benefits associated with the small direct revenues.

As with CBNRM in general, however, once the initial enthusiasm of the early 1990s waned, scholars and practitioners began to review CAMPFIRE more critically (Hasler, 1999; Newmark and Hough, 2000; Bond, 2001; Hughes, 2001; Wolmer et al., 2004). Some observers questioned the program's ability to meet either its conservation or development objectives. Others highlighted inherent conflicts among stakeholder groups—including local communities, donors, conservation and development NGOs, government agencies, and private sector firms—which often have sharply differing worldviews, interests, and incentives.

An additional concern regarding CAMPFIRE's structure and design is that, despite articulated ideals of devolution, communities do not have full authority for project management (Derman, 1995; Matzke and Nabane, 1996; Hasler, 1999; Logan and Moseley, 2002). Rural district councils retain the power to make and break contracts with hunting and tourism operators and to siphon off a significant portion of the proceeds through various taxes and levies. Lack of full devolution and continuing interference by the RDCs were the criticisms of CAMPFIRE that we heard most often as we talked to experts in Harare in preparation for our site visit.[1]

2.3. History of the Mahenye CAMPFIRE project

The central government of Zimbabwe authorized Chipinge District's CAMPFIRE program in 1991, making Mahenye one of the first officially recognized sites for implementation. But efforts at community-based natural resource management had been underway in Mahenye since the early 1980s and had served as an early model for development of the CAMPFIRE concept (Peterson, 1991; Murphree, 2001).

Mahenye Ward is situated in southeastern Zimbabwe along the border with Mozambique. The Save River forms the southern and western boundaries of the ward and separates the communal lands of Mahenye from Zimbabwe's Gonarezhou National Park. Prior to the 1960s when the Rhodesian government expropriated the land, part of the area that is now the national park had been traditional territory of the people of Mahenye. Because the colonial government had asserted state ownership of wildlife both inside and outside protected areas, the resettled people found themselves forbidden to hunt on either the old land or the new. Nor were they legally permitted to kill animals that moved through their villages threatening life and property.

Not surprisingly problems with poaching arose, sparking a running conflict with park managers. After independence in 1980, the people of Mahenye were angered further when the new government reneged on a promise to return lands from Gonarezhou to them. In 1982, however, in an effort to reduce the strife, park officials and local leaders

[1] Academics and professionals from the University of Zimbabwe Center for Applied Social Sciences, the Worldwide Fund for Nature Southern Africa Regional Programme Office, and the Zimbabwe Environmental Law Association interviewed in Harare, June 2004.

worked out an innovative arrangement, which in its implementation served as a precursor to CAMPFIRE (Murphree, 2001). The authorities agreed to allow the community to earn income from government-sanctioned trophy hunting in the area. In return the people of Mahenye agreed to limit illegal takes and to maintain wildlife corridors on their lands.

Initially, the project faced a variety of problems, many related to conflicts with the rural district council. Because the national CAMPFIRE program was not yet underway, no official mechanisms existed for managing and disbursing funds generated through community-based projects. Consequently, for several years, money earned from sport hunting in Mahenye Ward was retained at the district level, frustrating the community (Murphree, 2001). In 1987, as CAMPFIRE was about to be launched nationally, the Chipinge RDC finally allowed the funds that had accumulated to be used to support infrastructure improvements in Mahenye. In 1991 the process was formalized as Chipinge District joined the national program.

Leaders of the Mahenye project were also innovators in exploring means to supplement hunting revenue. Through the 1990s in Mahenye, annual CAMPFIRE dividends per household from sport hunting averaged between US$10 and US$30, depending on the number of animals hunted and the size of the trophies (Muir-Leresche et al., 2003). While these sums were significant—on the order of 5–10% of average family income from crops and livestock—additional sources of income were clearly needed.

In the mid 1990s, within the framework of its CAMPFIRE project, the community and its representatives made arrangements with a national hotel firm to establish two upscale tourist lodges along the Save River in Mahenye, sited to take advantage of the proximity of Gonarezhou National Park. In return for the right to build on communal land, the firm agreed to pay the RDC an annual fee rising over the 10-year contract from 8% to 12% of the lodges' gross receipts. In turn, the RDC, as with income from trophy hunting, committed to channel about 75% of the revenue back to Mahenye Ward (Murphree, 2001).[2]

At the outset, the community benefited from this venture in important ways. Construction of the lodges required the firm to improve the 50 km unpaved road leading to Mahenye and to bring in electricity, telephone communications, and potable water. Telephone service was extended to the community's clinic and police post, and water sources connected to the lodges' potable water system were installed in the village for people and livestock. The community also took an advance on its first few years of receipts from the venture to pay to have power lines continued from the lodges into the village to provide electricity for the grinding mill, clinic, general store, and other common-use buildings. In addition, the lodges provided about 40 jobs for locals as waiters, cooks, mechanics, drivers, maintenance workers, housekeepers, launderers, and so forth.

An elected CAMPFIRE committee has responsibility for managing the project at the local level and for representing the community interest in dealings with the RDC and with the safari hunting and lodge operators. The bylaws require committee members to be elected every two years, for the financial records to be audited every three months, and for a general meeting to be held annually to facilitate broad community participation.

From its inception through the worsening of Zimbabwe's political and economic crisis in 2000, the Mahenye project was consistently judged a model CAMPFIRE program (Peterson, 1991; Murphree, 2001; Matanhire, 2003; Muir-Leresche et al., 2003) both for its diversified sources of income and for its stable, participatory community leadership arrangements. For example, Matanhire (2003) evaluated local project management institutions in Mahenye for the first six months of 2001, the latest cycle for which data were available, as having an 89% performance rating, with 75% being the standard for model status.

2.4. National conditions

For the past six years, Zimbabwe has suffered through a debilitating social, political, and economic crisis. The disturbances have a complex history, shaped by links between residual effects of colonial rule that only ended in 1980 and recent struggles over the country's political future. An essential component of the colonial legacy was a distorted pattern of land ownership in which the white minority continued to control most of the arable land (Chaumba et al., 2003). While the question of land reform had been on the agenda since independence, political and economic trends in the mid to late 1990s contributed to making it a primary focus of government policy by 2000.

Robert Mugabe, the leader of the movement in the 1970s to overthrow Ian Smith's white-minority government, became head of state at independence in 1980 and remains in power. He imposes authority and controls parliament through his ZANU-PF party. While broadly admired in Zimbabwe during the early years of his rule, his popularity fell during the 1990s as the economy weakened, adversely affected by recurring droughts, counterproductive structural adjustment programs, and ineffective governance (Human Rights Watch, 2002). By 2000, his standing had declined to the point that in February of that year government-supported changes to the constitution were defeated in a referendum, and in June, despite widespread vote-rigging and intimidation, ZANU-PF lost substantial ground in parliamentary elections to the opposition Movement for Democratic Change (MDC). These unfavorable electoral outcomes contributed to Mugabe's implementation later in 2000 of an accelerated land redistribution program that in many areas degenerated into chaotic and often violent

[2] Under the initial agreement, the RDC kept 20%, and 4% went to the CAMPFIRE Association. At the time of our research, we were told that the RDC's portion had risen to 30% as the district had negotiated for higher returns (CAMPFIRE committee chair and RDC councilor interviewed in Mahenye Village Center, July 2004).

invasions of white-owned farms and ranches, and even of state-owned national parks and other protected areas (Chaumba et al., 2003; Wolmer et al., 2004). This radical and destructive land reform initiative was interpreted as a populist move designed to strengthen support for the ruling party among the poor rural majority.

Negative international reactions to the contested election results, uncompensated land seizures, and associated domestic political violence caused extensive further damage to an already fragile economy. Sanctions were imposed on government leaders, foreign firms and donors pulled out, international tourism declined sharply, hard currency supplies constricted, and inflation soared. Since 2000, gross domestic product in Zimbabwe has declined by 15–20% per year, annual inflation rates have averaged between 300% and 600%, and approximately 75% of the working age population has become unemployed or underemployed (Muir-Leresche et al., 2003). In a self-reinforcing cycle, Mugabe's rule has become increasingly authoritarian and conditions in the country have continued to deteriorate.

The economic and political crisis in Zimbabwe has adversely affected CAMPFIRE in various ways. First, around the country project incomes have fallen. Negative international publicity dramatically reduced game viewing tourism, and, while sport hunters are less affected than conventional tourists by reports of political disturbances, hunting revenue has also declined. Bookings for trophy hunts are flat or down somewhat. More damaging, however, is the government's policy of significantly overpricing the Zimbabwe dollar in official exchange rates, thus devaluing CAMPFIRE receipts (Muir-Leresche et al., 2003).[3]

Moreover, in conjunction with its land reform program, the ruling party also worked to consolidate its position in the countryside by recruiting traditional leaders to enforce party discipline in preparation for the parliamentary elections of 2005. During the period of our research in 2004, for example, chiefs around the country, including in Mahenye, received valuable perquisites from the government, such as pickup trucks, boreholes, and electricity connections. This strengthening of the chiefs' authority through the backing of a government willing to use political violence could be expected to threaten the stability and durability of local participatory institutions established for management of CAMPFIRE projects (Matanhire, 2003).

3. Mahenye case study

3.1. Methods

We conducted research in Zimbabwe from late June to mid August 2004. During an extended stay in Mahenye, we observed CAMPFIRE project activities and interviewed people living or working in the area. Both before and after visiting Mahenye, we interviewed representatives of relevant NGOs, government agencies, and private sector firms based in Harare and Chipinge District. In all, we completed open-ended interviews with 54 respondents both inside and outside the community.

Our respondents outside the Mahenye area were professionals whom we sought out for their specific expertise. In Harare, we interviewed people affiliated with Africa Resources Trust, the CAMPFIRE Association, the University of Zimbabwe Center for Applied Social Sciences, the Worldwide Fund for Nature (WWF) Southern Africa Regional Programme Office, the Zimbabwe Environmental Law Association, and Zimbabwe Trust. We also interviewed representatives of the Chipinge Rural District Council and River Lodges of Africa, the firm responsible for managing the two lodges established in Mahenye in conjunction with the community's CAMPFIRE project. When seeking appointments with these professionals, we explained our interest and purpose and secured their consent to be interviewed.

In Mahenye, we sought out respondents along a continuum from project insiders to project outsiders. Among those closely tied to the project, we interviewed traditional community leaders, members of the CAMPFIRE committee, committee staff, and people working at the tourist lodges, including both local residents and company employees brought in from outside. We also spoke to people—former CAMPFIRE committee members, for example—who had been closely involved with the project in the past but were no longer engaged. We selected these current and former insiders because of their personal knowledge of the project's history and current status.

We also solicited the opinions of people in the Mahenye area with no direct links to project management. We talked to people as we met them in public places, including at the grinding mill, at shops, on the road, on paths in the bush, at the schools, at the river, and so on. We also approached people in their homes and gardens and asked for permission to speak with them.

The respondents we encountered in Mahenye fell into three categories: permanent residents, temporary residents, and non-residents. Permanent village residents constituted the majority of our interviewees. Temporary residents we spoke to included secondary school teachers who had been assigned to the village after completing their training. Non-residents were generally people from nearby communities who happened to be in Mahenye visiting relatives or conducting business, but this group also included rangers at nearby Gonarezhou National Park who were long-term neighbors of the community. We sought out these respondents from Mahenye and its environs to learn about the perceptions and attitudes of people in the area who were not directly involved with project activities.

On first arriving in Mahenye, we met with the traditional chief, explained our purpose for visiting, and asked his permission to stay in the village and conduct our research. He

[3] At the time of our research, US$1 bought approximately Z$5400 at the official rate and approximately Z$6500 at the "parallel market" rate. Thus central government institutions could appropriate about 20% of the value of foreign currency exchanged at the official rate.

agreed to our request while emphasizing, falsely as it turned out, that he personally had no involvement with the local CAMPFIRE project. Although we were exploring what we later found to be a highly charged topic, we started our visit with considerable ignorance. None of the professionals we interviewed in Harare prior to our trip to Mahenye appeared to have any awareness of the depth of current troubles on the ground. While after the fact we found this lack of knowledge among outside experts surprising, we believe in practice it helped us undertake our work at the site with objectivity and open-mindedness.

On approaching prospective respondents during our research in the community at large, we explained our interest and purpose and requested their consent to be interviewed, promising to protect their anonymity and confidentiality. No one refused to speak to us, and many engaged us in open discussions. Some respondents, however, were more reticent. While we were patient and took our time to see if their opinions would emerge, we did not attempt assertively to extract ideas that people wished to keep to themselves.

With professionals outside Mahenye, after receiving permission, we recorded interviews using audio tape recorders. We supplemented the tapes with our notes taken after each session regarding non-verbal cues. With villagers, we did not use recording devices. Instead we wrote down field notes as soon as possible after each encounter.

Interviews typically took the form of face-to-face meetings of between 30 and 60 min in length involving one or both of the authors and a single respondent. There were several common variations, however. Some interviews, particularly our ad hoc meetings with villagers in Mahenye, were often shorter, perhaps 5–15 min in length. In contrast, interviews with particularly important respondents were often more extensive. These discussions either lasted longer during the course of one day or continued over several days. We conducted more extensive interviews of this type in Harare with Zimbabwean staff at WWF and in Mahenye with CAMPFIRE committee members and with several key informants among villagers not affiliated with the CAMPFIRE leadership.

While for most part we interviewed respondents individually, we also occasionally took advantage of opportunities for group discussions. In Mahenye, we engaged in group discussions with CAMPFIRE committee members, with primary school teachers, with women at the grinding mill, and with tourist lodge employees. We facilitated these discussions using focus group techniques.

We emphasize that we explored political and socioeconomic rather than ecological outcomes and acknowledge several additional limitations with our methods. For the most part we were not able to verify independently what our respondents told us about the history of the Mahenye project since 2000. We did not witness the events described, researchers have not published reports of the project's development over the past several years, and the project's records are incomplete and unreliable. In addition, several important respondents had reasons to dissemble, including both current insiders who may have wished to hide problems and former insiders who may have wished to exaggerate them. The impressions of other informants were clearly affected by anger or fear.

To address these potential weaknesses and distortions, we worked to take likely biases into account and to get multiple characterizations of important issues from as wide a variety of respondents as possible. In the end, the unusual unanimity of public opinion in Mahenye gave us confidence that we were capturing accurately both the substance of significant events and the perceptions of community members regarding project performance.

3.2. Results

Here we describe what we learned about the recent history and current state of the Mahenye CAMPFIRE project, highlighting changes from conditions reported in earlier published assessments. Most striking, we encountered broad and deep agreement among respondents that the project is no longer managed to benefit the community. No one unaffiliated with the leadership expressed satisfaction with current management practices, and even several interviewees with close ties to project leaders were critical of their performance. Regardless of gender, age, or education, and whether responding individually or in groups, local residents complained of bad management, corruption, nepotism, and intimidation. One respondent said, for example, "Let them steal a little. If I had CAMPFIRE money in my pocket and I was thirsty, I'd buy myself a beer, too. But it's not right to take it all."[4]

Furthermore, we found no sense of community solidarity in the face of Zimbabwe's more general problems and the associated pressures on the CAMPFIRE project. Instead, community members not part of project management universally expressed various combinations of resignation, anger, and fear directed at their own local leaders. Reflecting the sentiments of many residents we interviewed, one woman when asked about CAMPFIRE replied, referring to the community leaders and their families, "It's for them, not for us."[5]

In describing particular problems, our respondents repeatedly referred to several significant deviations from desirable governance and management practices. Perhaps most important, beginning in 2000 the democratic process for selecting CAMPFIRE project leaders was abandoned. Up through 2000, committee members and the chair were elected every two years as stipulated in the bylaws. In 2000, however, the chief, who has no formal authority over CAMPFIRE activities, ruled unilaterally that the sitting chairman could no longer serve because he had acquired

[4] Gonarezhou park guard interviewed near the Save River, August 2004 (translated from Shona by Mashinya).

[5] Woman interviewed at her home in Mahenye village, August 2004 (translated from Shona by Mashinya).

property outside the village thus raising questions about his residency.[6] The chief then elevated his own brother, who was deputy committee chairman at the time, to the leadership post. Since then there have been no elections.

Procedures intended to promote community participation and maintain transparency and accountability have been undermined. The required annual general meeting at which the CAMPFIRE committee reports to the community at large was not held as scheduled in 2004. Also, the project's financial records have not been audited since the change in leadership in 2000. When at our request the current chairman showed us the records, we found them in obvious disarray. The most straightforward annual totals for income and expenditures could not be found. The chairman, apparently embarrassed, chastised the bookkeeper in our presence for what was clearly long-standing normal practice. While in the office, we also observed casual disbursements of CAMPFIRE funds. The amounts were relatively small, but there was no accounting.

We asked the current chairman about his accession to committee chairmanship, the lack of elections for the past four years, and the canceling of the annual general meeting for the current year. He acknowledged that our characterization of events was accurate. Regarding the change in leadership in 2000, he repeated that the previous chairman could no longer serve because of a change in residency. Regarding the lack of elections, he told us that the community had decided that stability in the leadership was important. Regarding the canceling of the annual general meeting, he said that villagers did not understand the issues and just liked to complain.[7]

In addition to commenting on the lack of transparency and accountability, our respondents from the general community also reported evidence of misallocation of funds and mismanagement relating to the CAMPFIRE revenue-generating projects. For example, money promised in the past year for school construction and entered in the records as paid to the local school authorities has not been delivered.[8] We observed that one of the two secondary school blocks continues to sit unfinished and deteriorating without a roof in place. We were told that no work has been done on the building since the change of CAMPFIRE committee administration in 2000.[9] Also, the village store, established with CAMPFIRE funds as a cooperative to provide a convenient local outlet for common household goods and to generate funds for community improvements, has been given over to private merchants.

Interviewees in the community at large also expressed profound disillusionment and skepticism regarding the annual disbursements to families from the CAMPFIRE project. In the most recent cycle, for example, each of the approximately 1000 households in Mahenye eligible for benefits was to have received 6100 Zimbabwe dollars (Z$) as its share of CAMPFIRE revenues for the previous year.[10] Before payment and without prior notification, however, clan leaders subordinate to the chief deducted Z$6000 from each family's payment to cover a community development tax. The RDC delegates this tax collecting authority to the local kraal heads, who are allowed to keep 10% of the funds they collect. Although this levy is unrelated to CAMPFIRE, villagers saw the manner and timing of its collection as one more means by which the traditional local leadership expropriates community CAMPFIRE benefits. In March 2004, after this tax was deducted, each household in Mahenye Ward received a payment of Z$100 in return for its participation in CAMPFIRE for 2003.[11] As one respondent commented, this was not even enough for candy for the children,[12] and it certainly was not sufficient to compensate families for the costs of living with wildlife.

Moreover, there is evidence that this amount did not reasonably account for project earnings. For example, while at the time of our research the project's records were poorly maintained, we did see documentation of a recent payment from the hotel firm. After withholdings to cover levies for the RDC and the CAMPFIRE Association, the committee in early 2004 received Z$28.9 million from the firm as the community's share of 2003 lodge receipts.[13] This amount does not include project revenue from hunting safaris or from other sources, such as the operation of the grinding mill or the sale of elephant hides. Historically in Mahenye about half the income from CAMPFIRE is used for committee expenses and contributions to general infrastructure improvements in the village, and the other half is distributed directly to households. Yet following receipt of the payment from the lodges, the committee failed to distribute funds promised for school construction, and annual disbursements to households totaled only about Z$6 million,[14] well below half of even this partial contribution to project receipts for the year.[15] While this accounting of revenues and expenditures is far from comprehensive, it adds credibility to our respondents' skepticism regarding the CAMPFIRE committee's management practices.

Local leaders also monopolized equipment and employment opportunities meant to benefit the community. A

[6] Former CAMPFIRE committee chairman interviewed at Mahenye Primary School, August 2004.

[7] Current CAMPFIRE committee chairman interviewed at Chilo Lodge, August 2004.

[8] Teachers and administrators interviewed at Mahenye Primary School, July 2004.

[9] Teachers interviewed at Mahenye Secondary School, August 2004.

[10] The official exchange rate in March 2004 was US$1 = Z$3930, thus the payment would have been equivalent to approximately US$1.55.

[11] Approximately US$0.03 at contemporary exchange rates.

[12] Teacher interviewed at Mahenye Primary School, July 2004.

[13] This represents approximately US$7,400 at contemporary official exchange rates. In interviews, both the committee chairman and the lodge manager confirmed that the committee received this payment.

[14] Each of the approximately 1000 participating families received a payment of Z$6100 (pre-tax).

[15] We note that several respondents in Mahenye independently mentioned mysterious bags of money, assumed to be CAMPFIRE funds gone missing, that had been found recently buried in the bush.

pickup truck donated by the professional hunter to be used as an ambulance or for other local emergency services was co-opted for personal use by committee members. In the course of one private trip, the vehicle had been extensively damaged and as a consequence was not in working order at the time of our research. In addition, members of the chief's family filled jobs allocated for locals at the tourist lodges.[16] Indeed, the chief's brother, the CAMPFIRE committee chairman, was himself on salary there as community tourism officer.

Moreover at the time of our research the CAMPFIRE committee, without authorization from the community or the RDC and without support from the CAMPFIRE Association or other outside agencies, was negotiating a new contract with lodge managers. Under the proposed arrangement, the community would receive about 15% of the lodges' profits rather than 12% of gross revenues, as currently stipulated.[17] Because of the decline in tourism in Zimbabwe, however, the lodges are unlikely to be profitable for some time,[18] and as a consequence the proposed new arrangement would clearly benefit the firm at the community's expense. Yet in these negotiations the asymmetry of business expertise unfairly favored the firm over the community, and the employer/employee relationship between the lodge management and the CAMPFIRE committee chair created a conflict of interest.

Perhaps most disturbing, we heard allegations of intimidation during several credible, independent interviews. One respondent told us, referring to the current CAMPFIRE committee chairman, "He's my uncle, but I'll still tell you he's a bad man." The respondent went on to say, speaking of the community leaders, "If you speak against them, the sun will not set on you."[19] We were also told that because the chief retains his traditional authority to determine land-use patterns in the communal area those who might criticize the current CAMPFIRE leadership are silent for fear of losing rights to the plots on which they depend for subsistence livelihoods.

It might be reasonable to suppose that Zimbabwe's national political unrest is largely responsible for the collapse of participatory project management processes in Mahenye. Yet this is an isolated community with little history of violence linked to the national struggle for power. Even during the 2000 parliamentary election cycle, Mahenye was spared the attacks by war veterans and youth militia loyal to ZANU-PF that occurred in many parts of the country. Our respondents confirmed that this lack of politicization had continued up to the time of our research. For example, a secondary school teacher currently working in the community showed us scars he said he had sustained during a political attack on teachers that occurred in 2000 when he was working in another location, but he told us that during his time in Mahenye he had seen no disturbances associated with national politics.[20] Another resident told us that in Mahenye there was no problem with ZANU-PF but that when he visited relatives living out by the main Chiredzi highway he stayed indoors to avoid political troubles.[21] The manager of Chilo Lodge also confirmed that the political unrest seen elsewhere was not evident in Mahenye.[22] Indeed, none of our respondents reported any interference or intimidation from factions linked to ZANU-PF, and we observed no activity by either the ruling party or the opposition MDC.[23]

We have focused on issues of governance in Mahenye to this point, but some of our respondents also reported significant problems with management and oversight at other levels as well. Community leaders, for example, expressed frustration with the Chipinge RDC. They told us that the current professional hunter secured the Mahenye hunting concession through RDC favoritism and that his performance has been unsatisfactory.[24] They noted that in the previous year the hunter led safaris taking four elephants. They reported that he did not take the full quota of seven animals, and thus generate maximum revenue for the community, because he was overextended with other concessions elsewhere in the country.[25] They also complained that he has often been unavailable when the community needs him to deal with problem animals that threaten village residents and their property. Community leaders further asserted that under current arrangements between the hunter and the RDC they have no representative present when trophies are weighed and their values assessed.[26]

In response to criticism of RDC management of the hunting concession, a Chipinge district councilor explained that the council selected the present hunter because the previous hunter is also a partner in the Mahenye Lodge management firm. The councilor told us that RDC officials felt this gave the previous hunter too much involvement in the affairs of the local CAMPFIRE project and led to conflicts of interest.[27]

[16] Employees interviewed at Chilo Lodge, August 2004.

[17] Manager interviewed at Chilo Lodge and Chipinge RDC councilor interviewed at Mahenye Village Center, August 2004.

[18] The manager told us that occupancy rates in 2003 had averaged about 20%, well below the breakeven point.

[19] Hitchhiker interviewed on a drive from Mahenye to the Cheredzi highway, August 2004 (translated from Shona by Mashinya).

[20] Teacher interviewed at Mahenye Secondary School, August 2004.

[21] Driver interviewed on the Mahenye village road, August 2004.

[22] Manager interviewed at Chilo Lodge, August 2004.

[23] The people of Chipinge District, including Mahenye Ward, are primarily Shangaan, a small minority ethnic group constituting about 1% of Zimbabwe's population (which is dominated by Shona and Ndebele). Since independence, Chipinge has consistently voted for Shangaan parliamentary candidates under the banner of the minor ZANU-Ndonga party.

[24] CAMPFIRE committee chairman and members interviewed at Mahenye Village Center, July 2004. With hand gestures they appeared to go further and indicate that the hunter had bribed district officials. When we asked directly, they confirmed that this was what they had intended to suggest.

[25] CAMPFIRE committee member and RDC councilor interviewed at Mahenye Village Center, August 2004.

[26] CAMPFIRE committee members interviewed at Mahenye Village Center, July 2004.

[27] Chipinge RDC councilor interviewed in Mahenye Village Center, August 2004.

Thus relations between the RDC and the Mahenye CAMPFIRE committee remain adversarial rather than cooperative, continuing a pattern dating back to the early 1980s when CBNRM was first implemented in Mahenye (Murphree, 2001). This is not unexpected since the two institutions have differing incentives. Nevertheless, several residents of Mahenye that we spoke to, particularly the primary school teachers, spoke against the idea of full devolution of authority from the RDC to the community. While acknowledging that the RDC is not an ideal custodian of the community's interests, these respondents maintained that under current local conditions, characterized by mismanagement, misallocation of funds, and intimidation, the district council serves as an essential check on the power of local leaders.[28]

The NGOs responsible for guidance and oversight are part of a third layer of project management subject to criticism. At the beginning of the CAMPFIRE program, the CAMPFIRE Association was formed to provide administrative support to the communities and the RDCs, which lacked experience in CBNRM. Other national and international NGOs, which had acted as implementing agencies when donor money flowed in to underwrite CAMPFIRE development, also had capacity building responsibilities. Yet during the time of our research, our respondents reported a complete absence of external support for the Mahenye CAMPFIRE project. Moreover, NGO staff members whom we interviewed in Harare were unaware of the project's collapse. As mentioned earlier, their primary concern and recommendation was a change in the law to allow full devolution of authority to the community.

4. Discussion

Our study reveals the decline of a promising CBNRM program. We found that the Mahenye community no longer receives the flow of significant social and economic benefits reported in earlier studies. In this section we summarize the problems, consider reasons for the deterioration in outcomes, and discuss the implications of our findings for devolution in community-based natural resource management.

The central failure of the Mahenye CAMPFIRE project is that participatory decision-making processes have broken down. Following the undemocratic takeover of the committee in 2000 by the chief's immediate family, there have been no elections and no outside audits of receipts and expenditures. Moreover, progress on school construction and other community infrastructure improvements has stalled, and households have received only insignificant annual disbursements that fall well below the 50% share of project revenue that they received before the change in administration. Given the sharp decline of benefits and the lack of transparency and accountability, community members no longer trust the CAMPFIRE leadership or feel any sense of ownership in the project. Residents have seen the ruling clan fill jobs at the lodges, use project vehicles for personal purposes, and privatize the community's cooperative store. These overt violations of CAMPFIRE principles fuel what our findings suggest are residents' legitimate suspicions regarding the management of project revenues and the motives of the leadership.

Zimbabwe's broader crisis has contributed to these adverse outcomes. We found evidence of significant negative impacts from the national turmoil, including lower revenues from the lodges, challenging problems of financial management in a time of hyperinflation, and both reduced services and increased pressure for higher shares of project income from the RDC. Yet we also found that these national political and economic disruptions are not sufficient to explain the full extent of the collapse of Mahenye's CAMPFIRE project. Our research suggests that there were opportunities for resilience and survival.

First, on the political front, none of our respondents, whether members of the CAMPFIRE leadership, other community residents, or outsiders, suggested that Mahenye had been directly affected by violence and intimidation linked to national politics. This was not a consequence of fear of speaking out on the subject. Indeed, many of those we interviewed volunteered their opinions about the national situation, often complaining about political and economic conditions in the country.

Second, on the economic front, the project's two primary sources of income, hunting revenue and lodge receipts, are both to some degree buffered against external shocks. As mentioned, trophy hunters are less likely than other types of tourists to avoid countries with political troubles. Mahenye committee members told us that the professional hunter often failed to take the full quota of elephants not for lack of clients but because he was occupied with other concessions. Also, while game-viewing tourism in Zimbabwe is down sharply, the project still received substantial revenue from the lodges because language in their current contract guaranteed payment of a percentage of gross receipts rather than a percentage of now non-existent profits.

Thus, while we observed damaging effects from the national crisis, our findings suggest that local failures in governance and capacity contributed significantly to the decline in community benefits and the near universal distrust and disillusionment voiced by our respondents. Indeed, it appears that problems noted more generally in community-based programs may ultimately have undermined outcomes in Mahenye as well. For example, as mentioned in the introduction, the tendency of local elites to expropriate benefits and the instability of local participatory processes linked to community projects that our respondents in Mahenye described have both been reported elsewhere (Ribot, 1996; Agrawal and Gibson, 1999; Li, 2002; Gray and Moseley, 2005). In addition, our results indicate that in Mahenye, as noted in other projects in times of economic stress (Balint, in press), the incentives of private firms—the professional

[28] Teachers interviewed at Mahenye Primary School, July 2004.

hunter and the lodge operator in the Mahenye case—came to conflict with community development goals. We also found that the Mahenye project experienced the pattern reported in other cases (Derman, 1995) that when donor funding comes to an end, as it did nationally for CAMPFIRE in 2000, essential outside support for local projects drops off, thereby undermining success.

In Mahenye, following the withdrawal of NGOs and government agencies responsible for oversight and capacity building, the traditional community leaders usurped power from the elected CAMPFIRE committee and then co-opted benefits and otherwise mismanaged project activities. These outcomes highlight both the importance and the fragility of good governance and adequate capacity in CBNRM. Our findings thus add weight to arguments for caution in promoting full devolution of authority, particularly in the absence of safeguards to protect the broader community interest.

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References

Agrawal, A., Gibson, C.C., 1999. Enchantment and disenchantment: the role of community in natural resource conservation. World Development 27 (4), 629–649.

Alexander, J., McGregor, J., 2000. Wildlife and politics: CAMPFIRE in Zimbabwe. Development and Change 31 (3), 605–627.

Allen, G.M., Gould Jr., E., 1986. Complexity, wickedness, and public forests. Journal of Forestry 84 (4), 20–23.

Balint, P.J., in press. Bringing solar home systems to rural El Salvador: lessons for small NGOs. Energy Policy.

Berkes, F., 2004. Rethinking community-based conservation. Conservation Biology 18 (3), 621–630.

Bond, I., 2001. CAMPFIRE and the incentives for institutional change. In: Hulme, D., Murphree, M. (Eds.), African Wildlife and Livelihoods: The Promise and Performance of Community Conservation. James Currey, Oxford, UK, pp. 227–243.

Brown, K., 2002. Innovations for conservation and development. The Geographical Journal 168, 6–17.

Bryant, R.L., Jarosz, L., 2004. Editorial: thinking about ethics in political ecology. Political Geography 23, 807–812.

Chaumba, J., Scoones, I., Wolmer, W., 2003. New politics, new livelihoods: agrarian change in Zimbabwe. Review of African Political Economy 30 (98), 585–608.

Derman, B., 1995. Environmental NGOs, dispossession, and the African state: the ideology and praxis of African nature and development. Human Ecology 23 (2), 199–215.

Emerton, L., 2001. The nature of benefits and the benefits of nature: why wildlife conservation has not economically benefited communities in Africa. In: Hulme, D., Murphree, M. (Eds.), African Wildlife and Livelihoods: The Promise and Performance of Community Conservation. James Currey, Oxford, UK, pp. 227–243.

Gibson, C.C., 1999. Politicians and Poachers: The Political Economy of Wildlife Policy in Africa. Cambridge University Press, Cambridge, UK.

Goldman, M., 2003. Partitioned nature, privileged knowledge: community-based conservation in Tanzania. Development and Change 34 (5), 833–862.

Gray, L.C., Moseley, W.G., 2005. A geography perspective on poverty-environmental interactions. The Geographical Journal 171 (1), 9–23.

Hackel, J.D., 1999. Community conservation and the future of Africa's wildlife. Conservation Biology 13 (4), 726–734.

Hasler, R., 1999. An overview of the social, ecological and economic achievements and challenges of Zimbabwe's CAMPFIRE Programme. Evaluating Eden Discussion Paper No. 3. International Institute for Environment and Development, London, UK.

Hughes, D.M., 2001. Rezoned for business: how eco-tourism unlocked black farmland in eastern Zimbabwe. Journal of Agrarian Change 1 (4), 575–599.

Human Rights Watch, 2002. Fast track land reform in Zimbabwe. vol. 14, No. 1 (A). Human Rights Watch, New York.

Jones, B., Murphree, M., 2001. The evolution of policy on community conservation in Namibia and Zimbabwe. In: Hulme, D., Murphree, M. (Eds.), African Wildlife and Livelihoods: The Promise and Performance of Community Conservation. James Currey, Oxford, UK, pp. 38–58.

Leach, M., Mearns, R., Scoones, I., 1999. Environmental entitlements: dynamics and institutions in community-based natural resource management. World Development 27 (2), 225–247.

Li, T.M., 2002. Engaging simplifications: community-based resource management, market resources and state agendas in upland Southeast Asia. World Development 30 (2), 265–283.

Logan, B.I., Moseley, W.G., 2002. The political ecology of poverty alleviation in Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE). Geoforum 33 (1), 1–14.

Marks, S., 2001. Back to the future: some unintended consequences of Zambia's community-based wildlife program (ADMADE). Africa Today 48 (1), 121–141.

Matanhire, S., 2003. Process Oriented Monitoring System (POMS) evaluation of select sub-district CAMPFIRE institutions. Zimbabwe Trust for WWF-SARPO, Harare, Zimbabwe.

Matzke, G., Nabane, N., 1996. Outcomes of a community controlled wildlife utilization program in a Zambezi Valley community. Human Ecology 24 (1), 65–86.

Muchapondwa, E., 2003. The economics of community-based wildlife conservation in Zimbabwe. PhD dissertation, Göteborg University, Göteborg, Sweden.

Mugabe, P., 2004. Is community based natural resources management a possible resettlement option? The case for the south eastern lowveld of Zimbabwe. Commons Southern Africa Occasional Paper Series No. 2 of 2004, Centre for Applied Social Sciences, University of Zimbabwe, Harare, Zimbabwe.

Muir-Leresche, K., Bond, I., Chambati, W., Khumalo, A., 2003. An analysis of CAMPFIRE revenue generation and distribution: the first decade (1989–2000). WWF-SARPO Harare, Zimbabwe.

Murombedzi, J., 1999. Devolution and stewardship in Zimbabwe's CAMPFIRE programme. Journal of International Development 11 (2), 287–293.

Murphree, M., 1995. The lesson from Mahenye: rural poverty, democracy and wildlife conservation. International Institute for Environment and Development, Wildlife and Development Series No. 1, London, UK.

Murphree, M., 2001. Community, council and client: a case study in ecotourism development from Mahenye, Zimbabwe. In: Hulme, D., Murphree, M. (Eds.), African Wildlife and Livelihoods: The Promise and Performance of Community Conservation. James Currey, Oxford, UK, pp. 177–194.

Neumann, R., 1997. Primitive ideas: protected area buffer zones and the politics of land in Africa. Development and Change 28, 559–582.

Neumann, R., 1998. Imposing Wilderness: Struggles Over Livelihood and Nature Preservation in Africa. University of California Press, Berkeley, California.

Newmark, W., Hough, J., 2000. Conserving wildlife in Africa: integrated conservation and development projects and beyond. BioScience 50 (7), 585–592.

Newsham, A., 2002. Participation: processes, problematics and CAMPFIRE. A Centre of African Studies Occasional Paper, University of Edinburgh, Edinburgh, Scotland.

Peterson, J.H., 1991. A proto-CAMPFIRE initiative in Mahenye Ward, Chipinge District: development of a wildlife programme in response to community needs.Centre for Applied Social Sciences University of Zimbabwe, Harare, Zimbabwe.

Ribot, J.C., 1996. Participation without representation: chiefs, councils and forestry law in the West African Sahel. Cultural Survival Quarterly 20 (3), 40–44.

Robbins, P., 1998. Authority and environment: institutional landscapes in Rajasthan, India. Annals of the Association of American Geographers 88 (3), 410–435.

Roe, D., Jack, M. (Eds.), 2001. Stories from Eden: Studies of Community-Based Wildlife Management. In: Evaluating Eden Series, vol. 9. International Institute for Environment and Development, London, UK.

Roe, D., Mayers, J., Greig-Gran, M., Kothari, A., Hughes, R. (Eds.), 2000. Evaluating Eden: Exploring the Myths and Realities of Community-Based Wildlife Management. In: Evaluating Eden Series, vol. 8. International Institute for Environment and Development, London, UK.

Songorwa, A.N., 1999. Community-based wildlife management (CWM) in Tanzania: are the communities interested? World Development 27 (12), 2061–2079.

Stewart, R.E., Walters, L.C., Balint, P.J., Desai, A., 2004. Managing wicked environmental problems. USDA Forest Service, Pacific Southwest Region, Sacramento, CA.

Turner, M.D., 1999. Conflict, environmental change, and social institutions in dryland Africa: limitations of the community resource management approach. Society & Natural Resources 12, 643–657.

Twyman, C., 2000. Participatory conservation? Community-based natural resource management in Botswana. The Geographical Journal 166 (4), 323–335.

Wainwright, C., Wehrmeyer, W., 1998. Success in integrating conservation and development? A study from Zambia. World Development 26 (6), 933–944.

Wolmer, W., Chaumba, J., Scoones, I., 2004. Wildlife management and land reform in southeastern Zimbabwe: a compatible pairing or a contradiction in terms? Geoforum 35 (1), 87–98.

Zimmerer, K.S., 2000. The reworking of conservation geographies: non-equilibrium landscapes and nature-society hybrids. Annals of the Association of American Geographers 90 (2), 356–369.

Zimmerer, K.S., Young, K.R. (Eds.), 1998. Nature's Geography: New Lessons for Conservation in Developing Countries. University of Wisconsin Press, Madison, Wisconsin.

CAMPFIRE AND THE PAYMENT FOR ENVIRONMENTAL SERVICES

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Abstract

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1. Introduction

The dilemma of conservation and development is how to achieve one without sacrificing the other. Initial attempts to do this revolved around spatial separation of conservation areas (national parks, wilderness areas), where people other than tourists were largely excluded, from those areas occupied by local people, in which the widespread modification or transformation of land cover in pursuit of development could occur. This 'fortress' approach to conservation has been widely criticized as being unsustainable, because of the pressures on the reserves from people living along the boundaries, demands for the restitution of land from people who were displaced when the reserves were established, and the cost of managing these pressures. In turn, development is retarded by the alienation of local people from important resource areas in the reserves, which could be used to underwrite economic and social change, and their exclusion from political decision-making processes about how the conservation areas should be used (Adams and Hulme, 2001). As an alternative, integrated conservation and development projects (ICDP) or, more broadly, community conservation initiatives[1] have been proposed. These involve local people participating both physically and politically in the process of conservation while pursuing a development agenda, principally through some form of sustained use of natural resources. The underlying assumption is that this will provide the necessary incentives to conserve the resources and their environment. The corresponding hypothesis is that there are circumstances where conservation concerns and community interests in development converge and it becomes possible to achieve both. The track record of such presumed "win-win" situations has been patchy at best. Some

[1] Adams and Hulme (2001: 13) define community conservation as "those principles and practices that argue that conservation goals should be pursued by strategies that emphasize the role of local residents in decision-making about natural resources". Such initiatives span a wide range of conservation interventions that include co-management, parks outreach, and resource sharing (Jones and Murphree, 2004).

believe that these initiatives have provided neither sustained development nor lasting conservation benefits (*e.g.* Barrett and Arcese, 1995; Gartlan, 1998).

In recent years, the reality of a trade-off between conservation goals and development imperatives has become more widely recognized. This has given rise to a concept that, to maintain the supply of environmental goods and services for society more generally, incentives are needed to induce local people to forego more disruptive land- and resource-use practices. Such goods and services (usually contracted to the term 'services') include the production of 'clean' water in desired quantities, the storage of carbon in vegetation and soils, and the maintenance of both biodiversity and the aesthetic qualities of landscapes, primarily 'landscape beauty' but also including other facets of landscapes from which people can derive pleasure (see Pagiola et al., 2005, for a recent review). Such environmental services commonly exist as positive externalities or uncompensated benefits to users because conventional markets generally fail to value them in ways that recompense land managers for providing them. As a result, the production of these services over time has become progressively degraded (Pagiola et al., 2005). To counter this trend, attempts have been made to establish values for these services and reward land managers accordingly, to encourage them to undertake forms of land use that are compatible with the continued supply or restoration of these services.

The underlying assumption here is that the conversion of land from its natural state is largely a function of the net economic benefits that accrue to the land user by so doing. To the individual land user, maintaining the land in its natural state is seldom a more attractive option than its conversion for agricultural, forestry or industrial purposes. Therefore, to be an effective resource management instrument, the inducements offered to the land user to retain natural habitat must be sufficient to change the net benefits so that they outweigh the alternative of conversion. These inducements are widely termed 'payments for environmental

services' (PES), though they need not necessarily have to involve direct payments of money . No generally accepted definition of PES exists, though Wunder (2005) has proposed that a payment for environmental services is a voluntary transaction in which a well-defined environmental service (ES) or land use likely to secure that service is being "bought" by a minimum of one service buyer who, in return, compensates a minimum of one service provider, if and only if the ES provider secures that ES (i.e. payment is conditional on production of the ES) – italics in the original, though it has been slightly reworded.

If PES really is a novel approach, as is implied by various recent reviews (Ferraro and Kiss, 2002; Landell-Mills and Porras, 2002), then one might predict a period of experimentation and adaptation before the approach enters the mainstream of development options. Are there any long-standing precursors to PES from which one might be able to learn lessons about implementation, performance, outcomes and possible adaptations? One possible initiative is the **C**ommunal **A**reas **M**anagement **P**rogramme **f**or **I**ndigenous **Re**sources (CAMPFIRE), started in the late 1980s in Zimbabwe and widely emulated elsewhere in southern Africa in the following decade. The underlying philosophy of these initiatives places them firmly within the 'community conservation' paradigm, but in their functioning they share many features with PES.

In this paper, we explore some lessons learned from CAMPFIRE, which may help in the development of PES. We argue that there is more in common between the two approaches than is commonly acknowledged. The actors and language may be different, but many of the ideas and principles are the same. More generally, community conservation and PES both play out in analogous institutional landscapes, and are subject to similar external pressures. We therefore briefly describe the background and evolution of CAMPFIRE in the next section, identifying some of the key features of the programme. Following this, we look more closely at some of the variation in form and functioning that emerged over time, why this

happened, and how these might relate to PES. In the penultimate section we draw some lessons from CAMPFIRE that we believe are applicable to PES, and which will need to be taken into account if that program is to move from articulate rhetoric to successful practice. We conclude by looking forward to some emerging issues for both approaches. Given the political, economic and social changes in recent years in Zimbabwe, which have affected all facets of life, we limit our quantitative assessments of CAMPFIRE largely to the period 1989-2001, though we reflect on the resilience of the program in responding to the more recent upheavals.

2. What is CAMPFIRE?

The Communal Areas Management Programme for Indigenous Resources – CAMPFIRE – is a programme developed largely around the concept of managing wildlife and wildlife habitat in the communal lands of Zimbabwe for the benefit of the people living in these areas. Its details were first elaborated in 1986 (Martin, 1986) though its foundations were established about 25 years earlier when the commercial possibilities of wildlife production in Zimbabwe (then Rhodesia) were being explored (Dassman and Mossman, 1961; Dassman, 1964). At that time, wildlife was considered to be state property, managed by the State and able to be used commercially only under licence (rarely given). The resulting alienation of wildlife from both commercial and communal land farmers led both groups to consider wildlife as a pest. Explicit actions were often taken to remove animals that were considered a threat to crops or direct competitors for grazing with domestic livestock. More broadly, wildlife was threatened by the widespread transformation of natural habitats to agricultural land, even in agriculturally marginal areas. The State itself undertook massive wildlife eradication programmes in corridors on the borders of the country in an attempt to halt the spread of tsetse fly (Glossina spp), the vector for the livestock and occasionally human

disease trypanosomiasis. In short, the future of substantial numbers of wildlife outside demarcated conservation areas was bleak.

Initial efforts to utilize wildlife commercially focused on meat production, on the assumption that wildlife would be better adapted and therefore more productive than domestic livestock, at least in semi-arid environments. As the wildlife industry developed, however, it became apparent that the economic advantages of wildlife lay less in the biological productivity of the species than in the many different ways that value could be added to the basic product in the form of services offered to the end user. Because these services can be added at little environmental cost, and because consumers are generally willing to pay well for them, wildlife utilization has become an industry with the potential to be both ecologically sustainable and economically viable (Child, 1988).

The subsequent diversification and expansion of the industry was helped greatly by the introduction of the 1975 Parks and Wild Life Act. Among other things, this granted private landholders the right to use the wildlife on their land for their own benefit, including through safari hunting and the capture and sale of animals. Contrary to many expectations at the time, the wildlife industry flourished: in 1960 there were only three game ranches, totalling 350 km^2, all producing venison. By the early 1990s, this had risen to over 216 ranches extending over 37,000 km^2 and engaged variously in sport hunting, trophy hunting, photographic safaris, game-viewing tourism, game cropping for venison, and selling live animals. Many farmers shifted partly or completely to game farming when, after independence in 1980, the Government of Zimbabwe reduced the levels of subsidies to commercial farmers in favour of greater support to the hitherto largely neglected communal farming sector. This withdrawal of subsidies, together with the over-valued exchange rate, which effectively taxed commercial livestock producers, stimulating a search for alternative land uses. Wildlife production, which was not controlled by the State, became financially more attractive. By 1990, wildlife

production had become a major land use in commercial farming areas in the arid and semi-arid zones, where it was proving to be generally a more financially and economically viable form of land use when compared with single species livestock production (Jansen, et al, 1992). This process reached its climax with the development of the Save Valley Conservancy (SVC) in south-eastern Zimbabwe in the mid 1990s, where the owners of 29 ranches, totalling over 3,500 km^2 agreed on a common approach to wildlife management and the complete removal of livestock and much of the livestock-associated infrastructure, primarily fences.

Whereas the opportunities created by the 1975 Parks and Wild Life Act were initially limited to private land, at that time mostly owned by settlers of European origin, they were extended to the communal farming areas after independence. In 1982, the government amended the Act to enable rural communities to obtain Appropriate Authority to utilize wildlife for commercial gain. Apart from removing obviously discriminatory provisions in the Act, proposed changes were, in part, an effort by the Department of National Parks and Wild Life Management (DNPWLM), to replicate the success on privately-owned commercial farmland of wildlife as a form of land use. At that time there was no particular model as to how this could happen without threatening the resource base, though a group of ecologists within the Department of National Parks and Wild Life Management (DNPWLM) were exploring options within the framework of an integrated land-use plan for the communal lands bordering a number of national parks and safari areas in northern Zimbabwe. This area supported substantial numbers of wild animals, including some that were commercially valuable (*e.g.* elephant, Loxodonta africana, buffalo, Syncerus caffer, lion, Panthera leo, and leopard, Panthera pardalis), but which were threatened by ongoing expansion of agricultural land-use, much of it low yielding and used mainly for subsistence purposes.

One initiative was Project WINDFALL – **W**ildlife **Ind**ustries **f**or **All** – in which revenue in the form of trophy fees and lease fees paid by mostly-foreign hunters operating in the

communal lands, together with money from the sale of ivory and skins of animals shot while crop raiding, was paid to government on behalf of communities. This money was meant to be paid out for approved development projects within the district concerned, though in reality many of these projects were implemented away from the areas from which the revenues came and where the people had to bear the cost of wildlife damage. Although these communities benefited to some extent from the distribution of meat from animals culled in the adjacent national parks or killed while crop raiding in their area, this was insufficient incentive to encourage a measure of tolerance towards wildlife. Moreover, the people took no part in making decisions about the use and management of these wildlife resources. As a result, WINDFALL was not a sustained success. The main lesson to emerge was that any future initiative for wildlife management in the communal lands would have to transfer significant rights to the landholders (Martin 1986, Child 1995).

The CAMPFIRE concept was developed largely in response to the realization that unless people living adjacent to or within wildlife habitat can realize value from wildlife, other forms of land use will eventually replace it, as has happened in most parts of the world and was happening in Zimbabwe. For people to tolerate the presence of elephant, buffalo, lions, leopards and other species, and be prepared to put up with the threats to life and property that this entails, they would have to benefit much more directly and substantially. They would also need to have a much greater say in how those benefits would be derived, as well as a stake in the future of wildlife through management inputs. Giving back to people substantial proprietorship over wildlife was also seen to be an important step in re-empowering them to take greater control over the mode and tempo of their development, and to build the necessary institutional arrangements and structures to serve this.

From these perspectives, CAMPFIRE is normally classed as community based natural resource management (CBNRM) programme and therefore can be considered a variant of community conservation. The original objectives of the programme were:

1. To initiate a programme for the long-term development, management, and sustainable utilization of natural resources in the Communal Areas.
2. To achieve management of resources by placing custody and responsibility with the resident communities.
3. To allow communities to benefit directly from the exploitation of natural resources within the Communal Areas.
4. To establish the administrative and institutional structures necessary to make the programme work.
5. To establish an Agency under the appropriate Ministry with the following responsibilities:
   (i) to negotiate the entry of communities to the programme;
   (ii) to assist each community in devising appropriate management strategies to the natural resources in their area;
   (iii) to provide, through a foundation grant, the initial capital funding required for communities to embark on an agreed programme;
   (iv) to provide, through participation funds, the means to implement sound utilisation schemes;
   (v) to provide ongoing technical assistance in management and financial accounting.
6. To promote good land use and lifestyles in harmony with the natural constraints of marginal areas, and to operate within a regional context where the programme is coordinated between participating communities (Martin, 1986).

As originally conceived, CAMPFIRE focused on four major natural resources: wildlife, woodlands, water and grazing. In practice, however, the use of wildlife has been paramount since its realisable value is so much greater at present. The original programme envisaged communities voluntarily forming Natural Resource Co-operatives responsible for managing the resources in a defined Communal Resource Area, the boundaries of which would be determined by the appropriate authorities. Income from the use of the natural resources of the area, as well as any shared revenue derived from adjacent State lands, would accrue directly to the Co-operative, which in turn would establish an agreed system for handling income and expenditure. Benefits would be paid out to those holding shares in the Co-operative, primarily the residents of the area who would be issued shares at the time the Cooperative was set up. An administrative structure, compatible with the existing local government administrative structure based on District Councils and their respective Ward and Village development committees would in turn be set up to oversee the programme (Martin, 1986).

The manner in which the various CAMPFIRE initiatives have developed has departed somewhat from these proposals for both practical and philosophical reasons. The first two District Councils were designated as the relevant authority for the management of wildlife in their districts by the then-Minister of Natural Resources in 1989. These and 10 other District Councils were then granted Appropriate Authority status in 1991 (SI 12/ 1991 and 61/1991). The extended period between the legislative change (1982), the first formal articulation of CAMPFIRE (1986) and its actual implementation has been attributed to jockeying for position and the tension between the major government stakeholders over the revenue flows. In particular, there was concern about devolving the responsibility for receiving and distributing revenues to the producer communities through the proposed Natural Resource Co-operatives. Government was only prepared to devolve financial and administrative authority (‘Appropriate Authority’) to the District Councils, the lowest accountable tier of

government. This decision, instead of that to invest authority in the Natural Resource Co-operatives, has been described as a strategic compromise (Murphree, 1997). The District Councils opposed the formation of the co-operatives, seeing them as a threat to their own authority and financial viability by effectively administering large areas of communal land and receiving revenues directly, rather than through government-controlled structures. In return, the District Councils undertook to pass on to the producer communities a fixed percentage of the revenues earned. The agreed but non-binding guidelines were that not less than 50 % was to be paid to the communities (in the form of Wards[2]), not more than 35 % allocated to wildlife management (habitat management, fire control, monitoring, hiring of game scouts etc.), while 15 % could be retained by the District Councils as an administrative levy. In the longer term, however, DNPWLM intend a greater proportion (80%) to be returned to the producer communities, with corresponding reductions in the amounts allocated to programme management (15%) and general administration (5%) (B.A. Child, 1995).

The actual arrangements for using the wildlife resource commercially has also varied. Some Districts have opted to auction concession areas to safari companies, which in turn pay and annual concession fee and a trophy fee for each animal shot. This has engendered considerable competition among safari operators, with the longer-term concessions attracting disproportionately higher bids. Some communities[3] have entered into joint-venture partnerships with a safari operator, with the net profit being shared according prior agreement. Other communities, mainly those with limited wildlife attractions, have established locally-

[2] A ward is a sub-district administrative unit comprising, on average, six villages, with each village in turn comprising approximately 100 households.

[3] The term ‘community’ is used here to refer to a group of people living together in a common social setting in which they interact frequently and regularly. Use of the term in this context does not necessarily imply any unity of background, organization or purpose. Most CAMPFIRE communities are heterogeneous entities, socially, economically and in many other ways.

controlled enterprises (hiring their own professional hunter to support clients, or establishing campsites and facilities for eco-tourism).

At its peak, CAMPFIRE encompassed 14 separate main initiatives over 46,000 km^2 of communal land in 13 administrative districts. (Eleven other districts have received Appropriate Authority and occasional income from safari hunting, tourism and problem animal control but most have not manage to attract the sustained interest of safari operators, either for hunting or eco-tourism.) Between 1989 and 2001, CAMPFIRE revenue in these districts amounted to more than US$ 19.8 million, 49 % of which has been disbursed to communities (140 wards and over 130,000 households), 20 % used for wildlife management, just over 12 % retained by the District Councils as a levy, 3 % used for other expenses (including the 1.5 % levy to the CAMPFIRE Association – see below), while about 15 % is still being held by the RDCs pending allocation (Khumalo, 2003). Almost 90 % of this income has come from safari hunting, just under 6 % from the sale of ivory and hides of culled animals (mostly elephant), and just over 2 % each from tourism and the sale of other natural products. The low return from other natural resources is partly because policies in other sectors such as forestry and mining make no provision for the payment of stumpage fees or royalties to rural communities, but mainly because of the relatively low value of most other natural products, or the difficulties of adding appropriate value for distant and discerning overseas markets.

As a result of this diversity and innovation, CAMPFIRE has long been considered the flagship CBNRM programme in southern Africa, attracting much public and academic interests globally, most of it strongly supportive but some of it critical (*e.g.* Barrett and Arcese, 1995; G.T.F. Child, 1995; Hill, 199; Duffey, 2000; Adams and Hulme, 2001; Jones and Murphree, 2001, 2004). As a result, there is now a wealth of knowledge and experience on the management and sustained use of wildlife by communities (Child, 2004).

3. CAMPFIRE and Payments for Environmental Services

CAMPFIRE was never conceived of as a payment-for-environmental-services programme. Environmental services were generally considered as a positive and uncompensated externality from maintaining natural landscapes in ecologically fragile areas prone to high levels of soil erosion (Bond, 1999). Nevertheless, it exhibits many PES-like features. The programme was set up to address issues of sub-optimal land use, at least from a broader societal perspective[4], through creating economic incentives for land users to protect natural habitat and associated wildlife in areas considered to be marginal for agricultural development. The widespread conversion of land in these areas was seen as the core reason for the loss of wildlife and wildlife habitat (Child, 2004). As such, the original concept of CAMPFIRE was underpinned by an explicitly conservationist agenda, with issues of human well-being and rural development being seen as the means to achieving its objectives. Once CAMPFIRE was established, however, rural development concerns became more prominent, even to the point for some where conservation-oriented concerns became the means to achieving human-development ends (Jones and Murphree, 2001). The fulcrum on which these competing interests are balanced is the rural institutional and organisational framework. It too has developed over time to become an objective in its own right, driven by the need to accommodate internal diversity, individual ambition, and shifts in influence and authority, both locally and in larger-scale institutions. This co-evolution of organizational structure and institutional functioning has been critical in the ongoing process of community empowerment, allowing people to discover and explore options, and choose among them (Murphree, 2004).

[4] From the perspective of the individual land user, however, the current land use may often be the most rational and rewarding under prevailing personal circumstances.

3.1. Actors and services

The principal actors in CAMPFIRE are the producer communities, the Rural District Councils of which the communities are part (and which is authorised by government to receive revenue from the use of wildlife under the CAMPFIRE scheme), and the safari or eco-tourism operators, who enter into various contractual arrangements with the communities through the RDC and then market the opportunities for hunting or eco-tourism to mostly foreign clients. These interactions in turn have been facilitated by a loose consortium of third parties who helped initiate the programme, provide technical advice, and reconcile the different interests of the principals. The original CAMPFIRE proposal envisaged the formation of a CAMPFIRE Agency to help implement projects and develop the programme, but this body was never set up or funded. Instead, individuals from government (mainly DNPWLM, the main regulatory agency), academia (Center for Applied Social Studies, CASS, at the University of Zimbabwe) and the NGO sector (World Wide Fund for Nature, WWF, and Zimbabwe Trust, a rural development NGO) formed the CAMPFIRE Collaborative Group (CCG), to assist with programme development. The CCG in turn helped to set up the CAMPFIRE Association (CA) to represent those RDCs with Appropriate Authority. By 1992, the CA had assumed the leadership of the CCG, and by 1998 it was acting for over 30 RDCs and smaller community groups (Maveneke, 1998).

The CAMPFIRE Collaborative Group, both jointly and in their separate capacities, also served as channels for funding from bilateral donors such as the United States Agency for International Development (USAID), the Norwegian Agency for Development Cooperation (NORAD), and the British Overseas Development Administration (ODA, now the Department for International Development, DFID). This funding enabled the costs to be met of administering projects, providing technical assistance, purchasing and maintaining capital

equipment (vehicles, electric fencing), and partly underwriting recurrent expenditure, at least during the early years of the programme. It is doubtful if CAMPFIRE would have got off the ground without this initial support, more so given the fact that rural communities have almost no access to credit and therefore would not have been able to sustain the initial start-up costs.

Most importantly, the CCG lobbied extensively for the changes in policies and statutes that made it possible for the initiative to evolve from its uncertain beginning. CAMPFIRE was launched in the face of opposition from some sectors of government and strong doubts on the part of others. By promoting CAMPFIRE consistently and coherently, both nationally and internationally, the CCG convinced many that the initiative was a necessary experiment that deserved support.

Finally, the technical assistance given to RDCs by organisations such as WWF, CASS and ZimTrust greatly improved how CAMPFIRE functioned. Broadly accountable and transparent institutions evolved. Communities became empowered to demand their rights, though not all issues (*e.g.* land tenure) have yet been resolved. The efficiency of CAMPFIRE operations improved considerably. By encouraging an open competitive bidding process through asking for tenders for concession areas, the RDCs were able to attract more bids and ensure that the full market value of the resource was realised, thereby reducing the potential for rent capture. The tender process drove prices upwards (Table 4), as did the procedure of interviewing operators interested in securing a contract (WWF, 1997). In short, these intermediary organisations were crucial in the initial phases of CAMPFIRE.

3.2. Scale issues

As national programme, CAMPFIRE has grown substantially since the first two districts were granted Appropriate Authority in 1989. By 2002, the CAMPFIRE Association

represented 35 Rural District Councils, covering over 244,000 km^2 and supporting some 777,000 households, though only 12 of these districts had a consistently marketable quota of wildlife for hunting or some other sellable natural attraction. These latter districts encompass 238 wards and over 254,000 households (1992 national census figures) over areas totalling 68,000 km^2. Within this, however, the actual wildlife production areas are restricted to about 94 wards covering ~34,000 km^2 and supporting about 85,400 households. CAMPFIRE has not been a trivial undertaking in terms of scale of operation.

The underlying assumption of CAMPFIRE is that benefits derived from the use of wildlife, either through hunting or eco-tourism, can create sufficient incentive both for communities and for individual households within them to modify or limit their use of land in appropriate ways. But the measure of incentive depends greatly on whether it is viewed at the household level, where the payments are usually small and intermittent, or at community and district levels where the aggregate amounts are obviously larger (Table 2). For most CAMPFIRE communities, the small size of the payments at a household level probably does not provide much incentive to forego other, more immediately and individually rewarding land-use practices. Conversely, the aggregate amounts received from CAMPFIRE by the RDC and, in some cases, collectively by the community, are more compelling. As a result, there are top-down pressures on households, and usually also on communities, to adopt prescribed patterns of land use, rather than these decisions being made within the communities themselves. There are exceptions, however (Kanyurira Ward, Guruve District: Murphree, 1997).

3.3. Payments for landscape beauty

Payments for landscape beauty may be the oldest form of “payments for environmental services” (Landell-Mills and Porras, 2002). The marketed commodities generally include:

access rights, tourism services, photographic and eco-tourism concessions, and related management agreements. Although the service being purchased by the buyer is the right to access ‘scenic beauty’, the markets in which this occurs are both physically and conceptually complex. The physical complexity arises from the wide range of available products, each differentiated by price, seasonal availability, scope of activities, modes of access etc., and mediated by a range of third parties – tourist operators, agents, brokers, transporters. Conceptual complexity arises from the differing concepts of what constitutes ‘scenic beauty’ and the extent to which people are able to express their preferences in this regard, and from the many, not mutually exclusive, reasons why governments and others establish protected areas. These include: to conserve biodiversity; to maintain natural ecological processes; as wilderness areas, to be enjoyed by a select few; as areas on which to found a viable tourism industry; or as areas for various kinds of outdoor recreation. In most cases such areas are conceived to be public goods. While the agencies responsible for them have collected visitor and other fees from those using the amenities, these fees have seldom fully covered the maintenance costs. Moreover, the income has been paid into consolidated revenue funds rather than being immediately available to the management agencies for their use. Only recently, particularly in southern Africa, has this begun to be turned around. In such cases, the user fees can be considered a form of environmental service payment.

For CAMPFIRE, the concept of landscape beauty is even more complex. Only about 2 % of CAMPFIRE revenues have come from tourism, in contrast to hunting which has accounted for 90 %. While hunters no doubt appreciate the landscapes in which they hunt, their aesthetic pleasure comes more from the process of hunting itself, in which the landscapes are largely backdrop. Thus the concept of payments for landscape beauty, at least in the case of CAMPFIRE, need to be extended to cover hunting and other recreational activities generally associated with wild landscapes, rather than with specific scenic qualities of the landscapes.

3.4. Who pays?

Despite the political, social and spatial diversity of those communities and districts involved in CAMPFIRE, a common set of financial arrangements rapidly emerged between the buyers and sellers of this recreational service. The central contractual arrangement is between the RDC, acting as the seller on behalf of its constituent communities, and one or more 'safari operators' buying the service on behalf of their future hunting clients. In most cases the hunting or eco-tourism rights were being leased to safari operators, with additional fees for each animal taken in, or tourist brought to, the area. The details of the contracts vary considerably, however, as each party has sought to extract maximum benefit from the arrangement (WWF, 1997). Early initiatives, in which RDCs acted as the safari operator, showed that most did not yet have the marketing and logistical skills to engage effectively in marketing at that time (Jansen, 1990). The market for hunting leases on the one hand, and clients on the other, is highly competitive, with individual skill, recognition and reputation being important qualities. By exploiting this competitiveness through the use of tenders and auctions to market leases, and by innovatively structured contracts, CAMPFIRE communities achieved substantial real increases in wildlife-based revenue (Bond, 1999).

Did the landholders get a 'fair price' for these services? For environmental services generally, the potential for a genuinely competitive market to emerge – one in which there are multiple buyers and sellers competing openly and strongly with each other – is in many cases severely limited due to the biophysical setting of such services, and because of the aggregate nature of the demand. For example, payments for watershed services have been characterised as "(usually) bilaterally, mutually-negotiated agreements between representatives of the buyers and the sellers" (Wunder and Vargas, 2005).

For CAMPFIRE, the questions relates to whether the RDCs, on behalf of the producer communities, are getting a genuine market-related price for the natural resource that are being exploited. While notions of what constitutes a 'fair price' are all relative, the CAMPFIRE experience is quite clear: when hunting leases were marketed through an open, accountable and competitive process, the RDCs received market-related prices; conversely, when leases were granted using uncompetitive and unaccountable procedures, the RDCs received much less than the market price (Bond, 1999). It is a matter of speculation as to who captured the rent in such cases.

The early contractual arrangements between the safari operators and RDCs were simple and based on standard government rates for leased hunting rights and the size of the quota for the concession area. The contract defined the relationship between the safari operator, the RDC and the wildlife producer communities in terms of hunting ethics, monitoring, infrastructural investment and in some cases employment. From the mid-1990's more sophisticated contracts began to be developed with the rights and obligations of all parties being more clearly specified, including an implied conditionality in the link between service provision and payment. They were, in effect but not in name, payments for environmental services.

Compliance with these arrangements has been and remains highly variable. Typically, RDCs lacked the capacity to fully comprehend and monitor the payments made by the safari operators, and frequently had to rely on the honesty of the operator. Conversely, safari operators seldom if ever held RDCs and the wildlife producer communities to account for failing to meet their contractual obligations over and above the hunting quota. Early contracts between safari operators and RDCs frequently featured fungible benefits such as "a good, used Landrover for use by the RDC". The second-generation contracts eliminated virtually all these non-financial payments. Moreover, the contracts were mostly denominated in foreign

currency, albeit paid in Zimbabwean dollars to comply with Zimbabwe government regulations. This ensured that the RDCs were not compromised by the devaluation of the Zimbabwean dollar following various efforts at economic structural adjustment. Most recently, in view of the failure of many RDCs to pass on to communities their full share of CAMPFIRE revenues (see below), resulting in community dissatisfaction which threatens the whole initiative (including the RDCs' revenue streams), some safari operators have taken to paying communities their dividend directly, and then remitting to the RDCs their share in turn (Russell Taylor, WWF SARPO, pers. comm.). This on-going adaptiveness of all parties is a key feature of CAMPFIRE.

3.5. Financial and economic data

Between 1989 and 2001, RDCs earned a total of US$ 20.29 million from wildlife-based activities (Table 3). Of this total, 89 per cent has been from leases with private sector safari operators, about 6 per cent from the sale of hides and ivory, with the balance from tourism (photographic safaris: just over 2 per cent) and other miscellaneous activities. Of the revenue earned from safari hunting, at least 60 per cent can be attributed to hunting elephant, both through trophy fees and the daily rate paid by hunters when in the field (Bond, 1999). The development of photographic tourism within the communal lands has been constrained by the fragmented nature of most of the wildlife habitat and, relative to the protected areas of Zimbabwe, low wildlife population densities.

Wildlife revenue is allocated annually, in arrears, to wildlife producer wards, to wildlife management activities and to a council levy. At a national level, the guidelines on the disbursement of CAMPFIRE revenue (see section 2) have been largely met (Table 4). At the level of individual districts, however, the extent of disbursement has been highly variable.

The cumulative unallocated funds over the period 1989-2001 in one district, Gokwe North, amount to 65.5% of all funds received, while Gazaland District, the smallest CAMPFIRE operation, serving only two wards, unallocated funds come to only 1.1% of total receipts! Over the 12 main CAMPFIRE districts, an average 17.1% of funds received over this period have not been paid out.

Quantifying the financial benefits from CAMPFIRE is complicated by factors such as the size of the programme; the increasing number of participating districts (and therefore people) over time; and the variability among both districts and wards. Nevertheless, the financial benefits can be considered at four levels: the safari operators; rural district councils; wards; and households. Of these, the economics of the safari operations are least well understood, despite the volume of research on CAMPFIRE. Initially, it was assumed that as Zimbabwe's share of the international trophy hunting market was growing, and as operators were competing for leases and benefiting from the expanding hunting opportunities in the communal lands, no immediate information was required. The move to competitive marketing of wildlife leases may have reduced the profitability of their activities compared with previous arrangements, but has probably forced increases in efficiency to compensate.

As the legal authority for wildlife, RDCs acts as the gate-keeper for all wildlife revenue. For most RDCs, the CAMPFIRE revenues were a new and significant source of funds coming at a time when the central government, being urged to devolve authority, also took the opportunity to shed some of its fiscal responsibilities. Wildlife revenues typically constitute 0 - 24% of all locally earned income, though in several districts it has exceeded all other forms of local income and government grants (Bond, 1999). Between 1989 and 1999, the RDCs overall retained US$5.63 million (29%) of the income from wildlife, not including that set aside for wildlife management (US$ 4.08 million: Table 3). Of this, the RDCs' retained almost exactly what they were due under the CAMPFIRE guidelines (US$ 2.51 million,

14.6%), but they have also benefited from the investment income from the remaining unallocated funds that they hold. The communities have had to bear the opportunity costs of this unpaid money and, given the present hyperinflationary conditions in the country, when it is eventually paid, it will be worth a lot less. (The RDCs have also benefited substantially and indirectly from technical support, training and the provision of equipment but by how much is unrecorded.)

Wards were created by government as sub-district level planning and development entities, though they have no means of raising revenue. Effectively, they have never progressed beyond being units for political representation at the district level. With the devolution of revenue through CAMPFIRE the wards had for the first time financial resources with which to become potentially effective units of development. Between 1989 and 2001, almost US$ 9.9 million was devolved to a total of 143 wards. As with RDCS, wards also benefited substantially from infrastructural investment and training by donor and supporting agencies.

Estimates of the benefit per household are largely speculative, being calculated from the revenue received at ward level and available population data. (Only in some cases are there clear accounts of how much was paid to households: Child and Peterson, 1991; Bond 1991). Calculated this way the gross financial benefits among wards are highly skewed and generally very low. Between 1995 and 1999 the median benefit varied from US$ 2.2 in 1998 (range US$ 0.2 - 252.3, n = 86) to US$ 5.8 in 1999 (range US$ 0.2 - 197.5, n = 100: Figure 1). Compared with the benefits obtained from agricultural production, the income from wildlife in most wards is purely supplementary (Bond, 1999; Logan and Mosely, 2001). Nevertheless, such national-level analyses conceal the occasional substantial financial benefit, sometimes exceeding the estimated gross income from all agricultural sources (Bond, 1999).

3.6. Additionality and establishing baseline measurements

Additionality refers to the changes in the state of the natural resource as a result of the payments made. CAMPFIRE was developed with the specific purpose of conserving wildlife and wildlife habitat in the communal lands of Zimbabwe (Martin, 1986), and so wildlife or ecological indicators could be one measure of performance from which additionality can be calculated. From a development perspective the redistribution of power and the formation of effective units of common property management (Hulme and Murphree, 2001) are also performance indicators.

Formal ecological monitoring has been undertaken by censusing large mammals and using remote sensing to detect land-use changes. Aerial censuses of large mammals have been conducted in the major protected areas and the communal lands of the Sebungwe Region[5] since the early 1980s. These data show that while the total number of elephant in this region has remained more or less constant, there have been significant changes in their distribution (Dunham and Mackie, 2003). This is particularly significant in the Gokwe District, where substantial areas of prime wildlife habitat have been converted to settlement and agricultural lands over the last 20 years (Cumming, 1997), though in the context of the region as a whole, the changes are relatively small. Quantifying these changes using remote sensing has been hampered by the lack of extensive (and expensive) ground-based verification (Dunham and Mackie, 2003). The unverified remote sensing studies at a regional scale (area ~18,000 km^2) do not consistently pick up the variability of the landscape and the patterns of settlement and land use, all of which affect wildlife production (Dunham, Davies and Muhwandagara, 2003).

[5] Three major RDCs are located in the Sebungwe Region: Nyaminyami, Binga and Gokwe North.

The alternative is to use gross wildlife revenue as a proxy for wildlife production[6]. This shows a negative exponential relationship between wildlife productivity and human population density, suggesting that there is the competition between wildlife and farmers for key habitats (principally riverine areas with alluvial soils) and water within the larger landscape (Bond, 1999).

While there are indications of continuing habitat loss, this does not mean that the payments have had no impact. For example, in Gokwe District, the wildlife corridor that was established in 1990 has remained largely intact with only minor encroachment at the margins. In other areas, communities have implemented decisions that have consolidated settlement and created wildlife habitat. Almost as important as establishing a baseline against future changes can be measured is a need to understand of the processes leading to change. An analysis of land-use planning decisions in eight districts between 1989 and 1993 showed that these were mostly imposed on local communities by the RDCs, for whom wildlife revenue had become significant (Bond, 1999).

3.7. Permanence, accounting and leakage

The legislative changes that have allowed the development of wildlife as a form of land use on private and communal land in Zimbabwe have no time limitation and can potentially continue indefinitely. Nevertheless, although CAMPFIRE was conceived as a long-term programme rather than a series of short-term payments, permanence is by no means guaranteed. The policy and legislative changes that allowed payments to be made to RDCs and wildlife producer communities is increasingly under threat from gradual or wholesale re-

[6] The sample used wards in which revenue was allocated on the 'producer ward' principle, rather than spread among all wards in a district irrespective of their contribution to CAMPFIRE revenues.

centralisation. Moreover, changes in the relative market prices of wildlife and agricultural commodities could easily still change, and in some cases has, land-use practices (for example, the widespread transformation of land in the Zambezi Valley to cotton cultivation). Factors that might lead to relative price changes include: genetic modifications of livestock and key crops (cotton); reduced demand for wildlife-based tourism resulting from local and global instability, high oil prices or changing consumer tastes; and climate change[7].

Within the southern Africa, most CBNRM initiatives are based on policy and legislative changes that have devolved some proprietorship over wildlife and wildlife habitat to communal land farmers. A core issue has been how to interpret these legislative changes. In their enthusiasm and desire to initiate CAMPFIRE, advocates of community conservation approaches may have assumed that they shared a vision of local empowerment with central and district governments, but the reality is that the relative financial success of CAMPFIRE has opened up opportunities for rent-seeking on the part of individuals and covert taxation on the part of government (Bond 1999, Murphree 1993). In short, different stakeholders have competing interests in relation to the CAMPFIRE revenues (and, in some cases, the ancillary donor funds that have been attracted to support CAMPFIRE). Within CAMPFIRE, the Government has sided with the RDCs against the wildlife producer communities in terms of the share of revenue that the RDCs can appropriate[8]. Linked to this has been a gradual recentralisation by government of some provisions of these initiatives, inadvertently supported by some publications claiming that community conservation programmes have failed and that a return to protectionism is required (*e.g.* Barrett and Arcese, 1995).

[7] For the large sale commercial farmers on private land in South Africa and Namibia, the greatest short-term challenge will be the re-distribution of land by authorities that do not support or recognise wildlife as a legitimate and appropriate form of land use (Bond, 2004).

[8] Bond and Cumming (in press) document the extensive policy and advocacy efforts by the CAMPFIRE Collaborative Group (CCG), which still failed to change the levels of proprietorship of communal land farmers over wildlife and wildlife habitat.

Regarding ‘leakage’ – the transfer and intensification of human impacts to other places caused by a lessening of impact in CAMPFIRE areas – this is likely in the long term, though accounting for such impacts will be difficult, given the large areas covered by CAMPFIRE and the inevitability of other, unrelated, changes (*e.g.* changes in transport networks, agricultural opportunities, and demographic change).

3.8. Participation of marginal groups

Relatively little detailed work has been done on the intra-community and intra-household impacts of CAMPFIRE. As indicated earlier, the wildlife revenues received by households have generally been supplementary to other income sources (though none of these is large). Thus a direct, financial, impact on poverty, especially of the poorest people in society, has probably been marginal at best.

Nevertheless, CAMPFIRE has had a major impact on proprietorship of communities, engendering a sense that they have valuable resources at their disposal. The discussions and negotiations around CAMPFIRE have helped to build confidence and skills in negotiating and managing conflicts. It remains to be seen if these attributes can be used to advantage in other fora

On the negative side, there is largely anecdotal evidence of the benefits in many producers communities be captured or manipulated by elites to their individual advantage. These include nepotic employment practices and appropriation of project equipment for personal use. Some ethnic groups such as the Tonga, vaDema and Shangwe have been marginalised in much of the decision-making, even though they are often the original inhabitants of these remote areas. Women are also generally marginalised, and their needs and concerns overlook (Sithole and Frost, 2002). Countering these tendencies will be a significant challenge for CAMPFIRE in the future.

4. Lessons for PES

What lessons that can be drawn from the CAMPFIRE experience that might be important for the emerging PES schemes? We suggest the following principles:

- Form should follow function. There is too often the tendency to design projects for rural communities, including establish organisational structures and institutional arrangements, before there is any real functioning for such features to serve. CAMPFIRE was no different at the outset but the original plans soon got left behind as people focused of getting activities going on the ground.
- Be flexible. There is too much uncertainty to make it practical to adopt rigid rules and procedures. The evident flexibility of CAMPFIRE is one of its major strengths, since it has allowed considerable variation in functioning to emerge. From this adaptive solutions to differing social, environmental and other circumstances can materialize. By not insisting on rigid adherence to some preconceived plan, those who promoted the CAMPFIRE concept ensured that local communities and outside interests could forge relationships that they thought best fitted their circumstances at the time. In so doing, a much greater sense of local ownership and commitment was developed. No doubt, PES schemes will be similar, if allowed to follow the same route. Nevertheless, there are some instances where more structure would be advantageous. For example, the lack of a clear legal framework governing tenure, property rights and responsibilities for receiving and distributing funds has exposed CAMPFIRE communities to the vagaries of administrative whim and selective interpretation.
- Promote diversity. Although each CAMPFIRE initiative is based on the same fundamental plan laid down within a common regulatory environment, they all differ

importantly in the details of their development and outcomes to date. Variation in environmental and social settings, timing (in relation to the experience of others and to changing national economic and political circumstances), and the nature of external advice and advisors, all provided subtly different selective environments in which these initiatives evolved. Along with flexibility, that diversity was CAMPFIRE's strength, allowing natural selection to take place, both within and among the various initiatives over time. No doubt, selection will continue to operate.

- Recognise the complexity of the institutional landscape. That within which CAMPFIRE is evolving is considerably more complex that the simple configuration of a seller and a buyer of an environmental service, perhaps with an intermediary organization facilitating the transaction. First, there are existing institutional arrangements and structures, including traditional leadership and mechanisms for making decisions and managing disputes. Building on these rather than side-lining them would seem to be sensible. Second, there are other interests which need to co-opted, negotiated with and, if necessary, countered. Agent-based models provide a good paradigm for such settings. Third, at least for CAMPFIRE there were real markets for the services, so these did not have to be developed. Moreover, in most cases there was more than one buyer vying for the right to operate a concession, creating competition among them, but also the option to participate in bidding for more than one concession area, thereby fostering competition in turn among the service suppliers
- Success and failure are relative. It is somewhat invidious to talk of success and failure as if these are absolutes. Success can be ephemeral; failure no more than a temporary setback, if the lessons to be learned are applied in turning things around. Each CAMPFIRE initiative has been, in essence, an experiment. Learning and applying the lessons from each is crucial to the ongoing evolution of CAMPFIRE as a whole. Even

under the present extremely adverse economic, political and social conditions in Zimbabwe, CAMPFIRE continues to evolve, with innovative solutions to current problems emerging. The lesson for PES is to strive for constant improvement, not taking success for granted, for external conditions will surely change, and not accepting the notion of absolute failure, if lessons can be learned and applied in time.

- Complexity can be distracting. The complexity of ecological systems makes it difficult to establish and measure any causal relationships between "payments", land-use change or ecological indicators of environmental integrity. Consequently, too much concern over issues of 'additionality', 'leakage' and the demonstration of causality could become diverting. While not wishing to understate the significance of these problems, we nevertheless feel that they should be kept in perspective and not allowed to stand in the way of implementation.
- Remember Heisenberg's Uncertainty Principle. Establishing trends in complex social-ecological systems is difficult because baseline measurements are seldom available and pre-project circumstances were never static anyway. Time-series data are seldom collected with sufficiently replicable and constant methodologies to allow for meaningful comparison. Even then, wide confidence limits of the estimates constrain precise interpretation over short timeframes. For PES to work there needs to be an assurance that the changes that are being bought are being achieved. The lesson from CAMPFIRE is that even over an extended period of time, it is difficult to establish tangible, causal linkages between the payments that have been made and changes in land-use management. Monitoring these relationships with the necessary precision is likely to lead to substantial transaction costs, thereby potentially diminishing any gains in efficiency that might have been achieved by the market-led solution. A trade-off will be necessary.

5. Conclusions

Three interrelated problems currently burden CAMPFIRE arrangements (Murphree, 1995, 1997; Jones and Murphree, 2001). First, the actual wildlife areas in the communal lands are not clearly demarcated and, as management units, they lack any particular economic or ecological rationale. Ideally, such units should be contained within the jurisdiction of a recognised community group, and be small and sufficiently discrete to allow for direct interaction, discussion and decision-making among the community members. But they should also be large enough to sustain a resource base that can be exploited in ways that are both economically viable and ecologically sustainable. Such a combination is not easily achieved. Second, the communal lands are organisationally complex with overlapping jurisdictions among various kinds of authorities (traditional, spiritual and modern), functioning at a range of scales. Internally, the communities are differentiated by social standing based on lineage, influence and relative wealth, among others, so consensus is more difficult to achieve than is commonly assumed. Finally, the greatest problem is the lack of clearly defined property rights and strong tenure at both individual and community level. People's rights over the land and its resources vary with location, ranging from usufruct rights over arable land to collective rights elsewhere. This creates uncertainty and leads to conditional use of resources, and little or no investment in resource management other than that which will produce a near-immediate return. Moreover, as non-legal entities, the producer communities cannot enter into legally-binding contracts, or sue or be sued. Any contracts into which they enter are subject to common law. Despite many calls to strengthen both communal and individual rights, backed up by a government-appointed commission on land tenure (Runkuni, 1994), little has changed. Communities and their constituents remain in legal limbo though, arguably, initiatives such as CAMPFIRE that will eventually require resolution of the contradictions, or fail in the process.

6. References

Adams, W., Hulme, D., 2001. Conservation and Community: Changing Narratives, Policies and Practices in African Conservation. In: Hulme, D., Murphree, M.W. (Eds), African Wildlife and Livelihoods. The Promise and Performance of Community Conservation. James Currey, Oxford, pp. 9-37.

Barrett, C.B., Arcese, P., 1995. Are Integrated Conservation and Development Programmes sustainable? On the conservation of large mammals in sub-Saharan Africa. World Development 23, 1073-1085.

Bond, I., 1999. CAMPFIRE as a Vehicle for Sustainable Rural Development in the Sem-Arid Communal Lands of Zimbabwe: Incentives for Institutional Change. PhD thesis, Department of Agricultural Economics and Extension, Faculty of Agriculture, University of Zimbabwe, Harare.

Bond, I., 2001. CAMPFIRE and the incentives for institutional change. In: Hulme, D., Murphree, M.W. (Eds), African Wildlife and Livelihoods. The Promise and Performance of Community Conservation. James Currey, Oxford, pp. 227-243.

Bond, I. (with Child, B., de la Harpe, D., Jones, B., Barnes, J., Anderson, H.), 2004. Private land contribution to conservation in South Africa. In: Child, B. (Ed.) Parks in Transition – Biodiversity, Rural Development and the Bottom Line. Earthscan, London, pp. 29-62.

Child, B.A., 1988. The Role of Wildlife Utilisation in the Sustainable Economic Development of Semiarid Rangelands in Zimbabwe. DPhil thesis, University of Oxford, Oxford.

Child, B.A., 1995. Guidelines for Managing Communal Lands Wildlife Revenue in Accordance with Policy for Wildlife, Zimbabwe. CAMPFIRE Coordination Unit, Department of National Parks and Wild Life Management, Harare, Zimbabwe, (mimeo).

Child, B.A., 2004. Principles, Practice and Results of CBNRM in Southern Africa. In: Lyman, M.W., Child, B. (Eds), Natural Resources as Community Assets: Lessons from Two Continents. Sand County Foundation, Madison, Wisconsin, pp. 19-50.

Child, B., Peterson, J.H., 1991. CAMPFIRE in Rural Development: The Beitbridge Experience. University of Zimbabwe Joint Working Paper Series 1/91, Centre for Applied Social Sciences, University of Zimbabwe, Harare, Zimbabwe, (mimeo).

Child, G.F.T., 1995. Wildlife and People: The Zimbabwean Success. How the Conflict Between Animals and People Became Progress for Both. WISDOM Foundation, Harare and New York.

Cumming, D.H.M. 1997. Aerial photographic survey of the Sebungwe and Dande/Chiswiti areas in the mid-Zambezi Valley in Aug/Sept 1993. In: Lynam, T.P., Cumming, D.H.M. (Eds) Land-use Changes, Wildlife Conservation and Utilisation, and the Sustainability of Agro-ecosystems in the Zambezi Valley. EU Final Technical Report, Volume 2, WWF Regional Office, Harare, Zimbabwe, (mimeo).

Dasmann, R.F., 1964. African Game Ranching. Pergamon Press, Oxford.

Dasmann, R.F., Mossman, A.S., 1961. Commercial utilization of game animals on a Rhodesia ranch. Wild Life 3, 7 – 14.

Duffey, R., 2000. Killing for Conservation: Wildlife Policy in Zimbabwe. James Currey, Oxford.

Dunham, K.M., Davies, C., Muhwandagara, K., 2003. Area and Quality of Wildlife Habitat in Selected CAMPFIRE Districts. WWF-SARPO and the CAMPFIRE Association, Harare, Zimbabwe, (mimeo).

Ferraro, P., and A. Kiss. 2002. Direct payments to conserve biodiversity. *Science*, 298, 1718-1719.

Gartlan, S., 1998. Falling between two stools: the false promise of sustainable development. In: Christoffersen, N., Campbell, B., du Toit, J. (Eds), Communities and Sustainable Use: Pan-African Perspectives. Proceedings of the Pan-African Symposium on the Sustainable Use of Natural Resources and Community Participation, Harare, June 1996. IUCN Regional Office for Southern Africa, Harare, Zimbabwe, pp. 72-78.

Hill, K., 1996. Zimbabwe's wildlife utilization programs: grassroots democracy or an extension of state power? African Studies Review 39, 103-123.

Jansen D.J. (1990) Sustainable wildlife utilisation in the Zambezi Valley of Zimbabwe. Economic, ecological and political trade-offs. WWF Multi-species Animal Production Systems Project, Paper 10. WWF Regional Office, Harare, Zimbabwe, (mimeo).

Jansen, D.J., Child, B. and Bond, I. (1992) Cattle, Wildlife Both or Neither. Results of a financial and economic survey of commercial ranches in southern Zimbabwe. WWF Multi-species Animal Production Systems Project, Paper 27, WWF Regional Office, Harare, Zimbabwe, (2 volumes, mimeo).

Jones, B., Murphree, M., 2001. The evolution of policy on community conservation in Namibia & Zimbabwe. In: Hulme, D., Murphree, M.W. (Eds), African Wildlife and Livelihoods. The Promise and Performance of Community Conservation. James Currey, Oxford, pp. 38-58.

Jones, B.T.B., Murphree, M.W. 2004. Community-based natural resource management as a conservation mechanism: lessons and directions. In: Child, B. (Ed.) Parks in Transition – Biodiversity, Rural Development and the Bottom Line. Earthscan, London, pp. 63-103.

Khumalo, M.A., (compiler) 2003. CAMPFIRE Monitoring and Evaluation Data 2001. WWF-SARPO and the CAMPFIRE Association, Harare, Zimbabwe, (mimeo).

Landell-Mills, N., Porras, I.T., 2002. Silver bullet or fool's gold? A global review of markets for for forest environmental services and their impact on the poor. Instruments for Sustainable Private Sector Forestry. International Institute for Environment and Development, London.

Logan, B.I., Moseley, W.G., 2002. The political ecology of poverty alleviation in Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE). Geoforum 33, 1-14.

Martin, R.B., 1986. Communal Areas Management Programme for Indigenous Resources (April 1986, revised edition). Branch of Terrestrial Ecology, Department of National Parks and Wild Life Management, Harare, Zimbabwe, (mimeo).

Maveneke, T.N. 1998. Local participation as an instrument for natural resources management under the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe. Proceedings of an International Workshop on Community-Based Natural Resource Management (CBNRM), Washington, D.C., May 10-14, 1998 (online at: http://srdis.ciesin.columbia.edu/cases/Zimbabwe-Paper.html).

Murphree, M.W. 1991. Communities as Institutions for Resource Management. CASS Occasional Paper Series, Centre for Applied Social Sciences, University of Zimbabwe, Harare, Zimbabwe, (mimeo).

Murphree, M. 1993. Communal Land Wildlife Resources and Rural District Council Revenues. Occasional Paper Series, Centre for Applied Social Sciences, University of Zimbabwe, Harare, Zimbabwe, (mimeo).

Murphree, M.W. 1997. Congruent Objectives, Competing Interests and Strategic Compromise. Concept and Process in the Evolution of Zimbabwe's CAMPFIRE Programme. Community Conservation in Africa Working Paper No. 2, Institute for Development Policy and Management (IDPM), University of Manchester, Manchester, U.K.

Murphree, M. 2004. Communal approaches to natural resource management in Africa: from whence to where? Journal of International Wildlife Law and Policy 7, 203-216.

Pagiola, S., Arcenas, A., Platais, G., 2005. Can payments for environmental services help reduce poverty? An exploration of the issues and the evidence to date from Latin America. World Development 33, 237-253.

Rukuni, M. (Chairman) 1994. Report of the Commission of Inquiry into Appropriate Agricultural Land Tenure Systems. Government Printers, Harare, Zimbabwe, (2 volumes, mimeo).

Sithole, B., Frost, P.G.H., 2002. Appropriate social units of analysis in the CAMPFIRE programme in Zimbabwe. In: Oglethorpe, J. (Ed.) Adaptive Management: From Theory to Practice. SUI Technical Series Volume 3, IUCN Publications Services Unit, Huntingdon, UK, pp. 131-140.

Wunder, S., 2005. Payments for Environmental Services: Some Nuts and Bolts. CIFOR Occasional Paper No. 42, Center for International Forestry Research, Bogor, Indonesia, 24 pp.

WWF, 1997. Marketing Wildlife Leases. Wildlife Management Series No. 3, WWF Regional Programme Office, Harare, Zimbabwe, 43 pp.

Wunder, S., Vargas, M.T. 2005. Beyond “Markets”. Why Terminology Matters. Guest editorial, Katoomba Group’s Ecosystem Market Place. Online at http://ecosystemmarketplace.net/pages/article.opinion.php?component_id=1252&component_version_id=3597&language_id=12

Table 1. Pre- and post-tender prices for hunting concession areas in three districts participating in CAMPFIRE (WWF, 1997)

	Pre-tender price	Post-tender price	% increase
Tsholotsho	108,000	280,000	159
Hurungwe	172,000	654,000	280
Chipinge	70,000	300,000	329

Table 1. The magnitude of CAMPFIRE revenues in 1999 at different levels of organisation. The three districts have been the most profitable ones under CAMPFIRE and 1999 was the most rewarding year in terms both of total CAMPFIRE income and disbursements to communities. These therefore represent a 'best-case' scenario. Monetary values in US$, rounded to the nearest dollar.

	District		
Organisational level	**Binga**[1]	**Guruve**[2]	**Nyaminyami**[3]
Rural District Council			
1999 income	301,580	489,872	772,731
Retained	103,368	349,114	470,429
Disbursed	198,212	140,758	302,302
% disbursed	65.7	28.7	39.1
Ward			
Average	9,439	23,460	25,192
Range	3082 – 30,826	0 – 56,160	0 – 55,918
Number of CAMPFIRE wards	21	11	12
Household			
Average	10	58	59
Range	3 – 35	0 – 160	0 – 197
No. households (all wards)	19,669	5,303	5,720

[1] The Binga RDC distributes some revenue to each ward, irrespective of whether they have exploitable wildlife populations or other natural attractions

[2] In Guruve, only 11 out of 21 wards have produced CAMPFIRE revenues during the period 1989-2001, and then not in every year. Payments to wards reflects their contributions to annual revenue generation

[3] In Nyaminyami, all 12 wards participate in CAMPFIRE, though revenue generation varies. In some years a ward may produce no revenue, in which case no payments are made to it.

Table 2. Income earned by Rural District Councils with Appropriate Authority between 1989 and 2001 (data from Khumalo, 2003).

	Safari hunting	Tourism	Sale of hides and ivory	Other	Total
Income by activity (US$ million)	18.15	0.46	1.17	0.51	20.29
% of income by activity	89.5	2.3	5.7	2.5	100

Table 3. The allocation of wildlife revenue earned by Rural District Councils between 1989 and 2001 (data from Khumalo, 2003)

	Producer wards	Wildlife management	Council Levy	Other	Unallocated	Total
Revenue allocated (US$ millions)	9.89	4.08	2.51	0.68	3.13	20.29
% of total revenue	45.9	20.5	14.6	4.7	14.3	100

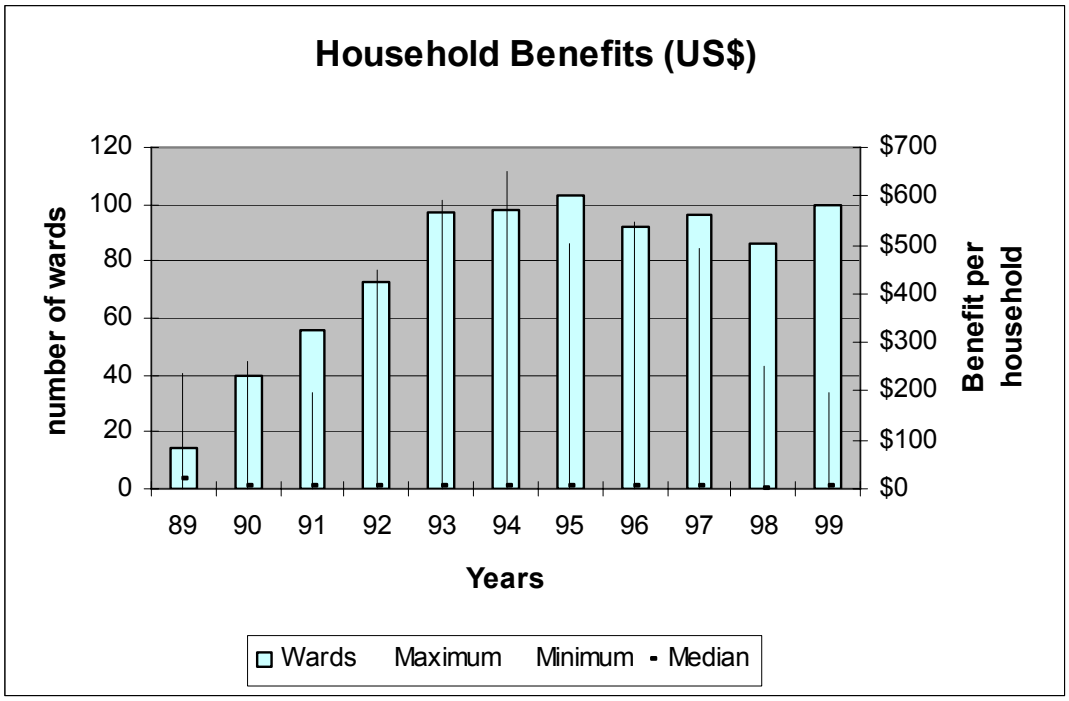

Figure 1. Changes in the number of wards receiving CAMPFIRE revenues, and the strongly asymmetric nature of those revenues, for the period 1989-1999.

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The CAMPFIRE programme in Zimbabwe: Payments for wildlife services

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ABSTRACT

Payments for environmental services (PES) have been distinguished from the more common integrated conservation and development projects on the grounds that PES are direct, more cost-effective, less complex institutionally, and therefore more likely to produce the desired results. Both kinds of schemes aim to achieve similar conservation outcomes, however, and generally function in analogous social, political and economic environments. Given the relative novelty of PES, what lessons can be learnt and applied from earlier initiatives? In this paper, we describe the evolution over the first 12 years (1989–2001) of Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE), a community-based natural resource management programme in which Rural District Councils, on behalf of communities on communal land, are granted the authority to market access to wildlife in their district to safari operators. These in turn sell hunting and photographic safaris to mostly foreign sport hunters and eco-tourists. The District Councils pay the communities a dividend according to an agreed formula. In practice, there have been some underpayments and frequent delays. During 1989–2001, CAMPFIRE generated over US$20 million of transfers to the participating communities, 89% of which came from sport hunting. The scale of benefits varied greatly across districts, wards and households. Twelve of the 37 districts with authority to market wildlife produced 97% of all CAMPFIRE revenues, reflecting the variability in wildlife resources and local institutional arrangements. The programme has been widely emulated in southern and eastern Africa. We suggest five main lessons for emerging PES schemes: community-level commercial transactions can seldom be pursued in isolation; non-differentiated payments weaken incentives; start-up costs can be high and may need to be underwritten; competitive bidding can allow service providers to hold on to rents; and schemes must be flexible and adaptive.
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1. Introduction

Payment for environmental services (PES) has been put forward as a novel approach to achieving conservation goals. Given its newness, some experimentation and adaptation is likely before it enters the mainstream. Are there any long-standing precursors to PES which could provide lessons about implementation, performance, outcomes and adaptation? One initiative is the **C**ommunal **A**reas **M**anagement **P**rogramme **f**or **I**ndigenous **R**esources (CAMPFIRE), started in the late 1980s in Zimbabwe, and subsequently widely emulated elsewhere in southern Africa. It involves the sale by rural

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authorities of the rights to access wildlife to entrepreneurs who in turn market safaris to hunters and eco-tourists. Although its underlying philosophy places it firmly within the 'community conservation' paradigm, its workings share some features with PES. There may be important insights from CAMPFIRE that could inform the emerging debate on how best to implement PES.

In this paper, we explore some lessons learned from CAMPFIRE. We argue that there is more in common between community conservation and PES than is commonly acknowledged. Both play out in analogous institutional landscapes and are subject to similar external pressures. We start by briefly describing the background, key features and evolution of CAMPFIRE (Section 2). We then examine CAMPFIRE through a PES lens, focusing on some of the variation in form and functioning that has emerged over time, and why this happened (Section 3). We draw some lessons from CAMPFIRE that should be taken into account if PES is to move from persuasive argument to successful practice, at least in developing countries, and conclude by identifying some unsolved issues relevant to both approaches (Section 4). Given the drastic recent political, economic and social changes in Zimbabwe, we limit our quantitative assessments of CAMPFIRE to the period 1989–2001. While CAMPFIRE continues to operate today (Section 4.3), we have no fully comparable data after 2001.

2. What is CAMPFIRE?

CAMPFIRE was developed largely around the concept of managing wildlife and wildlife habitat in the communal lands of Zimbabwe for the benefit of the people living in these areas (Martin, 1986). Its foundations were established in the 1960s when moves to commercialize wildlife production were first made (Dassmann, 1964). At that time, wildlife was legally property of the State, which rarely granted licences for commercial use. Consequently, in conflicts with farmers, wild animals were treated as pests. Wildlife was further threatened by the ongoing widespread transformation of its habitats to agricultural land. In short, the future of large wildlife populations outside demarcated conservation areas was bleak.

The principle of wildlife production as a recognised form of landuse outside protected areas was established by the 1975 Parks and Wild Life Act. This granted private landholders the right to use the wildlife on their land for their own benefit, including through safari hunting and the capture and sale of animals. After a slow start, the wildlife industry flourished.[1] Following Independence in 1980, the Zimbabwean Government amended the Act to allow rural communities occupying land under communal tenure also to obtain Appropriate Authority to use wildlife commercially. Apart from removing obviously discriminatory provisions in the Act, the proposed changes were intended to offer an alternative to subsistence agriculture on marginal lands, and so provide better prospects for development. This move was spearheaded by the Department of National Parks and Wild Life Management (DNPWLM), which was exploring such options within the framework of an integrated landuse plan for the communal lands bordering a number of national parks and safari areas in northern Zimbabwe. These areas supported substantial numbers of wild animals, including some commercially valuable species (*e.g.* elephant, *Loxodonta africana*, buffalo, *Syncerus caffer*, lion, *Panthera leo*, and leopard, *Panthera pardalis*) that were threatened by ongoing expansion of low-yielding subsistence agriculture.

The development of CAMPFIRE was strongly influenced by experiences from Project WINDFALL – **W**ildlife **Ind**ustries **f**or **All** – in which meat from elephant culling and some revenue from trophy fees was occasionally paid to rural communities adjacent to state-managed protected areas, with the aim of encouraging a positive attitude to wildlife. It failed in this regard, but it highlighted a need to devolve proprietorship over wildlife, to enable those living with wildlife to receive direct and sustained benefits from it. If wildlife was to have a future outside reserves, wildlife production would need to become a viable landuse option for communal land farmers (Martin, 1986).

CAMPFIRE was therefore designed specifically to stimulate the long-term development, management and sustainable use of natural resources in Zimbabwe's communal farming areas. It aimed to align landuse more closely with the natural opportunities and constraints of these agriculturally marginal areas. Resident communities were given custody over and responsibility for managing wildlife resources and the right to benefit directly from their use (called Appropriate Authority). As originally conceived, CAMPFIRE was to encompass four major natural resources – wildlife, woodlands, water and grazing – all to be managed by natural resource cooperatives. In practice, however, wildlife use predominates as it produces the most value, principally through safari hunting and eco-tourism. Venison production and the capture and sale of wild animals were other expected sources of wildlife revenue, but they have produced little.

For mainly political reasons, the implementation of CAMPFIRE has departed somewhat from the original plan (Murphree, 1997). Rural District Councils (RDCs), rather than the cooperatives, became the appropriate authorities for wildlife. In return, the RDCs agreed to pass on to producer communities a fixed percentage of the revenues earned. The accepted but non-binding guideline was that at least 50% of the revenues was to be paid to the communities (as Wards)[2,3], up to 35% would be

[1] In 1960 there were just three game ranches, totalling 350 km^2, all producing venison. By the early 1990, this had risen to over 216 ranches covering 37,000 km^2 and engaged variously in sport and trophy hunting, photographic safaris, game viewing, game cropping for venison, and selling live animals. Expansion occurred more in the drier areas where wildlife production was financially and economically more viable than single-species livestock production (Jansen et al., 1992).

[2] A ward is a sub-district administrative unit comprising an average of six villages, though settlement in these is not consolidated. For the main CAMPFIRE districts, there was an average 991 households per ward (range 131-3709) and 5.4 persons per household.

[3] The term 'community' is used here to refer to a group of people living together in a common social setting in which they interact frequently and regularly. This does not necessarily imply any unity of background, organisation or purpose; most CAMPFIRE communities are highly heterogeneous.

allocated to wildlife management (habitat management, fire control, monitoring, hiring of game scouts etc.), while 15% could be retained by the RDC as an administrative levy.

When CAMPFIRE started it was relatively small (2 districts, 16 wards, and about 8880 households). For the first five years, the number of participating districts and wards grew almost linearly, reaching 12 districts, 102 wards and at least 104,932 households by 1993. The numbers then expanded rapidly as many districts sought appropriate authority, even though most of them had little wildlife. By 2002, the CAMPFIRE Association represented 37 Rural District Councils, covering over 244,000 km^2 and supporting some 777,000 households, though just 23 of these really functioned as intended. Only 12 of these districts have had a consistently marketable quota of wildlife for hunting or some other sellable natural attraction, however (Khumalo, 2003). Within these districts, the actual wildlife production areas covered 118 wards with ~43,000 km^2 and ~121,550 households. At least some of this expansion was prompted by the prospect of receiving development aid, large amounts of which were attracted to CAMPFIRE by its initial success and promise of broader change. The increase reinforced a perception of success of community-based natural resource management, which attracted further support and encouraged yet more districts to join.

Given its history and extent, CAMPFIRE has long been considered the flagship community-based natural resource management (CBNRM) programme in southern Africa, attracting much public and academic interest globally. It has produced a wealth of knowledge and experience on the potential for and constraints on the management and sustained use of wildlife by rural communities[4].

3. CAMPFIRE and payments for environmental services

What are the similarities and differences between CAMPFIRE and PES? In part, the answer depends on how broadly or narrowly PES is conceived and defined. Wunder (2005) has defined PES as a voluntary transaction in which a well-defined environmental service (ES), or landuse likely to secure that service, is bought by at least one ES buyer from at least one ES provider, if and only if the provider actually continues to supply the service. This definition, however, excludes many of the current innovative approaches being developed under looser notions of PES (see Robertson and Wunder, 2005). CAMPFIRE fits within the latter group.

3.1. *Actors and services*

The principal service sellers in CAMPFIRE are the farming communities, whose land- and resource-use decisions ultimately determine the fate of wildlife. The RDCs, being authorised by government to receive and manage wildlife revenues on behalf of communities, serve as intermediaries. The service is bought by safari operators from the communities through contracts with the RDCs. It is then packaged into hunting or eco-tourism safaris and sold to safari hunters and eco-tourists as end users (Fig. 1). A consortium called the CAMPFIRE Collaborative Group (CCG), comprising the CAMPFIRE Association (CA) – representing those RDCs with Appropriate Authority – the DNPWLM, various NGOs, a university research unit, and the Ministry of Local Government and Rural Development, helped to initiate and implement the programme by providing technical advice and reconciling different interests (Maveneke, 1998).

The CCG members have also served as channels for funding from bilateral donors. The main donor has been the United States Agency for International Development (USAID), accounting for about two-thirds of this external support. The balance came from the Norwegian Agency for Development Cooperation (NORAD), the UK Department for International Development (DFID), and sundry other agencies[5]. Between 1989 and 2003, USAID spent almost US$25.2 million on natural resource management in Zimbabwe, including the development of CAMPFIRE (Child et al., 2003). These funds helped to meet the costs of project administration by USAID contractors (20.9% of total expenditure, including audit costs and contingencies); community development, including infrastructure (vehicles, fencing, buildings — 24.4%); development projects and institutional capacity building (12.7%); technical support for wildlife conservation (11.8%); planning and applied research (6.9%); communications and training (3.6%); and grants to the participating NGOs (19.7%). None of the funds was spent on subsidizing the basic transaction between the producer communities and safari operators.

3.2. *What is being bought?*

Safari operators are essentially wholesalers who buy the rights to bring sport hunters and eco-tourists to their concession areas to hunt a set quota of animals, or track, observe and photograph wildlife. Clients enjoy an experience encompassing notions of wilderness and untamed Africa, accompanied by quality service in the form of accommodation, cuisine and companionship. CAMPFIRE therefore most closely fits the PES concept of payments for landscape beauty.

What is the rationale for paying communities as 'service providers'? First, operators gain access to communal lands and the aesthetic landscape and wildlife values these provide. Second, agreements sometimes included explicit requirements for communities in the concession area not to harass or hunt wildlife, to limit expansion of crops and livestock, to confine human settlement to agreed zones and, in a few cases, to even move away from prime wildlife areas. Living with wildlife can result in damage to crops and other property. The payments can be seen, in part, as compensation for these losses. Such conditions, required by the operators, were generally accepted by the RDCs on behalf of the communities concerned, but not always with their full agreement.

[4] For more detail on the functioning and assessments of CAMPFIRE in general see Child (1993,2000); Bond (1999); Murphree (1997,2004) and Jones and Murphree (2001,2004).

[5] Information on the amount of funding from sources other than USAID is not readily available. Moreover, these funds were allocated to support community-based natural resource management generally, not just CAMPFIRE.

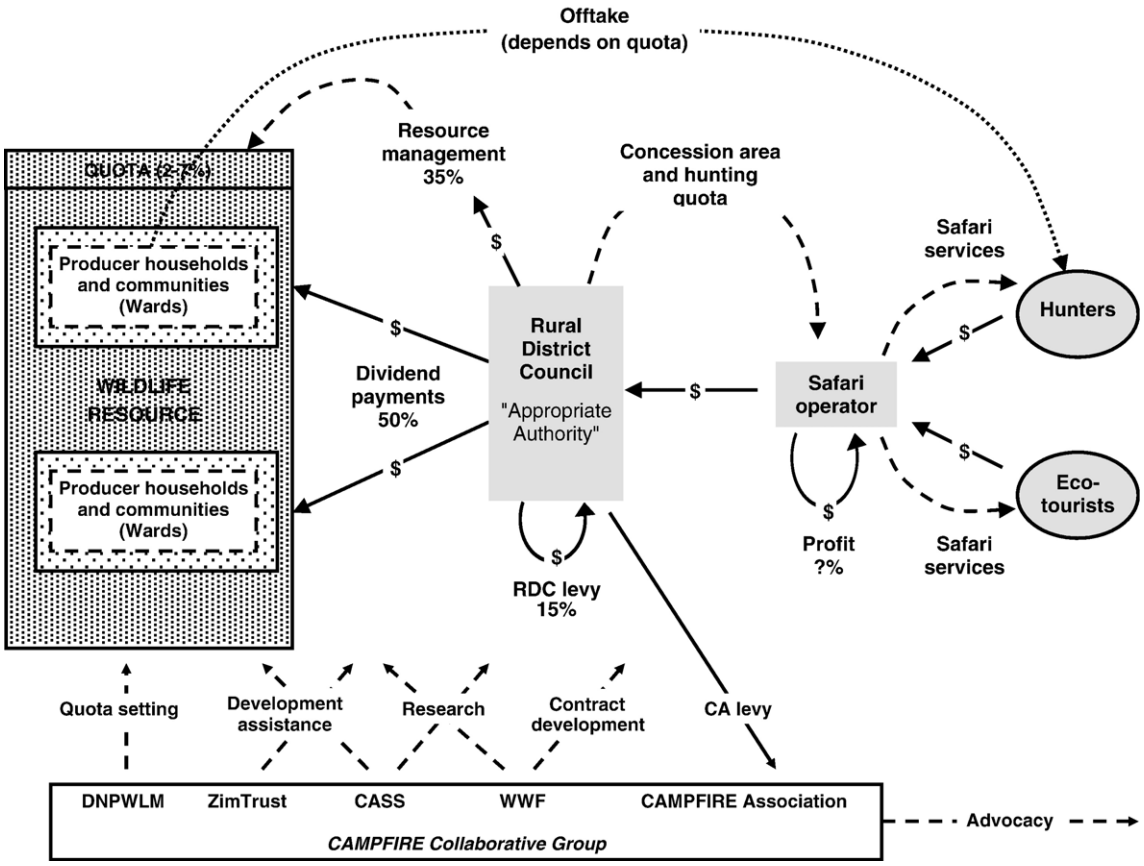

Fig. 1 – General structure of CAMPFIRE in Zimbabwe. Financial transfers — bold lines. Resource offtake — dotted line. Services (incl. by CCG) — dashed lines. Note: Financial assistance from donors to communities administered by the CCG has been omitted. The percentage values represent the recommended allocation of income from concession and trophy fees received by the RDC.

3.3. *How are payments effected?*

The core contractual agreement is between the RDC, acting as the seller on behalf of its constituent communities, and one or more safari operators buying services on behalf of future clients. The details of the contracts vary considerably between districts. In most cases, the safari operators pay an annual lease fee for the concession plus a trophy fee for each animal shot from an annual quota. In some cases the RDCs receive a percentage of the gross income realised by the safari operator, and in at least one instance the safari operator and the RDC formed a joint-venture partnership. Over time, the RDCs and communities became adept at using competitive marketing to maximize their market share (Bond, 1999). The contracts evolved considerably between 1989 and 2001 as the real value of leases rose and the negotiating skills of both parties improved. From the mid-1990s the rights and obligations of all parties, including an implied conditionality in the link between service provision and payment, began to be stated explicitly in the contracts. To ensure that the sellers were not compromised by periodic devaluations of the Zimbabwean dollar, the contracts were increasingly denominated in foreign currency, albeit paid in Zimbabwean dollars to comply with government regulations.

Adherence to these arrangements has been variable. The RDCs initially did not fully understand or monitor the safari operations and resulting payments, and so relied on operators to make proper payments, which they generally did. The safari operators in turn seldom held RDCs and the wildlife producer communities to account for not fulfilling their broader obligations relating to landuse. Despite this, most arrangements have held so far, though other, unrelated, factors may be undermining some of them. Any long term declines in wildlife and the aesthetic qualities of the landscape will threaten the viability of these transactions.

3.4. *Financial and economic data*

Between 1989 and 2001, 18 RDCs earned a total of US$20.29 million from wildlife-based activities, 97% of which came from just 12 districts. Safari hunting produced most of the revenue (89%); sales of hides and ivory (6%), revenue from eco-tourism leases (~2%) and miscellaneous transactions (3%) made up the balance (Table 1). This revenue is paid out annually in arrears. At a national level, the guidelines on the disbursement of CAMPFIRE revenue have been largely met: 49% has been disbursed to communities (118 wards and over 121,500 households), 20% used for wildlife management, just over

Table 1 – Income earned by Rural District Councils with Appropriate Authority between 1989 and 2001 (Source: Khumalo, 2003)

	Safari hunting	Tourism	Sale of hides and ivory	Other	Total
Income by activity (US$ million)	18.15	0.46	1.17	0.51	20.29
% of income by activity	89.5	2.3	5.7	2.5	100

12% retained by the District Councils as a levy, and 3% used for other expenses (including the 1.5% levy to the CAMPFIRE Association). The balance (~15%) is still being held by the RDCs and is unlikely to be disbursed (Table 2).

Financial benefits can be considered at four levels: the safari operators; rural district councils; wards; and households. Of these, the returns to commercial safari operations are the least well understood, because their profit margins are not known. As the operators continue to bid for lease, we presume that their returns are positive. The introduction of more competitive marketing of leases has undoubtedly forced operators to become more efficient at marketing and running their operations.

As RDCs have the legal authority to use wildlife, they serve as the gate-keeper for all wildlife revenue. For most RDCs, CAMPFIRE revenues have been a new and significant source of funds coming at a time when the central government, under pressure to devolve authority, took the opportunity to shed some of its fiscal responsibilities. For example, from 1989 to 1993 income from wildlife constituted up to 24% of local revenue, and in several districts it exceeded all other individual sources, including government grants (Bond, 1999). Most RDCs have been somewhat opportunistic in disbursing funds. Between 1989 and 2001, they retained US $6.3 million (31%) of wildlife revenues, including the agreed council levy (US$2.51 million, 12.3%) and a substantial block of unallocated funds from which they benefited through interest earned. This does not include the funds set aside for wildlife management (US$4.1 million). Certain RDCs also benefited from substantial investments in infrastructure, equipment and training provided by donors (Child et al., 2003).

Wards had been created by government as sub-district-level planning and development entities, but with no means of raising revenue. Effectively, they had never progressed beyond being units for political representation at the district level. With revenue received from CAMPFIRE they had, for the first time, financial resources to spend. Between 1989 and 2001, 143 wards received almost US$9.9 million. In the early days of CAMPFIRE, many RDCs tended to allocate revenue equally between wards, but with growing proprietorship from below and pressure from the CCG above, the producer-ward principle was increasingly adopted — that payments should be proportional to revenue generated. This is because those communities producing the most revenue are generally those with the largest wildlife populations and so experience the highest direct costs from wildlife damage and have the greatest opportunity costs from foregone agricultural production (Bond, 1999). The aggregate amount received by the wards during 1989–2001 averaged US$64,037 (median: US$27,152; range: US$137–801,042; Fig. 2). Some wards also benefited from investments of donor funds in small projects (eco-tourism facilities, beekeeping, crafts, wildlife management).

In only a few cases has money ever been paid directly to individual households. This has happened in wards where the per household financial benefits were exceptionally high (Child and Peterson, 1991; Murphree, 1997; Bond, 2001). In these cases, the financial benefits have been substantial and occasionally exceeded the estimated gross income from all agricultural sources (Bond, 1999). Notional estimates of gross financial benefit per household across CAMPFIRE can be calculated from the revenue received by a ward divided by its number of households. Estimated this way, the median gross financial benefits to households between 1989 and 2001 extend from US$20.11 per household in 1989 (range US$2.39–80.7, $n=16$) when only a few, more productive, wards participated, to US$2.1 per household in 1998 (range US$0.2–252.3, $n=95$: Fig. 3). For some districts, the household-level benefits have been substantial (Fig. 4). But for most, wildlife revenues, if paid out, would be supplementary. Between 1989 and 1993 the median financial benefit per household averaged just under 11% of gross income from agriculture (range 2–21%: Bond, 2001). As a result, the wards have generally used their funds to finance community development projects.

This development potential attracted complementary donor funding of about US$35 million up to 2003. Whether this support was essential to CAMPFIRE's success is unclear. Less than US$5 million of this was actually given as direct grants to community-based projects, many of them peripheral to mainstream CAMPFIRE operations, or to build district-level infrastructure and purchase capital items. Most of the funding supported the activities of the CCG and its members and paid for research, technical assistance and training.

3.5. *Conditionality, costs and scale of benefits*

The degree of conditionality between what the CAMPFIRE communities provide and the payments they receive varies with the kind of contractual arrangement and how the RDC decides to disburse the funds. In some districts, payments to wards are based on the proportion of revenue from hunting within a ward. In others, the payments are disbursed equally among the wards irrespective of how much each contributes to the total. In general, those districts with larger wildlife populations had bigger quotas and generated higher revenues,

Table 2 – The allocation of wildlife revenue earned by Rural District Councils between 1989 and 2001 (Source: Khumalo, 2003)

	Producer wards	Wildlife management	Council Levy	Other	Unallocated	Total
Revenue allocated (US$ millions)	9.89	4.08	2.51	0.68	3.13	20.29
% of total revenue	48.8	20.1	12.4	3.4	15.4	100

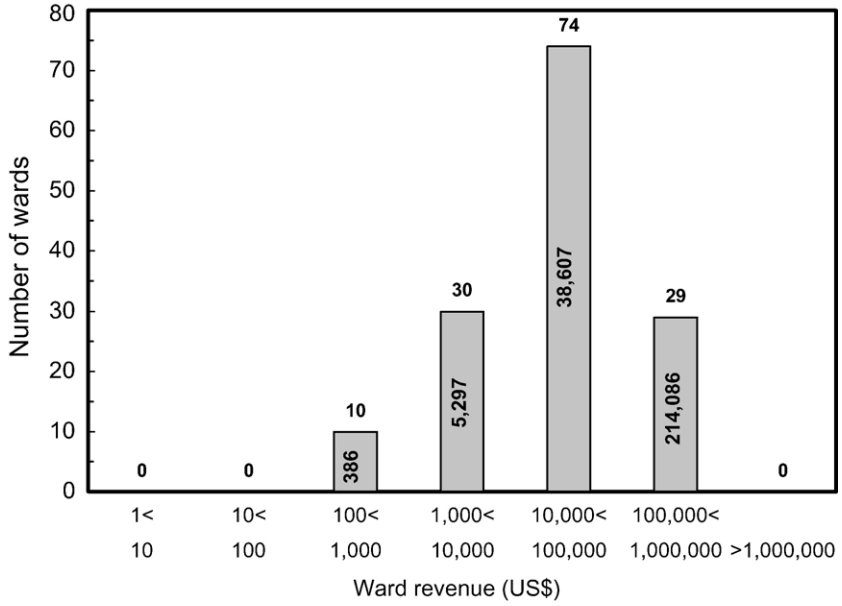

Fig. 2 – Frequency distribution of total CAMPFIRE revenues received by wards (n = 143), 1989–2001. Note: The number of wards in each category is given above the bars while the average revenue received in each category is shown within the bars. The x-axis (ward revenue) is plotted on a logarithmic scale. Source: Khumalo (2003).

but there is considerable year-to-year variation. Wildlife populations in turn are influenced by human population density and landuse intensity. To the extent that some communities made conscious decisions to confine settlement and limit landuse activities to those compatible with maintaining large wildlife populations, a degree of conditionality presumably exists, though it is not easily monitored or acted on in the short term. The best available long-term indicator may be the significant positive relationship between the total revenue received by RDCs from sport hunting (Y, US$ million) for the period 1991–2001, and the aggregate value of the hunting quota accompanying the concession (X, US$ millions):

$$Y = 0.608X - 0.174,\ r = 0.969,\ \mathrm{df} = 10,\ p<0.001.$$

The key assumption underlying CAMPFIRE is that the revenue from using wildlife can create sufficient incentive for communities and individual households within them to

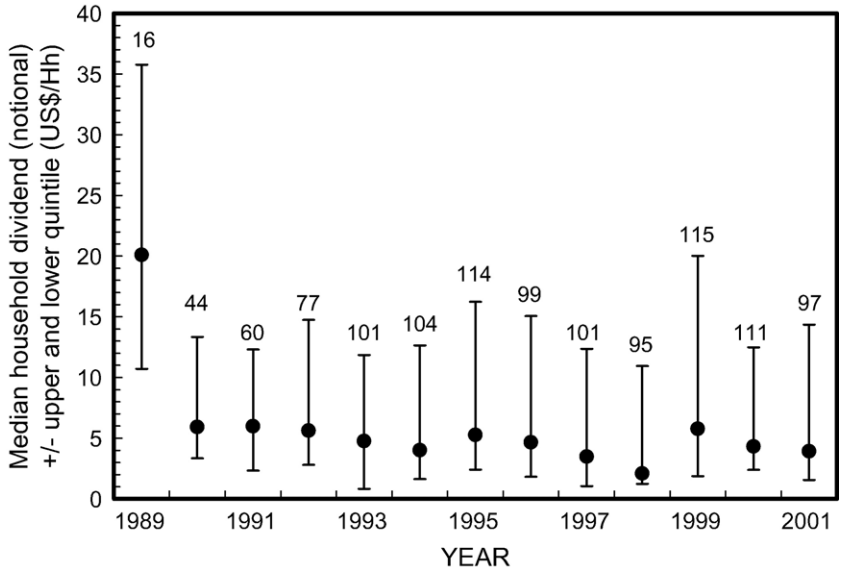

Fig. 3 – Monetary transfers to households of CAMPFIRE dividends, 1989–2001: median, upper and lower quintile values. Note: Number of wards receiving CAMPFIRE revenues is given above upper quintile. Source: based on data in Khumalo (2003).

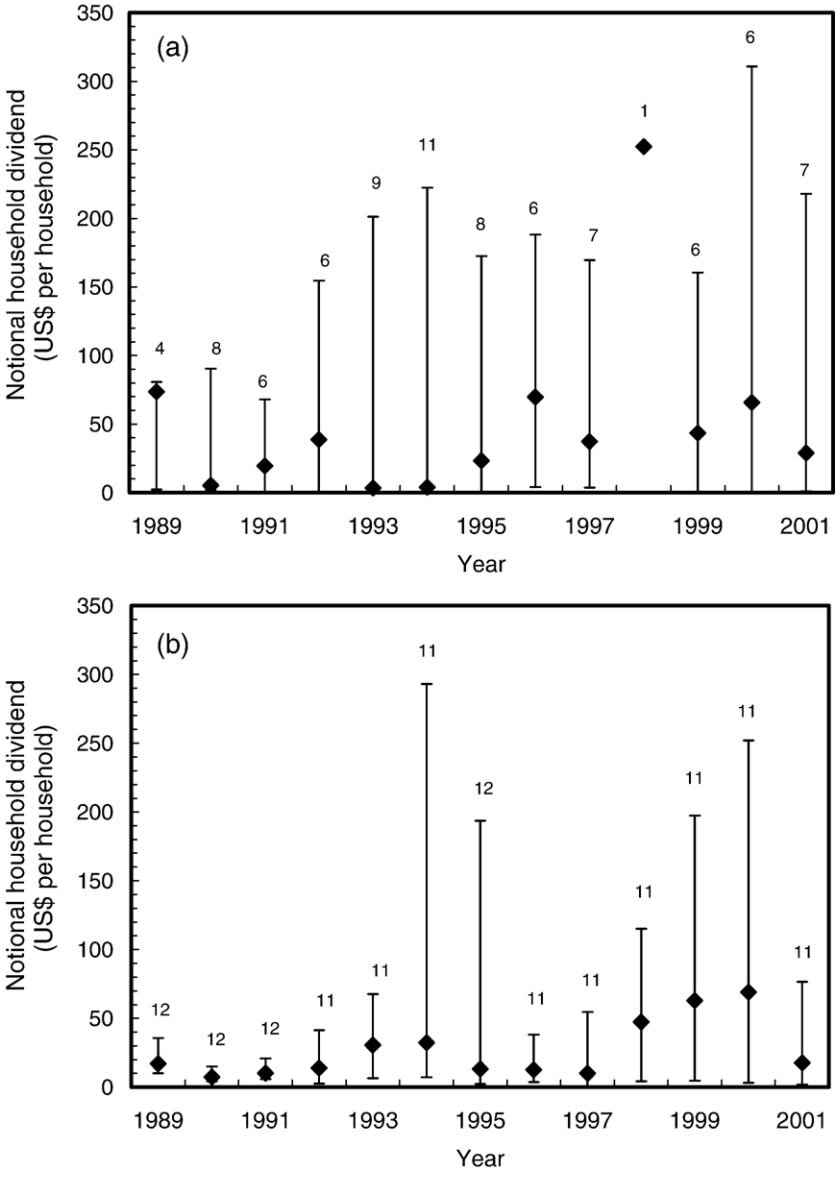

Fig. 4 – Median values (and range) of CAMPFIRE dividends per household in the two most profitable districts: (a) Guruve and (b) Nyaminyami (Kariba), 1989–2001. Note: Number of wards receiving CAMPFIRE revenues is given above the range bars.

modify or limit their use of land in appropriate ways. This depends greatly on whether the benefits are assessed at district or ward level, where the aggregate amounts can be considerable[6], or at household level where the payments, if made at all, are generally small and intermittent (Table 3). In most wards, household payments have not been made, or if so then the money has immediately been paid back into community funds to be spent on agreed community projects (*e.g.* Child and Peterson, 1991). Instead, the communities have opted to use their aggregated funds to build or extend schools, construct clinics, drill boreholes, or purchase grinding mills or irrigation pumps.

The benefits at whatever level must also be seen in relation to the costs involved. In contrast to the RDCs, where the costs of wildlife production are relatively minor, individuals and communities sustain considerable direct and opportunity costs. They must bear the costs of losing crops and livestock to wildlife, as well as living with real and perceived threats to their lives. Proposed technical solutions, such as the use of electric fencing or chemical deterrents, have generally been disappointing. Where people have curtailed hunting of wildlife for themselves, their intake of protein has probably declined. The opportunity costs to communities of wildlife production are site-specific. Tolerating wildlife often means damage to crops and property, an outright cost. The loss of opportunities to hunt (even if illegal) is another opportunity costs. In some wards, local wildlife committees, usually operating under the influence of the RDCs and outside

[6] The derived benefits are even greater at a national level, where the US$20 million direct CAMPFIRE revenues translate into an estimated US$100 million, once upstream and downstream multiplier effects are taken into account (Muir-Leresche, cited by Child et al., 2003).

Table 3 – Distribution of CAMPFIRE revenues in 1999 in the three most profitable districts (in US$) (derived from data given in Khumalo, 2003)

	District		
Organisational level	Binga[a]	Guruve[b]	Nyaminyami[c]
Rural District Council			
1999 income	301,580	489,872	772,731
Retained	103,368	349,114	470,429
Disbursed	198,212	140,758	302,302
% disbursed	65.7	28.7	39.1
Ward			
Average	9439	23,460	25,192
Range	3082–30,826	0–56,160	0–55,918
Number of CAMPFIRE wards	21	11	12
Household			
Average	10	58	59
Range	3–35	0–160	0–197
No. households (all wards)	19,669	5303	5720

[a] The Binga RDC distributes some revenue to each ward, irrespective of whether they have exploitable wildlife populations or other natural attractions.
[b] In Guruve, only 11 out of 21 wards produced CAMPFIRE revenues during the period 1989–2001, and then not in every year. Payments to wards reflect their contributions to annual revenue generation.
[c] In Nyaminyami, 12 out of 16 wards are involved in CAMPFIRE, with payments reflecting their contributions to annual revenue generation.

advisors, developed by-laws to limit the expansion of settlement, cultivation and use of natural resources. For example, communities in Nenyunka (Gokwe North District), Kanyurira (Guruve), and Ngwachumeni Island in Mahenye Ward (Chipinge)[7], agreed to limit settlement in some wildlife areas, which meant giving up the opportunity to farm the land. Such deals may be more effective in terms of restricting new immigration, however. Many community leaders traditionally welcome new settlers, locating them on the boundaries of existing settlement as a barrier against wildlife, so reducing wildlife damage to themselves (Sithole and Frost, 2002). By excluding these migrants, local communities probably sacrifice opportunities to benefit from their skills and assets (Bond, 1999). Where the land set aside for wildlife has no agricultural potential because of shallow soils or rugged terrain, or if the expansion of agriculture is limited by access to capital and labour, opportunity costs are small.

Many RDCs have also promulgated by-laws on the use of natural resources, further pressurising communities and individuals to conform to larger landuse plans, but often without proper consultation. Whereas these measures appear as examples of an economic incentive driving collective action to modify landuse, the regulations have seldom been enforced or payments withheld in cases where they have been flouted (Pangeti and Hansson, 1997).

In summary, although the aggregate revenue from wildlife at ward and district level is striking, for many communities the small value of these amounts at a household level has generally not been sufficient incentive for individuals to forego other more immediate and individually rewarding landuse practices. This raises the question of whether, in the long run, such small rewards alone can sustain wildlife-based landuses (Bond, 1999,2001). CAMPFIRE's greatest achievement and legacy may be indirect: the empowerment of communities to manage their own revenues and projects (Murphree, 2004).

3.6. *Baselines and additionality*

CAMPFIRE was initially conceived as a way of conserving wildlife and wildlife habitat in the communal lands of Zimbabwe (Martin, 1986). The programme expanded rapidly with few if any social, economic or biological baselines being measured. One possible measure of performance from which to calculate additionality could be changes in the populations of elephant, buffalo and other large conspicuous species in the CAMPFIRE areas, compared to changes elsewhere in Zimbabwe. Since the early 1980s, populations of such species have been monitored through aerial census in the main protected areas and in the communal lands of the Sebungwe Region[8], but only more sporadically elsewhere. While the total number of elephant in the Sebungwe has remained more or less constant, there has been a marked shift in distribution away from areas of human habitation (Dunham and Mackie, 2002). This is particularly so in Gokwe District, where a substantial amount of prime wildlife habitat has been converted to settlement and agricultural lands over the last 20 years, though in the context of the region more broadly, including some large protected areas, these changes are still relatively small (Cumming, 1997).

A second potential indicator is changes in wildlife habitat in CAMPFIRE areas, quantified by using remote sensing, but this is hampered by the lack of extensive (and expensive) ground-based verification (Dunham et al., 2003). Unverified regional-scale remote sensing (~18,000 km^2) does not consistently capture the variability of the landscape and the fine-scale patterns of settlement and landuse, all of which affect wildlife production (Dunham et al., 2003).

A third option is to use gross wildlife revenue in CAMPFIRE areas as a proxy for wildlife production[9]. Wildlife revenue (and therefore wildlife production) is negatively exponentially related to human population density, suggesting that wildlife and farmers compete for key habitats (principally riverine areas with alluvial soils) and water within the larger landscape (Bond, 1999). In some wards, *e.g.* Masoka (Guruve District) prime wildlife habitat has been retained and there is ongoing coexistence between people and wildlife.

3.7. *Permanence, accounting and leakage*

CAMPFIRE is supported by now long-established legislation. The arrangements have no mandated time limits and can potentially continue indefinitely. Nevertheless, permanence is not guaranteed. The policy and legislative changes that

[7] In the case of Mahenye, this happened in 1983, during Operation WINDFALL, the precursor of CAMPFIRE: Peterson, 1991.

[8] Three major CAMPFIRE districts are located in the Sebungwe Region: Nyaminyami, Binga and Gokwe North.

[9] The sample used wards in which revenue was allocated on the 'producer ward' principle, rather than spread among all wards in a district irrespective of their contribution to CAMPFIRE revenues.

allowed payments to be made to RDCs and wildlife producer communities are being increasingly threatened by an unwritten policy of re-centralisation. Even limited property rights have been unilaterally revoked. These kinds of reversals have been used by some to claim that community conservation programmes have failed and that a return to protection is required (*e.g.* Barrett and Arcese, 1995). If such a notion becomes broadly held, it could undermine the generally supportive policy and legislative environment in which CAMPFIRE operates.

The permanence of CAMPFIRE's positive environmental impacts also depends on broader economic factors. Changes in the relative market prices of wildlife and agricultural commodities could still easily alter landuse practices (as in the case of the recent spread of cotton cultivation in parts of the Zambezi Valley). Factors that could cause relative price changes include: genetic modifications of livestock and key crops (*e.g.* cotton); reduced demand for wildlife-based tourism resulting from local and global instability; high oil prices; changing consumer tastes; and climate change. At a macro-level continuing economic decline and hyper-inflation in Zimbabwe are exacerbating already high levels of unemployment, leading to a return to subsistence agriculture, increasing demands for agricultural land, and a growing livelihood dependence on natural resource extraction.

To the extent that CAMPFIRE may have succeeded in lessening human impacts on wildlife and the environment by modifying settlement and landuse, these activities and their impacts on wildlife could potentially be transferred and intensified elsewhere (i.e. leakage). Accounting for this is difficult, since most of the communal lands containing substantial wildlife populations are already part of CAMPFIRE. This wide scope of intervention makes the leakage problem less immediately relevant.

3.8. *Participation of marginal groups*

All of the communities involved in CAMPFIRE are classed as poor (UNDP/PRF/IDS, 1998). Given that most households have received only limited income from CAMPFIRE revenues, the direct financial impact on poverty, especially of the poorest, has been marginal. Nevertheless, from a development perspective, the redistribution of power and the formation of effective units of common property management have been important achievements (Hulme and Murphree, 2001). CAMPFIRE has enhanced the communities' sense of proprietorship over their natural resources, and ongoing dialogue and discussions have helped to build confidence and skills in negotiating and managing conflicts. It remains to be seen if these attributes can be used advantageously in other contexts.

On the negative side, there is largely anecdotal evidence of the benefits in many producer communities being captured or manipulated by elites to their individual advantage. These include nepotic employment practices and appropriation of project equipment for personal use. Some ethnic groups such as the Tonga, vaDema and Shangwe have been sidelined in much of the decision-making, even though they are often the original inhabitants of these remote areas. Women are also generally marginalised, and their needs and concerns overlooked (Sithole and Frost, 2002). At a more general level, however, the intra-community and intra-household impacts of CAMPFIRE are poorly known.

4. Discussion

4.1. *Contrasts between CAMPFIRE and PES*

CAMPFIRE was never conceived of as a payment-for-environmental-services programme, though it exhibits many PES-like features. Both are driven by market forces, with CAMPFIRE perhaps being even more market-driven than most PES. The market for concessions is highly competitive. More than 180 safari hunting companies are registered in Zimbabwe, together with 131 Zimbabwe-based tourism companies.[10] All can bid for concession areas and associated hunting and eco-tourism rights from among the 37 CAMPFIRE communities, and many do. The communities in turn vie for experienced leaseholders who can use the quota fully. In contrast, many current PES schemes often have just one buyer and a few competing sellers.

Nonetheless, CAMPFIRE differs from PES in the strict sense as defined by Wunder (2005). First, although CAMPFIRE agreements include elements of contingency, these are seldom enforced; payments to wards and households are not yet fully conditional on implementing agreed landuse changes. Instead, payments are seen as supplementary income, which may be sustained if certain activities are avoided and immigration is curtailed. Conditionality, to the extent that it exists, relates more to the size of the hunting quota and hunters' success, which are only partly determined by landuse. Second, at the ward and household levels, participation in CAMPFIRE has not always been voluntary. Legal authority to market wildlife and distribute the resulting revenues is vested in the RDCs and they have often unilaterally sought that authority. While they are notionally democratic bodies, established to improve the welfare of their constituents, in reality they have their own interests, including the need to generate revenue and spend it to their political advantage. Importantly, most RDCs see CAMPFIRE as a solution to their growing financial problems, and so oscillate between driving communities to accept the provisions of a particular CAMPFIRE arrangement, including how the land and its resources should be used to generate revenue, and being responsive to the development needs and concerns of those communities. Overall, many wards and individual households are largely involuntary participants in a much larger process, and some are likely to carry net losses, i.e. the opportunity costs exceed the benefits from participation.

CAMPFIRE has broader objectives than the ideal PES transaction, which is purely concerned with securing the delivery of an environmental service through payments. It was originally conceived within a conservation framework, the focus being on redistributing revenue raised from the use of wildlife away from central government to local administrations and communities living with wildlife so as to create a

[10] See http://www.zimbabwetourism.co.zw/directory/hop.htm and http://www.zimbabwetourism.co.zw/directory/top.htm.

greater incentive for conservation. Any other benefits, such as rural development and improved human well-being, were considered as positive side-effects. Given the underdevelopment of the communities and the potential for wildlife revenues to fund development, however, wildlife production soon came to be seen as a means of achieving human-development ends (Jones and Murphree, 2001). Subsequently, the focus has shifted further to building and strengthening the effectiveness of rural organisations and institutions (Murphree, 2004).

4.2. *Lessons from CAMPFIRE*

Recognising the important similarities and differences between CAMPFIRE and PES, we suggest the following main lessons for emerging PES initiatives.

4.2.1. *Community-level commercial transactions can seldom be pursued in isolation*

A key attraction of PES is that it is potentially a more direct source of conservation finance, unencumbered by presumed institutional complexities, economic inefficiencies, inevitable trade-offs and unsustainability of more indirect approaches ICDPs (Ferraro and Kiss, 2002). Nevertheless, in the process of negotiating and designing agreements, side agendas and aims may arise, influencing the trajectory, mode and tempo of the transactions. CAMPFIRE started out with a fairly limited objective – to decentralise the financial benefits from using wildlife so as to create an incentive for wildlife conservation – but as the programmme evolved, new objectives emerged. Some of these were necessary to address unforeseen problems; others to accommodate internal diversity, individual ambitions, and shifts in influence and authority at different scales.

4.2.2. *Non-differentiated payments weaken incentives*

In some districts, CAMPFIRE revenues were paid to all wards irrespective of whether they contributed to generating those revenues (many did not). Some animals move seasonally into regions outside the main hunting areas, causing wildlife damage that needed compensation. Nevertheless, this approach substantially reduced the incentive for wildlife production in producer wards (*e.g.* in Binga District, payments were reduced by 26%). Similar quandaries may arise about whether all households should be paid equally. An advantage is that non-differentiated payments minimise the risk of envy and internal division undermining implementation. Nevertheless, a severe disadvantage is that the incentive is diluted, or that the intervention causes outright losses for those households carrying disproportionate opportunity costs.

4.2.3. *Start-up costs are high and may need to be underwritten*

By 2003, CAMPFIRE had received substantial financial and technical support from donors. Given the almost complete absence of models, skills and infrastructure for community-led conservation in Zimbabwe's communal lands at the time, one can argue that the programme, with all the broader conservation and development expectations placed on it, could not have achieved what it did without some initial external support. Whether these had to be as large as they were is a moot point. CAMPFIRE was part of a broader suite of initiatives to support community-based natural resource management, so disaggregating the necessary start-up costs of CAMPFIRE from the costs of these other initiatives is not possible. Many of the activities of the CAMPFIRE Collaborative Group, the intellectual force behind the programme, were financed externally. These included creating an enabling environment – developing skills, institutions and infrastructure – and allowing the CCG to lobby extensively for changes in policies and statutes, thereby making it possible for CAMPFIRE to evolve from an uncertain beginning. By promoting the concept consistently and coherently, the CCG convinced many that the initiative was an experiment deserving support. Many PES face similar issues: establishing the principle; developing the necessary institutions; addressing issues of property rights and tenure; ensuring that there are supportive administrative and judicial processes; providing education and training on contracts, management, monitoring and enforcement; and encouraging the adoption of non-agricultural livelihoods. To meet the costs of creating the necessary supportive environment for PES solely from payments runs the risk of raising the costs to buyers to unaffordable levels, or of reducing the benefits to the sellers to a point where there is little incentive to provide the service. This will either limit PES to those few places where a supportive environment already exists, or prompt a two-stage approach: an initial phase, supported externally, to establish the necessary conditions, followed by an operational phase governed by free-market principles.

4.2.3.1. *Competitive bidding allows producers to hold on to rents.* The demand for hunting and eco-tourism opportunities among many different operators ensured that competition for concession areas was high. The use and refinement of competitive pricing arrangements such as auctions and tenders allowed RDCs and provider communities to secure greater rent from the resource. For example, post-tender prices for concession areas in three districts were 159–329% higher than the prices paid for these concessions before tendering was introduced (WWF, 1997). Decentralisation has also helped, by allowing these processes to be experimented with locally rather than being centrally-driven. In many PES schemes, there is only one buyer, who therefore has the monopsonic advantage of being able to dictate terms. Creating a more competitive buyer environment in which providers have greater bargaining power is a significant challenge to emerging PES schemes.

4.2.4. *Schemes must be flexible and adaptive*

The flexibility of CAMPFIRE has been one of its major strengths, as it has allowed considerable variation in functioning to emerge. Although each CAMPFIRE initiative is based on the same fundamental plan organised within a common regulatory environment, the details of their development and outcomes to date all differ. Variation in environmental and social settings, timing (in relation to the experience of others and to changing economic and political circumstances), and the nature of external advice and advisors, all provided subtly different selective environments in which these initiatives evolved.

From this, adaptive solutions to differing social, environmental and other circumstances materialized. By not insisting on rigid adherence to some preconceived plan, those who promoted the CAMPFIRE concept ensured that local communities and outside interests could forge relationships that they thought best fitted their circumstances at the time. In so doing, a much greater sense of local ownership and commitment has been developed. No doubt, PES schemes will be similar, if allowed to follow the same route. Undoubtedly there are some instances where more structure would be advantageous. For example, the lack of a clear legal framework governing tenure, property rights and responsibilities for receiving and distributing funds has exposed CAMPFIRE communities to the vagaries of administrative whim and selective interpretation. Nevertheless, CAMPFIRE continues to evolve, despite extremely difficult circumstances outside the control of the organisations concerned. The authority and skills acquired early in the project are being used to develop new arrangements that will allow the communities to circumvent emerging problems, such as the growing non-payment of revenues. To flourish, payments for environmental services will need to show similar flexibility and adaptability.

4.3. *Next steps*

CAMPFIRE's current dynamics are being driven mainly by larger-scale macroeconomic and political processes, both of which are undermining local-level management (Mapedza and Bond, 2006). The so-called 'fast track' land reform programme in the country has disrupted the wildlife industry, especially on private land and state concession areas. Whereas safari hunting in the communal land concessions has so far proved more resilient than other sectors of the tourism industry, with ongoing demand for hunting, it depends on the continued existence of large wildlife populations. Some communities remain deeply committed to the CAMPFIRE ideal, continuing with its processes – wildlife monitoring, overseeing contracts, involvement in quota setting, allocating revenues in transparent and accountable ways – despite the absence of external support. Deepening poverty is forcing people to rely more heavily on extracting natural resources, including wildlife, for both subsistence and commercial purposes. Reports of increased poaching, expansion of settlement, and harassment of wildlife, while not well documented, must be a cause for concern.

The institutional environment is also now much less enabling. Donor support, for both CAMPFIRE and rural development generally, has been greatly reduced. The Zimbabwe Government, through the Zimbabwe Parks and Wildlife Management Authority (formerly DNPWLM), has recentralised aspects of wildlife management, including problem animal control and quota setting, weakening people's sense of ownership. The RDCs have few local sources of revenue other than those coming from CAMPFIRE, so more delays in payment and underpayment of dividends to communities are likely. Recently, in response to growing dissatisfaction over increasing delays by the RDC to pass on the community's share of the revenues, the Masoka community negotiated direct payment of its dues by the safari operator, bypassing the Guruve RDC, which receives its agreed share separately (Russell Taylor, WWF SARPO, pers. comm.). Such innovation, borne of necessity, will be needed to sustain CAMPFIRE. In areas where interest in CAMPFIRE may have weakened, efforts to revive the programme will be able to build on earlier achievements. The resettlement of some former commercial farms, which previously had switched to wildlife production, because of the unsuitability of much of the land for conventional agriculture, provides an opportunity to extend CAMPFIRE to new areas, through issues of property rights, community organisation, and whether there are still exploitable wildlife populations, need to be resolved.

Three other interrelated problems also require attention (Jones and Murphree, 2001). First, the wildlife areas in the communal lands need better delineation; currently, as management units, they often have no particular economic or ecological rationale. They have to be large enough to sustain an economically viable and ecologically sustainable resource base, or be positioned adjacent to reserves that are, but conversely should be sufficiently small and discrete to allow for direct interaction and decision-making among the landusers, preferably ones forming a coherent and recognised community group. Such a combination is not easily achieved.

Second, the communal lands are organisationally complex with overlapping but not wholly coincident jurisdictions among different authorities — traditional, spiritual and modern. Internally, the communities are differentiated by social standing based on lineage, influence, and relative wealth, among others. Achieving consensus can be more difficult than is commonly assumed.

Finally, property rights are not clearly defined; both individual and community tenure are insecure. Whereas households have usufruct rights over their arable lands, their rights elsewhere are collective, often overlapping with neighbouring communities. This creates uncertainty, competing interests, and can result in opportunistic use of resources. Investments in management tend to be limited to those that produce short-term returns. As the producer communities are not legal entities, their contracts are subject to common law. Despite calls to strengthen both communal and individual rights, including by a government-appointed commission on land tenure (Rukuni, 1994), communities and their constituents remain in legal limbo. For CAMPFIRE to be sustained these contradictions eventually will have to be resolved.

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REFERENCES

Barrett, C.B., Arcese, P., 1995. Are Integrated Conservation and Development Programmes sustainable? On the conservation of large mammals in sub-Saharan Africa. World Development 23, 1073–1085.

Bond, I., 1999. CAMPFIRE as a Vehicle for Sustainable Rural Development in the Semi-Arid Communal Lands of Zimbabwe: Incentives for Institutional Change. PhD thesis, Department of Agricultural Economics and Extension, Faculty of Agriculture, University of Zimbabwe, Harare.

Bond, I., 2001. CAMPFIRE and the incentives for institutional change. In: Hulme, D., Murphree, M.W. (Eds.), African Wildlife and Livelihoods. The Promise and Performance of Community Conservation. James Currey, Oxford, pp. 227–243.

Child, B.A., 1993. Zimbabwe's CAMPFIRE programme: using the high value of wildlife recreation to revolutionise natural resource management in communal areas. Commonwealth Forestry Review 72, 284–296.

Child, B., 2000. Making wildlife pay: converting wildlife's comparative advantage into real incentives for having wildlife in African savannas, case studies from Zimbabwe and Zambia. In: Prins, H.E. T., Grootenhuis, J.G., Dolan, T.T. (Eds.), Wildlife Conservation by Sustainable Use. Kluwer Academic Publishers, Boston, pp. 335–387.

Child, B., Peterson, J.H., 1991. CAMPFIRE in Rural Development: The Beitbridge Experience. University of Zimbabwe Joint Working Paper Series 1/91, Centre for Applied Social Sciences, University of Zimbabwe, Harare, Zimbabwe, (mimeo).

Child, B., Jones, B., Mazambani, D., Mlalazi, A., Moinuddin, H., 2003. Final Evaluation Report: Zimbabwe Natural Resources Management Program — USAID/Zimbabwe Strategic Objective No. 1. USAID, Washington, DC. 153 pp. (typescript).

Cumming, D.H.M., 1997. Aerial photographic survey of the Sebungwe and Dande/Chiswiti areas in the mid-Zambezi Valley in Aug/Sept 1993. In: Lynam, T.P., Cumming, D.H.M. (Eds.), Landuse Changes, Wildlife Conservation and Utilisation, and the Sustainability of Agro-ecosystems in the Zambezi Valley. EU Final Technical Report, Volume 2, WWF Regional Office, Harare, Zimbabwe, (mimeo).

Dasmann, R.F., 1964. African Game Ranching. Pergamon Press, Oxford.

Dunham, K.M., Mackie, C.S., 2002. National Summary of Aerial Census Results for Elephant in Zimbabwe: 2001. WWF-SARPO, Occasional Paper 1. WWF-SARPO, Harare, Zimbabwe. (mimeo).

Dunham, K.M., Davies, C., Muhwandagara, K., 2003. Area and Quality of Wildlife Habitat in Selected CAMPFIRE Districts. WWF-SARPO and the CAMPFIRE Association, Harare, Zimbabwe, (mimeo).

Ferraro, P., Kiss, A., 2002. Direct payments to conserve biodiversity. Science 298, 1718–1719.

Hulme, D., Murphree, M. (Eds.), 2001. African Wildlife and Livelihoods. The Promise and Performance of Community Conservation. James Currey, Oxford.

Jansen, D.J., Child, B., Bond, I. 1992. Cattle, Wildlife Both or Neither. Results of a financial and economic survey of commercial ranches in southern Zimbabwe. WWF Multi-species Animal Production Systems Project, Paper 27, WWF Regional Office, Harare, Zimbabwe, (2 volumes, mimeo).

Jones, B., Murphree, M., 2001. The evolution of policy on community conservation in Namibia & Zimbabwe. In: Hulme, D., Murphree, M.W. (Eds.), African Wildlife and Livelihoods. The Promise and Performance of Community Conservation. James Currey, Oxford, pp. 38–58.

Jones, B.T.B., Murphree, M.W., 2004. Community-based natural resource management as a conservation mechanism: lessons and directions. In: Child, B. (Ed.), Parks in Transition — Biodiversity, Rural Development and the Bottom Line. Earthscan, London, pp. 63–103.

Khumalo, M.A., (compiler) 2003. CAMPFIRE Monitoring and Evaluation Data 2001. WWF-SARPO and the CAMPFIRE Association, Harare, Zimbabwe, (mimeo).

Mapedza, E., Bond, I., 2006. Political deadlock and devolved wildlife management in Zimbabwe. The case of Nenyunga Ward. The Journal of Environment and Development 15, 1–21.

Martin, R.B., 1986. Communal Areas Management Programme for Indigenous Resources (April 1986, revised edition). Branch of Terrestrial Ecology, Department of National Parks and Wild Life Management, Harare, Zimbabwe, (mimeo).

Maveneke, T.N., 1998. Local participation as an instrument for natural resources management under the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe. Proceedings of an International Workshop on Community-Based Natural Resource Management (CBNRM), Washington, D.C. May 10–14, 1998 (online at: http://srdis.ciesin.columbia.edu/cases/Zimbabwe-Paper.html).

Murphree, M.W., 1997. Congruent Objectives, Competing Interests and Strategic Compromise. Concept and Process in the Evolution of Zimbabwe's CAMPFIRE Programme. Community Conservation in Africa Working Paper, vol. 2. Institute for Development Policy and Management (IDPM), University of Manchester, Manchester, U.K.

Murphree, M., 2004. Communal approaches to natural resource management in Africa: from whence to where? Journal of International Wildlife Law and Policy 7, 203–216.

Pangeti, G.N., Hansson, R., 1997. SupCamp: Support to Campfire Review March 1997. Geckoconsult (Pvt.) Ltd, Harare, Zimbabwe, (mimeo).

Robertson, N., Wunder, S., 2005. Fresh Tracks in the Forest. Assessing Incipient Payments for Environmental Services Initiatives in Bolivia. Center for International Forestry Research, Bogor, Indonesia.

Rukuni, M. (Chairman) 1994. Report of the Commission of Inquiry into Appropriate Agricultural Land Tenure Systems. Government Printers, Harare, Zimbabwe, (2 volumes, mimeo).

Sithole, B., Frost, P.G.H., 2002. Appropriate social units of analysis in the CAMPFIRE programme in Zimbabwe. In: Oglethorpe, J. (Ed.), Adaptive Management: From Theory to Practice. SUI Technical Series Volume 3. IUCN Publications Services Unit, Huntingdon, UK, pp. 131–140.

UNDP/PRF/IDS, 1998. Zimbabwe Human Development Report 1998. United Nations Development Programme, Poverty Reduction Forum, and Institute of Development Studies. University of Zimbabwe, Harare, Zimbabwe.

Wunder, S., 2005. Payments for Environmental Services: Some Nuts and Bolts. CIFOR Occasional Paper No. 42. Center for International Forestry Research, Bogor, Indonesia. 24 pp.

WWF, 1997. Marketing Wildlife Leases. Wildlife Management Series No. 3. WWF Regional Programme Office, Harare, Zimbabwe. 43 pp.

From:	Gadd, Michelle
To:	Vannorman, Tim
Subject:	Re: Frost and Bond reference in Zimbabwe finding
Date:	Friday, July 07, 2017 9:26:08 AM
Attachments:	Alexander_et_al-2000-Development_and_Change.pdf Balint Mashinya 2005 Community conservation decline_Balint.pdf Bond-Campfire.pdf Frost Bond 2008 CAMPFIRE as a PES.pdf

---

Yes, I meant to give you the reference pdfs.

On Fri, Jul 7, 2017 at 8:54 AM, Vannorman, Tim <tim_vannorman@fws.gov> wrote:

> Michelle,
>
> You referenced Frost and Bond in a comment about CAMPFIRE. Do you have that reference available?
>
> Tim
>
> --
> Timothy J. Van Norman, Chief
> Branch of Permits
> Division of Management Authority
> U.S. Fish and Wildlife Service
> (703) 358-2350
>
> ***Sign up** for our e-newsletter to learn how we're working around the globe to protect species and their habitats!*

--
Michelle Gadd, Ph.D.
Program Officer, African Elephant and African Rhino Programs
Division of International Conservation
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803
michelle_gadd@fws.gov

From: Simukai Nyasha
To: "Vannorman, Tim"
Subject: RE: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
Date: Friday, July 08, 2016 6:28:17 AM

I thought you had already received the priorities from the Director General. Let me verify with him and then I update you.

Regards

Simukai Nyasha
International Conventions Manager
Cell: +263-772 678 351

From: Vannorman, Tim [mailto:tim_vannorman@fws.gov]
Sent: Wednesday, July 06, 2016 8:47 PM
To: Simukai Nyasha <snyasha@zimparks.co.zw>
Subject: Fwd: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction

Simukai,

I hope all is well with you. I wanted to follow up on my message below regarding priorities for implementing the elephant management plan. I am anxious to finalize my review and updated finding but am at a loss in how to rectify the Director General's statement without more information. Any additional clarification that you could provide would be greatly appreciated.

Sincerely,

Tim

---------- Forwarded message ----------
From: **Vannorman, Tim** <tim_vannorman@fws.gov>
Date: Tue, May 24, 2016 at 1:13 PM
Subject: Re: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
To: Simukai Nyasha <snyasha@zimparks.co.zw>, Edson Chidziya <wsithole@zimparks.co.zw>, Edson Chidziya <(b) (6) [redacted]

Dear Director General,

Thank you for your May 9, 2016, letter providing more information on the football stadium. Based on your statement, I take it that the proceeds generated from only 10 elephant hunts was being allocated for the construction of the stadium. This would be more in line with our

perception that the hunting revenue received by CAMPFIRE are for smaller community projects, as oppose to larger construction or capital gains projects.

I fully recognize that the limitations that have occurred due to the suspension of elephant trophy imports has affected your budget and ability to fully implement the 2015-2020 Management Strategy. However, has your department prioritized the activities identified in the strategy to fully utilize the albeit budget allocated to elephant management? I ask this not to require additional work from your staff, but to better quantify the statement made in the strategy and, if possible, strengthen my enhancement finding to authorize imports of trophies.

I look forward to your response,

Sincerely,

Tim

On Mon, May 9, 2016 at 9:01 AM, Simukai Nyasha <snyasha@zimparks.co.zw> wrote:

> My apologies for responding late to your email. Herewith attached please find a response letter to the issues raised in your email.
>
> It's true Olivia is no longer with Zim Parks and we had not seen the correspondence that you emailed on 4th April. For all future correspondences, please communicate through my email and copying the Director General also if need be.
>
> **Regards**
>
> **Simukai Nyasha**
> **International Conventions Manager**
> **Cell: +263-772 678 351**
>
> **From:** Vannorman, Tim [mailto:tim_vannorman@fws.gov]
> **Sent:** Monday, April 25, 2016 4:18 PM
> **To:** snyasha@zimparks.co.zw; Edson Chidziya <wsithole@zimparks.co.zw>; Edson Chidziya (b) (6)
> **Subject:** Fwd: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
>
> Dear Edson,
>
> I was informed last week by John Jackson that Olivia is no longer with ZPWMA. If this is the case, I am concerned that the e-mail I sent her on April 4th may not have been seen. I am hoping that this additional information can allow me to finalize the USFWS position for imports of 2016 elephant trophies.
>
> If you have any questions, please let me know.

Sincerely,

Tim

---------- Forwarded message ----------
From: **Vannorman, Tim** <tim_vannorman@fws.gov>
Date: Mon, Apr 4, 2016 at 1:06 PM
Subject: Fwd: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
To: Olivia Mufute <omufute@zimparks.co.zw>

Dear Olivia,

I hope all is well with you. I am trying to finalize our finding for 2016 for Zimbabwe elephant trophies and a question arose.

An article in Newsweek (below) raised questions about how funds are used by RDC. It is my understanding the funds generated from trophy hunts goes back to the community for activities to benefit the communities, such as clinics, schools, and salaries for game scouts. I have some doubts about what the article identifies, but could you or someone on your staff elaborate on the article?

In addition, in reviewing the 2015-2020 Management Strategy, it states that the plan, if fully implemented, would require a greater amount of money than is currently available. I would assume that part of the reason for this statement is because for the last two years, US hunters have declined to hunt in Zimbabwe and therefore less money has been generated than in previous years. Fully recognizing the financial situation that your department is in, what aspects of the management plan is do you anticipate could not be carried out at this time? Also, is it anticipated that if the US again allowed imports of elephant trophies in 2016, sufficient revenue would be generated to facilitate full implementation of the plan in 2017?

Thank you for assistance in this matter.

Sincerely,

Tim

---------- Forwarded message ----------
From: **Save The Elephants News Service** <stenews@elephantnews.org>
Date: Tue, Mar 22, 2016 at 5:03 PM
Subject: [African-elephant] Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
To: african-elephant@elephantnews.org

Zimbabwe: Elephant Hunting Dispute Slows Football Stadium Construction
Conor Gaffey, Newsweek
March 22, 2016

The construction of a football stadium in rural western Zimbabwe is being stalled by a dispute over its unusual source of funding—elephant hunting.

Zimbabwe's environment minister Oppah Muchinguri has been forced to deny claims that she is blocking pre-sanctioned elephant hunts, the funds from which would be used to start building the stadium in Tsholotsho.

Under Muchinguri's predecessor Saviour Kasukuwere, the Tsholotsho Rural District Council (RDC) was issued with hunting permits for some 70 elephants, with the funds raised from the hunt to be put towards building the stadium, Zimbabwe's state-owned Chronicle newspaper reported.

The chairperson of Tsholotsho RDC, Cde Alois Ndebele, accused Muchinguri of holding up the process on Sunday, according to the Chronicle. "We have all the documents in the office but after the new minister was appointed, things just started stalling, there has not been any movement," said Ndebele, referring to Muchinguri's replacement of Kasukuwere as environment minister in July 2015 in a cabinet reshuffle by President Robert Mugabe.

But Muchinguri dismissed the criticism on Monday, saying that the hunts had been suspended after elephants were killed in the area by poachers laying cyanide. "The country suffered bad publicity from the cyanide poisoning and it was felt that the hunts be stopped while the poaching issue was being handled," said Muchinguri, according to the Chronicle.

Tsholotsho borders Hwange National Park, where scores of elephants were killed by poachers using the poison in 2015, with most of the elephants having their tusks removed. Hwange is overpopulated with elephants, currently hosting twice its carrying capacity with 53,000 of the creatures, and hunting is often cited as a means of generating funds for local communities impacted by elephant populations. Elephant hunting packages sell for around $30,000 online.

http://www.newsweek.com/zimbabwe-elephant-hunting-dispute-slows-football-stadium-construction-439504

This news service is provided by Save the Elephants.

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All Scientific Papers:
http://elephantnews.org/mailman/listinfo/allpapers_elephantnews.org

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Michelle Gadd, Ph.D.
Program Officer, African Elephant and African Rhino Programs
Division of International Conservation
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5275 Leesburg Pike, MS: IA

Falls Church, VA 22041-3803
michelle_gadd@fws.gov

--
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U.S. Fish and Wildlife Service
(703) 358-2350

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MANA POOLS ANTIPOACHING WORKSHOP: OUTPUTS	MANA POOLS ANTIPOACHING WORKSHOP: ACTIVITIES	CITES MIKES: ACTIVITIES SHOWING SYNERGY OF PROJECT WITH MANA POOLS (LOWER ZAMBEZI VALLEY) ANTIPOACHING STRATEGIC PLAN
1.1 Informer network, investigation and Intelligence system established	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistleblowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social enforcement) - Establish intelligence database - liaise with existing successful anti-poaching units in the Zambezi Valley (e.g. DAPU)	Support the establishment and operation of an informer network, in collaboration with ZPWMA Investigations Office Establish an auditable fund and payment schedule for rewards made for information on wildlife crime that leads to encounters, arrests or prosecutions, in collaboration with ZPWMA Investigations Office
1.2 Well equipped, trained and fully operational units in place	Carry out an assessment / audit of current capacity, prioritise needs and mobilize resources to fill gaps - Recruit and train field rangers and research staff - Explore the Gonarezhou model for NGO employment of cadet rangers - Conduct frequent	Identify and prioritise basic ranger field equipment needs in collaboration with site-based patrol staff, and provide equipment to 60 rangers based across Mana Pools, Sapi and Chewore Develop new vegetable garden at Kapirinengu to provide fresh produce to supplement patrol rations, and identify key maintenance and management issues with Mana Pools vegetable garden and rehabilitate once addressed
1.3 Patrols strengthened	Establish effective patrolling force of 40 deployable rangers (exclusive of those on other duties or on leave) - Establish (or review?) Standard Operating Procedures - Establish regular training and retraining schedule - Establish well-equipped reaction	Define key patrol staff training needs in collaboration with Mana Pools and Sapi/Chewore Area Managers, and carry out three training courses for selected patrol staff Carry out basic training of wildlife law enforcement patrol staff based at Mana Pools National Park in ranger-based monitoring

	teams - Re-examine the practice of appointing Honorary officers	principles and practices
1.6 Joint operations (national and cross-border) established	Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) - Conduct joint operations	Support the establishment and operation of an informer network, in collaboration with ZPWMA Investigations Office
2.6 Access: 3 4x4 vehicles (operational for law enforcement only) 1 lorry 1 tractor 3 boats (1 Pelican and 2 Aluminium – 90HP Mercury or Marina) Aircraft: Microlight / Bathawk / Plane / Helicopter - rental	Acquire vehicles and boats - Establish management and maintenance protocols and packages for vehicles and boats, including supporting a capable mechanic based at the Park. - Outsource aircraft and pilot package	Purchase one Pelikan boat and deploy to Chewore North (Kapirinengu), and organise training for two coxswains in boat operation and maintenance Provide Anti-poaching vehicle
2.7 Field stations	Undertake feasibility study for new bases and pickets in relation to hotspots. - Establish anti-poaching bases at Nyakisakana - Establish [anti-poaching or picket?] base at Sore Sore - Establish boundary pickets & hot spot pickets (refer to Maps) - [Use MPNP Management Plan Zone Plans and develop approaches	Provide support for Lower Zambezi law enforcement coordination and rapid response operational base Carry out assessment of existing operational control rooms at Mana Pools and Chewore Headquarters, and rehabilitate facilities in line with findings Review optimal outpost construction type, facilities and location with area managers, and construct outposts in accordance with agreed plans

2.8 Communications - VHF - Solar power - [Cell phones - Computer - GIS - SMART software Cyber Tracking]	Establish digital VHF radio GPS communication tracking systems across LZV (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes) - Complete activity list for other tech needs.	Review communication equipment needs with Area Managers, and purchase and provide VHF radio handsets and spare batteries in line with requirements Review GPS needs, identify optimal GPS model and supplier, and provide units to patrol staff involved in ranger-based monitoring data collection in Mana Pools, Sapi and Chewore
3.1 Monitoring system for wildlife populations and illegal activities established	Carry out regular surveys (ground counts carried out by rangers) - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations and RDCs in LZV - Introduce ranger-based monitoring (SMART, MIKE, ETIS) across all stations in LZV - Analyze the data and use in adaptive	Review capacity needs of senior law enforcement staff based at Mana Pools and Chewore, and support training opportunities to meet defined needs Provide laptop computers and basic SMART training (led by Chewore administrator) on data management to selected staff at Mana Pools and Chewore North Offices Identify key staff in Mana Pools and Chewore operational bases for further training in SMART data management and reporting, with a particular focus on generating management orientated reports and MIKE data

From:	John J. Jackson, III
To:	Prince Mupazviriho; Edson Chidziya; David Cumming; Liberty Nyaguse
Subject:	CITES MIKE Project in Mana Pools, Sapi, and Chewore ENESCO UNESCO....
Date:	Monday, July 18, 2016 10:18:00 AM
Attachments:	Synergy between CITES MIKES and Mana Pools Antipoaching Strategy, part of the Lower Zambezi Regional Elephant Plan.pdf

---

FYI

> **From:** Lynne Taylor <>
> **Date:** July 17, 2016 at 11:28:28 AM CDT
> **To:** John Jackson <>
> **Cc:** Marco Pani <>
> **Subject: Re: CITES MIKE Project in Mana Pools, Sapi, and Chewore ENESCO UNESCO....**

John,

I am camped at Nyakasikana. Attached is a table that I have compiled very quickly to show you the very close synergy between the Lower Zambezi Valley (compiled at the Mana Pools Antipoaching Workshop, March 2015) strategic antipoaching plan and the CITES MIKES project and which antipoaching plan is part of the LZV Regional Elephant Plan.

And yet another example is the building of this antipoaching base at Nyakasikana - which will be completed early August, and which fulfils that activity (2.7) from the Antipoaching Plan - to which more than 100 donors and stakeholders have donated and where CITES MIKES will be contributing towards the equipping of the operations room - including of course Houston Safari Club and West Texas SCI. Other donors have been British Embassy, Virgin Unite, German Embassy, Kate Sanderson (Species Survival Commission), Elephant Crisis Fund.

The latter donors all received project proposals from Tashinga Initiative and the individuals donated through Zambezi Elephant Fund group.

So yes, you definitely can hold it out to USFWS as a legitimate support and partial implementation of the regional plan. Yes! The Mana Pools Antipoaching Plan was Tashinga Initiative's "bible" at the time of the CITES MIKES visit to the LZV in August 2015 and its relevance within the LZV Elephant Management Plan is clear. Furthermore, all the Regional Elephant Plans, despite any possible cynicism perhaps expressed about these, are the most vital documents on which ZPWMA can hang its coat, and certainly whilst the coat is in its current threadbare state, these do, as far as I am concerned, form the very spine upon which the new Parks will be built. It may not be apparent immediately, but so much has happened quietly.

Further examples: The internal roads in LZV have ALL been graded and are a great pleasure to drive. I have driven them all in the last month. The terrible 31-k stretch between the two gates entering the LZV and Mana Pools has also been partially graded. The Mana Pools airstrip has been repaired and also has its CAA certification as of last week. I am told that Zambezi Society are putting up some tentage on the southern boundary with water as a

temporary Picket Post for Rangers. The CITES MIKES project will be putting up formal picket post structures with solar power.

Tashinga is about to start working on the compilation of an ACCURATE list of equipment that is needed for rangers in LZV. We are having frank discussions about the worthiness/otherwise of the Chinese Sino Zim equipment, some of which has already disintegrated. Tuesday this coming week, here at our camp at Nyakasikana Base.

Further we are starting to work through HELP ZIMBABWE on establishing a community goat project to provide food for the rangers.

I keep referring back to information and intelligence gathering. Tikki Hywood Trust appear to be leading on this vital aspect and recently attended a 2-day workshop held with Conservation Lower Zambezi in Zambia. I was in touch with Ian Stevenson about it - I did not know about it beforehand. Our initial efforts at cross-border collaboration appear to have come to a halt, but I guess this is the current climate that is driving this negatively.

On the fundraising side, I am hoping to hear back from THE THIN GREEN LINE FOUNDATION, Australia, on the submission of two proposals - one for the completion of this antipoaching base and the other for a training course for rangers in antipoaching. This has now become critical for me to hear since our quest for water for this base has finally been rewarded! We are almost at the point of not being able to dig our well any deeper because of the volume of water that we have found in the last 3 days - at least 6,000l per hour currently! What a find! There is such excitement at long long last, as this volume of water has never been found in this area before. I am now putting my neck out on the line re funding to complete this as we have no option now but to continue to conclusion!

As a matter of interest, Kavinga Camp, about 10ks away, are accessing almost 50,000l per hour. Having established a drinking pan, each day now, as the dry season starts to advance, more than 100 elephant gather every day right now. As the season advances this increases to 500 elephant every day.

So really hoping that THE THIN GREEN LINE will let me know as soon as they have decided (I submitted by 5th June).

If this fails, I have to put my thinking cap on. I am looking for USD20,000, and this definitely please does not mean that I am asking you, but so that you know having raised and implemented USD180,000+ towards the full establishment of this vital antipoaching base, we are in the very last phase now.

All best, and I hope all the above information helps.

Lynne

On 17 Jul 2016, at 14:37, John Jackson <> wrote:

Lynne,

Can you provide more details about this project funding? Did the regional elephant planning , particularly anti-poaching workshop, have any relationship to this CITES Project. Is this to implement any part of the Regional Elephant Plan? Can I legitimately hold it out to USFWS to be partial implementation of the regional plan? Did the Regional planning help?

Thanks,

John

From: John Jackson
To: Vannorman, Tim
Subject: Re: Zimbabwe National Parks
Date: Monday, July 18, 2016 3:46:59 PM

Tim, There is no attachment as such, just the email trail from David Cumming that the supplementation is going forward.

Sent from my iPad

On Jul 18, 2016, at 12:43 PM, Vannorman, Tim <tim_vannorman@fws.gov> wrote:

> John,
>
> Thanks for the e-mail. If there was an attachment, I did not get it in your e-mail. Could you resend it?
>
> Thanks,
>
> Tim
>
> On Mon, Jul 18, 2016 at 8:38 AM, John Jackson <jjjiii@att.net> wrote:
>> Tim, This is the prioritization of the National elephant action plan budget expenses you asked for. David and Prince, the Permanent Secretary, want to do it in a participatory process of the Regional Committees. No telling how long it will take or what more it will cost but it Is moving.
>> I fired Rowan Martin as a contractor long ago because he had no intent to jump for the USA because of its misinformation. Let's not burn out David Cumming as well, please.
>> In the meantime the revenue continues to fall and the backlog of needs builds because of the import suspension. It is a " Catch 22." They need the revenue from the hunting that they are being denied by the suspension. The loss of potential income is many millions. Not good. ZimParks and everyone need income, not more expenses and delay while costs backup. . I again suggest it is time for a positive enhancement finding before more of the hunting season passes or other reasons for inquiry arise.
>> Then there can be funds to budget, and a more trusting relationship.
>> Sent from my iPad
>>
>> Begin forwarded message:
>>
>>> **From:** David Cumming (b) (6)
>>> **Date:** July 18, 2016 at 5:06:50 AM CDT
>>> **To:** John Jackson <jjjiii@att.net>
>>> **Subject: Re: Zimbabwe National Parks**
>>>
>>> Thank you John,

I contacted Liberty Nyaguse this morning and he has confirmed that the Actin DG has given the go-ahead to develop a supplement to the elephant management plan. I urged Liberty to move on the issue and to convene the meeting of Regional Managers as soon as possible.

Will keep you informed of progress,

Best wishes,

David

> On 15 Jul 2016, at 15:20, John Jackson <jjjiii@att.net> wrote:
>
> David, FYI.
>
> Sent from my iPad
>
> Begin forwarded message:
>
> **From:** "John J. Jackson, III" <cf@conservationforce.org>
> **Date:** July 14, 2016 at 9:47:31 AM CDT
> **To:** JJJ Travel <jjjiii@att.net>
> **Subject: Fwd: Zimbabwe National Parks**
>
> -------- Forwarded Message --------
> **Subject:**Fwd:
> **Date:**Thu, 14 Jul 2016 16:32:01 +0200
> **From:**P Mupazviriho <pmupazviriho@environment.gov.zw>
> **To:**cf@conservationforce.org
>
> ----- Original Message -----
> **From:**
> "Noni Garira"

(b) (6) [redacted] >

To:
pmupazviriho@environment.gov.zw

Sent:
Thu, 14 Jul 2016 16:13:30 +0200
Subject:

Dear John J. Jackson III

Find attached document explanation from Zimbabwe National Parks explaining their responds they made to USFWS and their letter to the attention of Mr Timothy J. Van Norman of 09 May 2016.

Best regards,

Powered by G.I.S.P.

<parks usfws 1.jpg>

--

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

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From:	Gadd, Michelle
To:	Tim Vannorman; Hoover, Craig; Laura Noguchi; Horton, Monica; Anna Barry
Subject:	Fwd: Booth: clarification on Elephant Survey request - Zimbabwe
Date:	Wednesday, July 26, 2017 6:05:36 PM

FYI a request from Zimbabwe for additional survey money (but they did not submit an application).

---------- Forwarded message ----------
From: **Vernon Booth** (b) (6)
Date: Sat, Jul 22, 2017 at 4:50 AM
Subject: Re: Elephant Survey - Zimbabwe
To: "Gadd, Michelle" <michelle_gadd@fws.gov>

Hi Michelle,

Thanks for getting back to me. As I mentioned in an earlier email, the Permanent Secretary for Ministry of Environment and Water here in Harare called me to a meeting to discuss options to advance the Zimbabwe Elephant Management Plan. The Wildlife Authority is taking various steps within its capacity to implement this plan, one of which is to establish the regional management committees called for in the plan. I have been asked to make a short presentation on funding options at the Sebungwe Regional Meeting on Thursday next week. There are several loosely coordinated management initiatives taking place around the country that are funded by NGOs, mostly in the law enforcement arena and providing water (e.g. Benjane Trust, Friends of Hwange, Bumi Hills Anti-Poaching, Tashinga Initiative etc.). The objective of these regional committees is to improve the coordination of these initiatives and identify where further input is needed. It is clear however, that there is very limited funding available for baseline research or monitoring.

At the meeting with the PS, I mentioned that unless a concerted effort is made now to raise funds, it will be 4 years (possibly 5 years) before another national elephant population survey is conducted. In the mean time, there are a number of events taking place that are attracting attention with regard to the Zimbabwe elephant population. For example, export of live animals, poaching for ivory, poisoning of elephants (mostly in Hwange), high populations of elephants on the conservancies etc. I emphasised that it is important that Zimbabwe be pro-active to show that it is taking the implementation of the management plan seriously, and should not wait for the rest of the world to demand information on its elephant population.

Locally it is possible to coordinate data on indicators such as investment in law enforcement (i.e. how funds from the parks authority from hunting and elsewhere are used), effectiveness of this management (patrol effort, arrests, prosecutions etc), levels of legal and illegal offtake (e.g. from hunting, poaching, problem animals etc.). This can be achieved using the local capacity under the guidance of the National Elephant Coordinator in tandem with the regional committees and the many stakeholders.

Getting a grip on the national population trends is another story since this requires substantial funding. It is still not too late to plan and undertake a survey of the Matabeleland North population (the biggest in Zimbabwe) and possibly the Zambezi Valley if this can be done by late September/October. The other regions could be done in 2018. The alternative is to plan

for a national survey in 2018.

I am acting in my private capacity in this regard. My reason to contact you was to see whether there was any feasibility of securing some funds for this year. If this was possible, I would pass this on to the Ministry and Wildlife Authority who would formally prepare the request to FWS.

Best regards

Vernon

--
Vernon Booth
Phone/Fax Home: +263 4 497 851
Cell Zimbabwe: (b) (6)
Cell South (b) (6)
Alternative Email: swallow@yoafrica.com
Web: http://www.vernonbooth.com
Skype: (b) (6)

--
Michelle Gadd, Ph.D.
Program Officer, African Elephant and African Rhino Programs
Division of International Conservation
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803
michelle_gadd@fws.gov

From:	Kessler, Danielle
To:	Craig Hoover; Gadd, Michelle; Noguchi, Laura; Tim Vannorman; Mary Cogliano; Dirck Byler
Cc:	Heidi Ruffler
Subject:	Revisiting elephants poaching stats, again
Date:	Wednesday, July 26, 2017 9:03:29 AM

Some NGOs seem to be consistently reducing their statistics regarding the number of elephants killed every day (96 elephants to 55 per day; 1 killed every 15 minutes to every 30 minutes).

Michelle - I know that you and I have had this conversation before and since we've previously stated statistics such as "More than 30,000 killed each year" and "One killed approximately every 15 minutes", we've stuck with those, since there isn't great data to support adjusting them.

As you all know, the Zimbabwe finding on import of sport-hunted trophies will publish soon, and while I didn't notice any continent-wide poaching estimates in the finding, I think it's quite reasonable to assume that we may be asked, or want to talk about the overall poaching of African elephants.

So, are we still going with our previously stated stats (e.g. More than 30,00 annually.... one every 15 minutes...), which I think are based on the Wittemeyer study from 2014?

Thanks for your input. Danielle

---------- Forwarded message ----------
From: **Jessica Sotelo, WWF** <ecomments@wwfus.org>
Date: Wed, Jul 26, 2017 at 5:27 AM
Subject: Gone: 55 elephants every day
To: Danielle Kessler <danielle_kessler@fws.gov>

Dear Danielle,

School is out, but, of course, poachers don't take a break for summer. Every year, they slaughter around 20,000 African elephants for their ivory—that's an average of **55 elephants killed every single day.**

Day by day, poaching is driving elephants, rhinos, and tigers toward extinction. Wildlife crime also puts the lives of the rangers who work to protect them at risk, and it disrupts regional security.

Nature needs you today and every day of the year.

From wildlife crime to deforestation to climate change, there are many threats to life on our planet, but **you can do something about them**.

Stand with us today—become a monthly member and part of the solution. Help conserve the biggest forests; safeguard the rivers and oceans; stand up for coral reefs, rain forests, deserts and grasslands; and give a voice to all animals.

Danielle, will you stand up for nature and become a monthly member today?

Yes, count me in ›

Monthly members are the heart of WWF. Together, we are able to protect imperiled wildlife and their habitats around the world day after day, year after year.

Becoming a monthly member is **a simple way to make a lasting difference**. You'll be providing steady support we can count on to protect the living creatures with which we share the planet and help make our critical conservation work possible. It's easy to get started, and you can cancel any time.

Danielle, I hope you'll take two minutes to make your secure monthly gift and join a very special group of people who can proudly say, "**WWF can depend on me to protect the future of nature all year long.**"

Thanks for your generosity,

Jessica Fraser Sotelo
Director, Online Membership
World Wildlife Fund

P.S. For just 50 cents a day, or any amount you choose, you can **make a difference for wildlife and wild places around the world all year long**. If you're not ready to donate monthly, I hope you'll **make a one-time donation** instead. Thank you for being a hero for elephants and nature worldwide.

African elephants © naturepl. com/Anup Shah/WWF

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--
Danielle Kessler
Chief, Office of Outreach & Communications
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Falls Church, VA 22041-3803
703-358-2644
www.fws.gov/international

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From:	Gadd, Michelle
To:	Tim Vannorman; Hoover, Craig; Laura Noguchi; Pamela Scruggs; Danielle Kessler
Subject:	Zimbabwe news: droughts and poachers affecting elephants in NE
Date:	Wednesday, July 26, 2017 9:27:00 AM
Attachments:	ATT00001.txt

See below for a reference to elephant populations in Zimbabwe.
(This agrees with other information - that Hwange and Gonarezhou increased,
while the Zambezi Valley population decreased (19,000 in 2001 to 14,500 in 2014) and
Sebungwe decreased substantially 15,000 in 2001 to 3,500 in 2014).

---------- Forwarded message ----------
From: **Save The Elephants News Service** <stenews@elephantnews.org>
Date: Tue, Jul 25, 2017 at 1:46 PM
Subject: [African-elephant] Elephant 'domesticated' to give tourist rides at Victoria Falls kills handler (Zimbabwe)
To: african-elephant@elephantnews.org

Elephant 'domesticated' to give tourist rides at Victoria Falls kills handler (Zimbabwe)
Peta Thornycroft, The Telegraph
July 24, 2017

See link for photo.

An elephant trained to give rides at Zimbabwe's main tourist resort has charged and killed one of its handlers.

Enock Kufandada, 50, a guide at Victoria Falls, was preparing to put Mbanje, the elephant, into a paddock when it turned and charged at him.

Mbanje, who was about 30, had been giving tourists rides earlier in the day.

Zimbabwe Parks and Wildlife Management Authority rangers were called and they shot and killed the raging elephant.

Police confirmed that Mr Kufandada worked at the Victoria Falls tourist company, Adventure Zone, for more then 10 years.

Mr Kufandada's son, Shepherd, said his father's death was a "great shock".

Brent Williamson, who owns and runs Adventure Zone said he was also "shocked" at the turn of events as his company has been providing elephant rides for several years. He said he spoke with "deep regret…that our domesticated elephant bull, Mbanje charged at one of our staff which resulted in one of our guides losing his life."

Glynnis Vaughan, chief inspector of the Zimbabwe National Society for the Prevention of Cruelty to Animals, ZNSPCA disputes that African elephants cautioned that elephants can never be "domesticated."

"Captured elephants which were used by several tourist companies have killed quite a few people in recent years," she said.

“We should not be surprised when there are tragedies after elephants are captured in the wild when they are young, and taken from their families. Teaching a young elephant to get on to its knees so that people can mount it is vicious, it’s cruel."

ZNSPCA went to court more then 10 years ago and successfully prosecuted an elephant capturer and a major tourist company in Victoria Falls which was buying young elephants to train them for rides for tourists.

Several large companies in Victoria Falls still provide rides for tourists on their elephants, most of which were captured and taken from their families.

Two other elephants, which roamed around provincial capital, Mutare, in eastern Zimbabwe, were shot dead today by government rangers after they killed a policeman last week.

Zimbabwe has tens of thousands of elephants, mostly in the west and the south, more then its wild life areas can cope with given many recent droughts and because poachers have made huge parts of north eastern Zimbabwe hostile territory for the animals.

In the last few years bankrupt Zimbabwe has exported scores of young elephants to China which were captured by the Parks and Wildlife Management Authority on behalf of several Chinese safari parks. ZNSPCA has condemned some some quarantine areas in China where Zimbabwe elephants were held after a recent inspection.

http://www.telegraph.co.uk/news/2017/07/24/elephant-domesticated-give-tourist-rides-victoria-falls-kills/

This news service is provided by Save the Elephants.

For further information on elephants please see Save the Elephants' web site
at http://www.savetheelephants.org

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--
Michelle Gadd, Ph.D.
Program Officer, African Elephant and African Rhino Programs
Division of International Conservation
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803
michelle_gadd@fws.gov

From:	John J. Jackson, III
To:	Tim Vannorman
Cc:	Rosemarie_Gnam@fws.gov
Subject:	Fwd: Strategic research plan for Zimbabwe
Date:	Tuesday, August 08, 2017 3:16:15 PM
Attachments:	ZPWMA Research Stragegy Workshop Agenda Draft 5.docx ZPWMA Wildife Research Strategy - Objectives Tree -D_2 - 7Aug2017.doc

---

Tim,

Please note the Strategic Research Planning Workshop of ZimParks. Conservation Force is funding this for ZimParks.

Thanks,

John

-------- Forwarded Message --------
Subject: Strategic research plan for Zimbabwe
Date: Tue, 8 Aug 2017 13:38:58 +0200
From: Rose Mandisodza-Chikerema
To: John Jackson
CC:

Dear John Jackson,

I hope this email finds you well. We are going to have our strategic research plan on the 9th and 10th of August 2017. Kindly find attached to this email our agenda and objectives tree for your information.

Thank you once again for making this happen.

Kind regards

Roseline
--
*Mrs Mandisodza-Chikerema R. L
“If you wait for perfect conditions, you’ll never get anything done!” (Ecclesiastes 11:4).

From:	Gadd, Michelle
To:	Hoover, Craig; Laura Noguchi; Tim Vannorman; Horton, Monica; Anna Barry; Rosemarie Gnam; Pamela Scruggs; Daphne Carlson Bremer
Subject:	Fwd: [African-elephant] Zim to fight ivory ban
Date:	Tuesday, August 15, 2017 1:50:32 PM

---------- Forwarded message ----------
From: **Save The Elephants News Service** <stenews@elephantnews.org>
Date: Tue, Aug 15, 2017 at 11:11 AM
Subject: [African-elephant] Zim to fight ivory ban
To: african-elephant@elephantnews.org

Zim to fight ivory ban
Jeffrey Gogo, Zimbabwe Situation/Zimbabwe Herald
August 15, 2017

See link for photo.

Environment, Water and Climate Minister Oppah Muchinguri-Kashiri says Zimbabwe is "going to put up a really strong fight" to have a global ban that has left the country stuck with a multi-million dollar 96 000kg ivory cache lifted.

She was speaking after it emerged last week that those opposed to lifting the ban had become unrelenting in their efforts to permanently shut debate on the commercial trade of ivory — the remains of thousands of elephants hunted illegally for their tusks, or those dying from natural causes. It also emerged that the ivory crushing crusade of August 3 in New York, US, where 2 tonnes of ivory were reduced to dust in a calculated demonstration of ivory's worthlessness unless on a live animal, was actually much larger than we had previously thought.

"We have engaged in strategic talks (I cannot pre-empt the talks), and countries that have been fighting us, we seem to be winning them over," Mrs Muchinguri-Kashiri told The Herald Business on August 11, by telephone. "We certainly have not been sleeping. We have been engaging."

Malawi, Mozambique and Tanzania, which have previously resisted calls for legitimising international ivory trade — banned 28 years ago — had since joined the foremost trade advocates of Namibia, South Africa and Zimbabwe, in the "fight", she revealed.

The Environment Minister said they had even managed to convert some among the so-called African Elephant Coalition, a group of 29 African countries that last September, together with the EU and wildlife campaigners, rejected a plan by Zimbabwe, Namibia and South Africa that would have allowed ivory sales in the future. But circumstances are beginning to change as the moratorium on ivory sales that Zimbabwe agreed to back in 2007, ostensibly as a compromise to keep the debate on commercial trade open, is due to expire in November.

"The moratorium is falling away this year. This means that the decisions that were made 10 years ago would have to be renegotiated again," said Minister Muchinguri Kashiri, hopeful a sale will be in the offing this time round.

Zimbabwe wants to be allowed to sell its elephants — at 80 000, the world's second largest herd after Botswana — and to sell its 96 000kg of ivory to help raise revenue to protect the same, wildlife officials say.

That's despite fears in some quarters that doing so would only fuel poaching of the African elephant, already at crisis level, with some 30 000 animals killed illegally each year for their ivory, according to the Great Elephant Census report of 2015.

And in order to prevent poaching, CITES, the global watchdog for endangered animal species, in 1989 banned the global trade in ivory, with Zimbabwe's last legitimate trade happening on November 1, 2008 — a one-time sale of 3 700kg of ivory to Japan and China. Based on the average price of $135 a kg reported in the 2008 transaction, we assume any future sale will be benchmarked against the last per kg selling price, valuing Zimbabwe's current stock of ivory at an estimated $13 million, according to calculations by The Herald Business.

Hard done

It is worth noting that Harare's plan to push through the adoption of the Decision Making Mechanism, which would allow trade in ivory in future, was rejected by an overwhelming majority of 76-20 during the last Convention on International Trade in Endangered Species (CITES) meeting in South Africa in 2016.

Now, that's in effect a rejection of the compromise agreement on the moratorium of 2007, to which Zimbabwe committed. It is also one of the clearest indications yet of the growing influence of the anti-ivory trade lobby, and how the opportunity for legitimate trade is closing with each passing year.

Campaigners are using various tactics to turn the world's attention away from endorsing legal trade calls by those countries in southern Africa bearing the world's burden in looking after elephants, which often times destroy food crops and homes. From burning to crushing, NGOs, governments and conservators have brought destruction to thousands of kilogrammes of confiscated ivory, hammering home the message ivory was not for sale.

We reported here last week that the World Elephant Society, a US-based non-profit group, had crushed 2 000kg of "illegal ivory". It has since emerged the Society was not acting alone, Patricia Sims, a co-founder of the WES, said by email. The ivory crush was conducted by a coalition of organisations led by the New York State's Department of Environmental Conservation (DEC) and Wildlife Conservation Society (WCS), with support from some of the world's most prominent wildlife conservation NGOs.

Participants included the African Wildlife Foundation, Association of Zoos and Aquariums, Humane Society of the US, International Fund for AnimalWelfare, National Geographic, National Resources Defense Council, Saving Animals Facing Extinction, US Wildlife Trafficking Alliance, WildAid, Sims said.

This is no longer grand-standing. Here is a large group of powerful, wealthy actors that are capable of influencing global legislation on ivory trade. The fact that these groups could come together in a common act that would otherwise fail to find currency in Zimbabwe, Namibia or South Africa, demonstrates just how big the fight for ivory has become.

We'll stick around

We asked Minister Muchinguri-Kashiri whether Zimbabwe would consider options outside the CITES legal regime, should efforts at reform within the 180-government member body fail.

"This is an issue that requires a lot of debate on our side here in Zimbabwe," she admitted, but only.

"We cannot afford to leave CITES just like that. We work as a region . . . so whatever position that Zimbabwe adopts, we have to sell that to the other countries in SADC. Together, we form a formidable force, which will lobby, if we are required to do so, as we have been doing in the past."

In the past we have argued that a radical alternative may include a complete or partial break-away from the Convention.

In this scenario, countries backing the trade in ivory may create their own market, supported by bilateral instruments and agreements that do not only legitimise trade outside of the Cites, but ensure it is sustainable, transparent and accountable — with all trade statistics made public.

Or the ivory proponents could stick around in CITES, and hope to force change from within. Minister Muchinguri-Kashiri accused unnamed high ranking officials of marshalling a domestic "mafia" killing elephants for their ivory, as frustrating Zimbabwe's efforts at achieving world acceptance as a genuine case for liberalising ivory trade.

"We are trying to clean up our image (as a country) . . . it's a mafia. I am dealing with a mafia," she complained.

God is faithful.

http://www.zimbabwesituation.com/news/zim-to-fight-ivory-ban/

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Chronology of Zimbabwe's current management plan

December 1, 2014 – Conservation Force (CF) email with agenda for Elephant Conseration Policy and Management Plan workshop (December 2-4, 2014)

May 4, 2015 – Conservation Force (CF) email on preparatory documents for Sebungwe workshop

May 5, 2015 – CF email on Mana Pools Workshop Proceedings (held March 30 April 2, 2015)

May 8, 2015 – CF email on Sebungwe workshop agenda (held May 19-22, 2015)

May 14, 2015 – CF email on Sebungwe workshop factsheet

August 3, 2015 – Email from Zimbabwe government with a copy of the "Draft – July 2015 Action Plan for Elephant Conservation and Management in Zimbabwe (2015 – 2019)"

September 30, 2015 – CF email on South East Lowveld Workshop Proceedings (held August 7-11, 2015)

February 15, 2016 – Email from Zimbabwe Government with copies of the four subregional action plans

February 29, 2016 – CF email final print of management plan (Service received a hard copy of the signed management plan around that time period as well)

From:	Vannorman, Tim
To:	Russell Husen
Subject:	Chronology of Zimbabwe"s current management plan
Date:	Friday, August 25, 2017 3:13:47 PM
Attachments:	Chronology of Zimbabwe national management plan.docx

---

Russ,

I went through my e-mails and documents and came up with the attached chronology on the development of Zimbabwe's current national and regional management plans.

Tim

--
Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

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From: John J. Jackson, III
To: Tim Vannorman
Cc: Bryan Arroyo - FWS
Subject: Fwd: Zimbabwe: 12 Milllion Euro Boost for Campfire Review - allAfrica.com
Date: Monday, September 19, 2016 10:06:48 AM
Attachments: WebPage.pdf

Tim,

Please note this CAMPFIRE development.

Thanks,

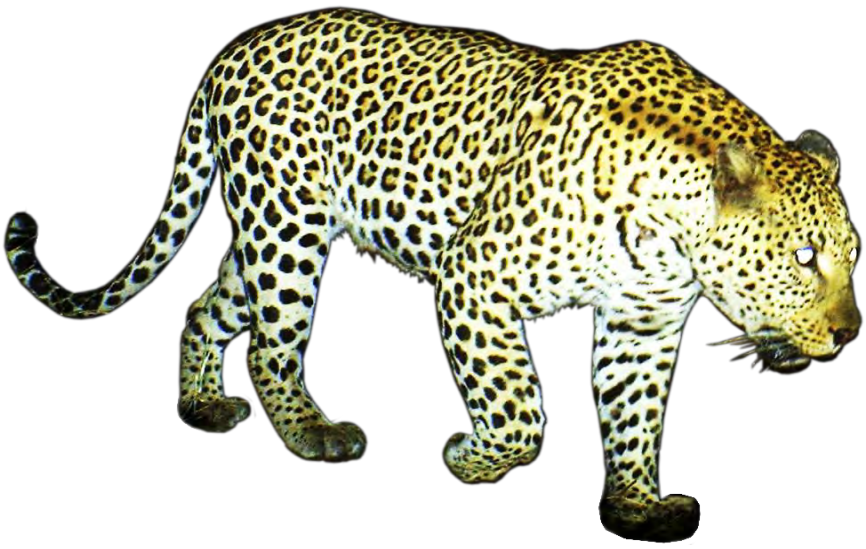
John

> **From:** Marco Pani (b) (6)
> **Date:** September 17, 2016 at 7:09:20 AM CDT
> **To:** John Jackson , Regina Lennox <regina.lennox@conservationforce.org>
> **Subject: Zimbabwe: 12 Milllion Euro Boost for Campfire Review - allAfrica.com**
>
> FYI
>
> Marco
>
> http://allafrica.com/stories/201609160812.html

DAPU Second Period Newsletter 2017

Charlton McCallum Safaris

30 September 2017



DAPU

DANDE ANTI POACHING UNIT

WELCOME

Dear Friends,

Thank you all so much for your unwavering support. DAPU has continued to build on our very successful first quarter 2017. Snare yields, elephant poaching and illegal netting are at an historic low – let's hope that we can maintain this as we move out of the "safe" hunting season into the hectic burning and poaching season. Poaching always picks up as the hunting winds down, however we actually are able to dedicate more and more resources and time to DAPU because of that. This arrangement typically works very well indeed!

We have continued to meticulously document all of our support, deployments, wins and losses and here we share a summary with everyone who so graciously and generously supported all of our efforts both financially and in kind. As we grow from strength to strength we look forward to your continued support.

With Regards,

Myles E. McCallum
James D. Charlton
Charles Ndondo

Harare, Zimbabwe
30th September 2017

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1. Changes

We have further bolstered the troops with the inclusion of Owen Zviwanza who is a local from Kanyemba and is a Learner Professional Hunter. Owen is 26 years old and is in the second year of a 4-year apprenticeship to be a professional hunter (or guide). Like Peter Solomon, Owen will alternate between going on patrol, attending to PAC and accompanying the odd hunt for experience.

CMS is doing a bit of hunting in the Charara Safari Area, which has been neglected for many years. Peter and Muno have been there full time for 3 months, slowly and successfully getting on top of what poaching they can.

We have had our first disciplinary issues with two DAPU scouts who went AWOL on duty – they have been replaced by two more from the same communities so there are no .net losses in terms of jobs to those wards.

2. Peter Stewart fine art

Well know artist Peter Stewart has created a "DAPU collection" and Peter has undertaken (very graciously) to donate 40% of the proceeds of any of the works in the collection to DAPU.
http://cmsafaris.com/dapu/DAPU-COLLECTION-2017.pdf

3. The dry season
fires, water, and poaching

As I am sure most of you are aware the 2017 rainy season has been incredible BUT the dry season snaring and burning season is now upon us. DAPU patrols are currently patrolling the big

water sources as often as possible for obvious reasons. The local folk are patiently waiting for the rain so as to plan their crops – often at times like this the urge to poach is very strong!

Starting a bushfire in Zimbabwe is an offence and we are beginning to treat it as one. DAPU patrols are now required to investigate fires with the aim of:

1. Putting them out if possible.
2. Finding, apprehending and charging offenders.

Dande as a whole has seen a 69% reduction on hectares lost to fire between 2015 and 2016. We hope to further reduce that this year. We plan to start incentivizing arrests and convictions of those who burn deliberately.

3. Snaring & general poaching

January to the end of August of 2017 has been much, much quieter than the same period of 2015 and 2016. In terms of snares picked up and meat poachers arrested the yield is drastically reduced.

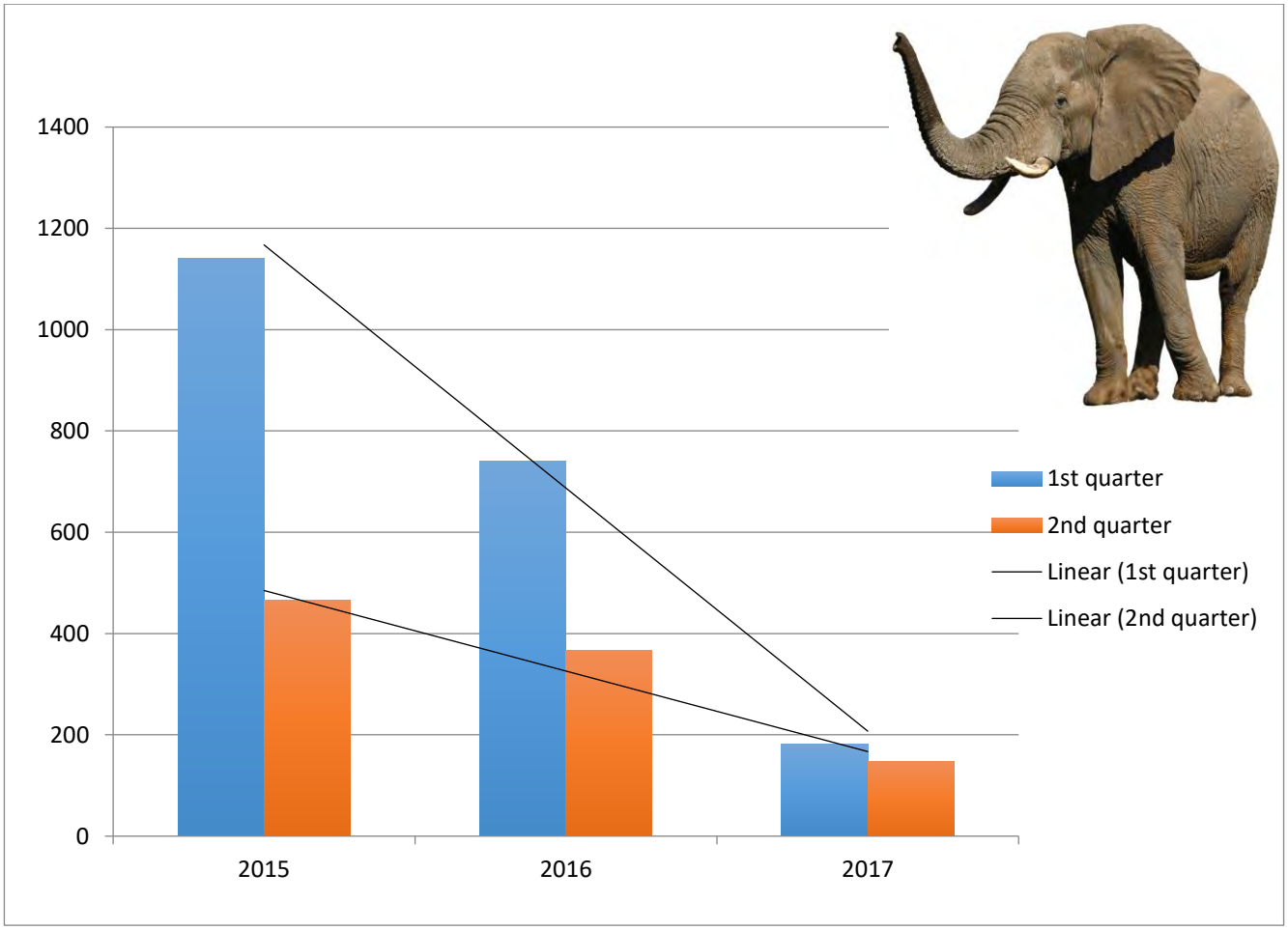
2017 FIRST AND SECOND PERIOD BASELINE COMPARISONS

Month	No. of snares	Dogs shot	Meat Poachers convicted	Elephant poachers	Weapons retrieved	Rewards paid
January	71	0	3	0	2	US$784
February	0	0	1	0	0	US$150
March	7	0	0	0	0	US$19
April	103	0	0	0	0	US$133
	181	0	4	0	2	US$1,086.00
May	9	0	0	0	0	US$9
June	89	0	2	0	0	US$118
July	19	1	2	0	0	US$439
August	30	0	0	0	1	US$48
	147	1	4	0	1	US$614
Total YTD	328	1	8	0	3	US$1,700.00

2016 FIRST AND SECOND PERIOD BASELINE COMPARISONS

	No. of snares	Dogs shot	Meat Poachers convicted	Elephant poachers	Weapons retrieved	Rewards paid
January	300	0	3	0	0	US$821
February	208	0	0	2	0	US$978
March	95	0	0		0	US$97
April	137	0	1	0	2	US$321
Total	740	0	4	2	2	US$2,217
May	94	0	5	0	4	US$1,310
June	75	0	0	0	0	US$83
July	27	0	0	0	2	US$67
August	164	1	0	0	0	US$254
Total	360	1	5	0	6	US$1,714
Total Y.T.D.	1100	1	9	2	8	US$3,931

2015, 2016 and 2017
first & second Period snare yields compared



4. Elephant poaching

Finally we have picked up the carcasses that we knew must be there. Two in ward 2 in the Irira area and one in ward 1 for a total of three for 2017 thus far. The two Irira carcasses look like a young bull and a young cow respectively, in ward 1 a cow. Total combined ivory yield was probably only 30kg.

Whilst losing only three elephants is pretty good, and today may be even considered excellent, we certainly need to strive for ZERO losses. As the hunting season slows down, so the presence

of hunters also decreases – this has always been and will continue to be the danger time for all poaching.

Ward 1 – elephant cow

One bull and one cow – Yirira river 2017

7. Problem Animal Control

Duties for DAPU scouts also include attending to Problem Animal reports (PAC). Obviously all the crops are now harvested so the cases of genuine PAC are few and far between.

7.1.1 Elephant

None shot BUT there have been sporadic raids by mostly young bulls into riverside vegetable gardens. We treat every report as serious and the DAPU teams really react as strongly as they can early on. This normally saves us shooting.

7.1.2 Lion

Sporadic killing of livestock persists especially in ward 4 but no lions shot.

7.1.3 Buffalo

One blind buffalo cow in the Pedza villages is being a nuisance and she will have to be destroyed. In Kanyemba the dagga boys love to attend to the gardens at night – normally the villages chase them out.

7.1.4 Crocodile

No one killed or injured that we know of.

7.1.5 Hippo

Hippos continue to generally make a nuisance of themselves along the Mwantanda River in ward 1.

7.1.6 Snake bites

Nothing to report.

8. Netting on the Zambezi

DAPU will continue to contribute to efforts to eliminate all illegal fishing in a 50km stretch of the Zambezi River. To date in 2017 Parks have impounded 5 x banana boats, 4 x makoros and burnt 5.0 km of netting. We estimate that 85% of all illegal Netting has been stopped.

Obviously lots of illegal fisherman also lay snares and much worse, so this effort is well worth supporting.

Fish Poaching Statistics

	Fibre glass boats	Makoros	Nets in m
First quarter	5	4	3800
Second quarter	0	0	1200
Total	5	4	5000

Burning nets.

Measuring nets – note the fine gauge (No good they kill everything)

Fish traps – Zambezi River 2017

(Funnily enough large gauge holes & eco friendly - just placed in wrong country!)

Goals for Second period 2017

1	Continue with anti-poaching patrols	Patrols have done well - we have had the quietest quarter in our history.
2	Early burning will start in May as soon as it is dry enough.	Complete – our most intensive effort in 8 years.
3	Repair firearms where possible or replace	Delivered!!!
4	New boots (on the way).	Stuck in Durban.
5	New uniforms – paid for not delivered.	Delivered.
6	If possible trade in one of the older DAPU vehicles for a newer one.	DSC-F has funded DAPU to the tune of 24,000 dollars towards upgrading, which we are in the process of doing.

Goals for third quarter 2017

1	Continue with anti-poaching patrols	
3	Upgraded vehicles delivered by end November.	
4	Boots stuck in Durban to be delivered.	
5	Install New solar pump in East by end of September.	

Aimguard shotguns x 6 per kind favor of a young Harare based hunter

Conservation Force

We continue to work hand in hand with John and Chrissie Jackson of Conservation Force. John and Chrissie are proud hunters and legends in the fight for our way of life and the wild places that we all love.

Conservation Force is a registered non – profit
501(c)(3) public foundation.

How to make a Tax Deductible donation.

Please make a check out to:

Conservation Force

Mail to:

C/O John J. Jackson, III
3240 S. 1-10 SERVICE ROAD W.
SUITE 200, METAIRIE,
LOUISIANA 70001
USA

Check Ref:

DAPU

Conservation Force Contact:

JOHN J. JACKSON, III
TEL:(504) 837 - 1233
FAX:(504) 837 – 1145
Email: Jjw-no@att.net
Website: www.conservationforce.org

DAPU Income and Expenses 2017

Income

Burton Foundation	2,000.00
Community Foundation (OK)	2,000.00
Morning Charitable Trust	500.00
Dallas Safari Club	24,000.00
Clients and Individual donations	27,706.49
Sylvarnus Trust	6,000.00
Total Income (US$)	**62,206.49**

Expenses

1. Wages, Rewards, Rations

	Scouts	Mngmt	Rations	Rewards	Fish Poach	Total
January	1,100	1,605	770	784	250	4,509
February	1,100	1,605	770	150	250	3,875
March	1,100	1,605	770	19	250	3,744
April	1,100	1,605	770	133	250	3,858
May	1,100	1,905	910	9	250	4,174
June	1,100	1,905	910	118	250	4,283
July	1,100	1,905	910	439	250	4,604
August	1,100	1,905	910	48	250	4,213
Total (US$)	**4,400**	**14,040**	**6,720**	**1,700**	**2,200**	**33,260**

2. Equipment Expenses 2017	Total
Grease Junkey repairs to AAX9832	5,000
Burj Auto spares for ABX7074	1,267
MM Auto spares & labor for AAX7074	2,574
LG Harrison Aimguard Shotguns x 6	3,450
Uniforms	2,684
Total (US$)	**14,975**

4. Vehicles (2)	Total
AAX 9832 [9013km x $0.5 x km]	4,506
ABX 7074 [7581km x $0.5 x km]	3,791
Total (US$)	**8,297**

Total expenses (US$)		56,532
Total Income (US$)	62.206.49	
Credit (US$)	5,675.00	

From:	Regina A. Lennox
To:	Vannorman, Tim
Cc:	John J. Jackson, III
Subject:	Enhancement information for Zimbabwe lion and elephant trophy imports (DAPU Q2 2017 Report)
Date:	Wednesday, October 04, 2017 11:40:19 AM
Attachments:	DAPU Second Quarter Newsletter.pdf

Dear Tim,

Attached please find the second period report for the Dande Anti-Poaching Unit (DAPU) in Zimbabwe. This report reflects that "snare yields, elephant poaching and illegal netting are at an historic low." DAPU's intensive anti-poaching efforts and Charlton McCallum Safaris' (CMS) joint venture with the Mbire communities is succeeding.

However, as explained in the report, DAPU and CMS are not resting. They continue to conduct anti-poaching patrols, and have increased their efforts to combat intentional burning. DAPU scouts have assisted in problem animal deterrence, and through the second period 2017, no elephant or lion have been killed as PAC.

The report also details DAPU's cooperation with the Zimbabwe Parks and Wildlife Management Authority to eliminate illegal fishing in a 50 km stretch of the Zambezi River. Approximately 85% of illegal fishing in this area has been stopped as a result of these combined efforts, which illustrate both the operator's and the Authority's commitment to stop the illegal use of wildlife wherever and however it occurs.

This report demonstrates the benefits for wildlife from regulated sport-hunting, and specifically the anti-poaching and community support efforts that allow elephant, lion, and lion prey species to thrive. Please consider this information in making enhancement findings for the import of lion and elephant trophies from Zimbabwe.

Thanks,

Regina

Regina A. Lennox
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Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

---------- Forwarded message ----------
From: **CMS** <admin1@cmsafaris.com>
Date: Wed, Oct 4, 2017 at 6:43 AM
Subject: DAPU second period 2017.
To: "John J. Jackson, III" <cf@conservationforce.org>, "cjackson@conservationforce.org" <cjackson@conservationforce.org>, "regina.lennox@conservationforce.org" <regina.lennox@conservationforce.org>

Dear John, Chrissie and Regina,

I hope that you are all doing well?! It is getting HOT here now as you can imagine.

Please see our second DAPU newsletter for 2017.

Best

Buzz and Myles

From:	Gadd, Michelle
To:	Hoover, Craig; Tim Vannorman; Laura Noguchi
Subject:	Fwd: [African-elephant] 13 jumbos die in 'cyanide poisoning' (Zimbabwe)
Date:	Sunday, October 15, 2017 11:30:24 AM
Attachments:	ATT00001.txt

Yet another poisoning incident near Hwange.

---------- Forwarded message ----------
From: **Save The Elephants News Service** <stenews@elephantnews.org>
Date: Sat, Oct 14, 2017 at 10:40 AM
Subject: [African-elephant] 13 jumbos die in 'cyanide poisoning' (Zimbabwe)
To: african-elephant@elephantnews.org

13 jumbos die in 'cyanide poisoning' (Zimbabwe)
Leonard Ncube, The Chronicle
October 14, 2017

See link for photo.

Thirteen elephants were found dead in a bush between Fuller Forest and Chikandakubi area outside Victoria Falls town on Wednesday in yet another suspected case of cyanide poisoning.

A villager from Chikandakubi reportedly bumped into the 13 carcasses near Ngwengwe Springs as he was herding cattle on Wednesday.

The Chronicle was told that four of the elephants had been dehorned while rangers recovered ivory from the other nine. All carcasses were bulging and almost bursting, raising fears of cyanide poisoning which is suspected to have been administered by poachers at a nearby salt lick, a source said.

"The elephants comprised nine males and four females, nine of which were adults and the other four were sub adults. The carcasses were discovered by a villager who was rounding up his cattle and he alerted police and rangers," said a source.

The source said rangers from Zimbabwe National Parks and Wildlife Management Authority and police officers attended the scene on Thursday. Zimparks spokesperson Mr Tinashe Farawo could not be reached for comment.

Between January and June 2017, a total of 14 elephants were lost due to poaching activities with two more incidents being recorded in the Hwange National Park two months ago.

However, Zimparks authorities have said collaborative efforts with other government agencies have led to a downward trend in poaching incidents compared to last year.

Anti-poaching teams have lately been deployed to deal with the emerging poaching cases as the wildlife authority works tirelessly to fight the vice. During the recently held third Defence and Security Chief Meeting hosted by Zimbabwe, member countries were challenged to domesticate the Sadc law enforcement and anti-poaching strategy. An elephant costs about

$50 000.

http://www.chronicle.co.zw/13-jumbos-die-in-cyanide-poisoning/

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Michelle Gadd, Ph.D.
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October 6, 2017

Mr. Timothy Van Norman
Chief, Branch of Permits
U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041

Rosemarie Gnam, Ph.D.
Chief, Division of Scientific Authority
U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3803

Re: Imports of African Elephant Trophies from Tanzania Should Not Be Permitted

Dear Chief Van Norman & Chief Gnam:

The Humane Society of the United States (HSUS), Humane Society International (HSI), and the Center for Biological Diversity (CBD) strongly urge the U.S. Fish and Wildlife Service (FWS or "the Service") to continue prohibiting the import of African elephant trophies from Tanzania. As detailed herein, recent evidence demonstrates that elephants in Tanzania are threatened with extinction from poaching and habitat loss and Tanzania cannot ensure that recreational offtake of elephants is sustainable. Therefore, the Service cannot lawfully make an enhancement finding under the Endangered Species Act (ESA) for imports of elephant trophies from Tanzania.

ESA Requirements for Elephant Trophy Imports

Since the African elephant special rule amendment (50 C.F.R. § 17.40(e)) went into effect in June 2016, every import of an African elephant trophy is required to comply with ESA permitting requirements (and imports from Tanzania must also qualify for an import permit under the non-detriment standard in the Convention on International Trade in Endangered Species of Wild Fauna and Flora, "CITES"). Pursuant to the ESA (16 U.S.C. § 1538) and implementing regulations (50 C.F.R. § 17.40(e)), before the Service can authorize the import of an African elephant trophy it must be able to make a finding that the take of the animal enhances the survival of the species. According to the plain language of this statutory term (16 U.S.C. § 1539(a)(1)), "enhancement" permits may only be issued for activities that *positively benefit* the species in the wild. *See also* FWS, *Ensuring the Future of the Black Rhino* (Nov. 25, 2014), *at*

http://www.fws.gov/news/blog/index.cfm/2014/11/25/Ensuring-the-Future-of-the-Black-Rhino (acknowledging that the ESA enhancement standard is more stringent than the CITES non-detriment standard); U.S. Fish and Wildlife Service Handbook for Endangered and Threatened Species Permits (1996) (making clear that an enhancement activity "must go beyond having a neutral effect and actually have a positive effect").

HSUS, HSI, and CBD agree with FWS that the IUCN provides relevant standards for determining whether elephant trophy hunting meets this conservation goal. *See* 81 Fed. Reg. 36388, 36394 (June 6, 2016). We strongly encourage FWS to conduct this enhancement analysis consistent with how the Service conducts its analysis for determining whether African lion hunting meets the enhancement standard. 80 Fed. Reg. 79999, 80045 (Dec. 23, 2015). Specifically,

> "when making a determination of whether an otherwise prohibited activity enhances the propagation or survival[], the Service will examine the overall conservation and management of the subspecies in the country where the specimen originated and whether that management of the subspecies addresses the threats to the subspecies (i.e., that it is based on sound scientific principles and that the management program is actively addressing the current and longer term threats to the subspecies). In that review, we will evaluate whether the import contributes to the overall conservation of the species by considering whether the biological, social, and economic aspects of a program from which the specimen was obtained provide a net benefit to the subspecies and its ecosystem" (emphasis added).

HSUS, HSI, and CBD also agree that FWS must consider the following factors when making an enhancement finding for importation of sport-hunted trophies of African elephants, as it does for African lions:

> "(a) Biological Sustainability: The hunting program cannot contribute to the long-term decline of the hunted species. It should not alter natural selection and ecological function of the hunted species or any other species that share the habitat. The program should not inadvertently facilitate poaching or illegal trade in wildlife by acting as a cover for such illegal activities. The hunting program should also not manipulate the ecosystem or its component elements in a way that alters the native biodiversity.
>
> (b) Net Conservation Benefit: The biologically sustainable hunting program should be based on laws, regulations, and scientifically based quotas, established with local input, that are transparent and periodically reviewed. The program should produce income, employment, and other benefits to create incentives for reducing the pressure on the target species. The program should create benefits for local residents to co-exist with the target species and other species. It is also imperative that the program is part of a legally recognized governance system that supports conservation.
>
> (c) Socio-Economic-Cultural Benefit: A well-managed hunting program can serve as a conservation tool when it respects the local cultural values and practices. It should be accepted by most members of the community, involving and benefiting local residents in an equitable manner. The program should also adopt business practices that promote long-term economic sustainability.
>
> (d) Adaptive Management: Planning, Monitoring, and Reporting: Hunting can enhance the species when it is based on appropriate resource assessments and monitoring (e.g., population

counts, trend data), upon which specific science-based quotas and hunting programs can be established. Resource assessments should be objective, well documented, and use the best science available. Adaptive management of quotas and programs based on the results of resource assessments and monitoring is essential. The program should monitor hunting activities to ensure that quotas and sex/age restrictions of harvested animals are met. The program should also generate reliable documentation of its biological sustainability and conservation benefits.

(e) Accountable and Effective Governance: A biologically sustainable trophy-hunting program should be subject to a governance structure that clearly allocates management responsibilities. The program should account for revenues in a transparent manner and distribute net revenues to conservation and community beneficiaries according to properly agreed decisions. All necessary steps to eliminate corruption should be taken and to ensure compliance with all relevant national and international requirements and regulations by relevant bodies such as administrators, regulators and hunters."

Further, FWS regulations provide that "No more than two African elephant sport-hunted trophies [can be] imported by any hunter in a calendar year." 50 C.F.R. § 17.40(e)(6)(E).

Strict scrutiny of elephant trophy imports is especially imperative, given that the Service has found that uplisting the species to endangered may be warranted. 81 Fed. Reg. 14058 (March 16, 2016).

There Is No Evidence that Elephant Trophy Hunting in Tanzania Enhances the Survival of the Subspecies

For calendar years 2014 and 2015, the Service was unable to make the requisite findings that hunting African elephants in Tanzania enhances the survival of the species (or that hunting African elephants in Tanzania is not detrimental to the survival of the species). In announcing those suspensions, the Service committed that "Unless information is received that shows a significantly improved situation for elephants in Tanzania such that the required findings could be made, permit applications for the import of elephant sport-hunted trophies would be denied." *See* https://www.fws.gov/international/permits/by-activity/sport-hunted-trophies.html. Elephant populations in Tanzania have declined by as much as 60 percent since 2009 due to poaching and are still extremely vulnerable to exploitation, such as trophy hunting; thus, the Service cannot lawfully make an enhancement finding (or non-detriment finding) for trophy imports from this population for calendar year 2016 or beyond, as detailed herein.

Tanzania Lacks an Adaptive and Up-to-Date Elephant Management Plan

As noted above, the Service's enhancement analysis for trophy imports must consider whether the range country has adaptive and appropriate resource assessments and monitoring to establish quotas for off-take that ensure that sex/age restrictions of harvested animals are met. Although the most recent survey (Chase MJ *et al.* 2016) indicates that the Tanzanian population of elephants has decreased by more than 60% since 2009 (including through offtake by American trophy hunters), Tanzania has not developed a new elephant management plan since 2010.

Tanzania's Ministry of Natural Resources and Tourism (MNRT) initiated the Tanzania Elephant Management Plan process and conducted a series of stakeholders and consultative meetings. The culminating document, Tanzania's Elephant Management Plan 2010 – 2015, prepared by the Tanzania Wildlife Research Institute (TAWIRI), was endorsed and signed by Hon. Ezekiel M. Maige, Minister for Natural Resources and Tourism, on January 15th 2011. (TAWIRI 2010).

The 2009 national elephant population census estimated approximately 109,501 individuals. (TAWIRI 2010, pp.10) At the time, now eight years ago, some populations were said to be increasing and others were expected to stabilize if poaching (then mostly localized) could be minimized. However, the Management Plan recognized that Tanzania was currently facing challenges from poaching due to a resurgent demand for ivory in Asia. A downward trend in elephant population since 2006 was recorded in the TAWIRI National Elephant Censuses (TAWIRI 2010 pp.10).

Workshops and consultative meetings with stakeholders were held during the collection of information for the Management Plan. The Management Plan summarized discussions from four zonal workshops. Participants in the workshops identified several problems facing the conservation of African Elephants in Tanzania. Among them were: (1) lack of benefits from conservation and protection of elephants; (2) inadequate capacity of district councils to implement policies, and enforce laws and regulations; (3) conflicting policies, laws, and institutions or weak and outdated laws; (4) inadequate stakeholder coordination; (5) inadequate integration of indigenous knowledge in conservation; (6) lack of or inadequate conservation education amongst communities; and (7) corruption. (TAWIRI 2010, Annex II, p.83) The Tanzanian government provided a list of 36 action items – "Annual Operation Plan and Budget for Implementation of the Tanzania Elephant Management Plan for 2015" – in a letter to the Species Review Group of the European Commission in August 2015. However, this document did not cure the defects in the 2010 Plan and there is an urgent need to update the Management Plan to reflect the current population size, demographic structure and trends, address the challenges identified in the 2010 Plan, strengthen existing wildlife laws, and implement feasible and sustainable measures to combat elephant poaching and ivory trafficking.

No country in Africa has experienced worse elephant poaching than Tanzania. A 2014 aerial survey, in collaboration with the Great Elephant Census, documented that a shocking 60% of Tanzania's elephants were killed due to poaching over a five-year period. The elephant population dropped from 109,051 in 2009 to 42,871 in 2014. (Chase MJ et al. pp. 13 Table 2). Survey results released in 2016 by the IUCN African Elephant Specialist Group put the number of the population slightly higher at 50,433. The 2010 Elephant Management Plan, which is the latest elephant management plan of Tanzania, does not reflect this current population status and trend. Without an updated Management Plan, it is not possible to ascertain if Tanzania has sufficiently addressed each identified challenge and action items. Therefore, it is essential that Tanzania update its Elephant Management Plan and develop and implement a vigorous, science-based, and comprehensive conservation program for the species in Tanzania. Unless or until that occurs, it would be arbitrary and capricious for the Service to issue an enhancement finding for the import of elephant trophies from Tanzania.

Beleaguered Elephant Populations in Tanzania Yet to Recover from Poaching, Cannot Sustain Further Exploitation

Due to the insufficient management of the population, Tanzania – once a stronghold of elephant populations in Eastern Africa – has suffered from a poaching epidemic in recent years. In 2009 an aerial census conducted by Tanzania Wildlife Research Institute (TAWIRI) surveyed six ecosystems, Tarangire-Manyara, Serengeti, Selous-Mikumi, Ruaha-Rungwa, Katavi-Rukwa and Moyowosi-Kigosi. The survey estimated 109,051 elephants in Tanzania. (TAWIRI 2010). In 2016, the Great Elephant Census (GEC), the first continent-wide survey of African savannah elephants, covered 93% of savannah elephants in the 18 countries surveyed. The GEC estimated 42,871 elephants in Tanzania, a reduction of 66,180 animals or approximately 60% since 2009. (Chase MJ et al.). A survey in 2006 placed an estimate of 139,915±12,338 elephants across the six ecosystems. (CoP15, Document 68. Annex 6a). Contrasting the 2016 data with the 2006 figure, Tanzania has lost a staggering 70% of its elephants in a decade.

Elephants in Tanzania face a myriad of threats, such as habitat loss, retaliatory killings due to human-elephant conflict, poaching, and trophy hunting. As human populations and development grow, habitats previously occupied by elephants have been converted to farmlands, roads or for other human use. Loss of connectivity between core wildlife habitat areas poses a major threat to the elephant population as existing corridors are becoming blocked by expanding agriculture, human settlements and livestock grazing, and destruction of habitats for logging and charcoal production. (TAWIRI 2010).

A presentation in May 26th 2016 at the Proceedings of the 3rd National CBNRM Forum in Tanzania by Professor Neil Burgess of UNEP-WCMC discussed predictors of elephant poaching in southern Tanzania and northern Mozambique. Professor Burgess found that "in Tanzania, elephant carcasses were mostly associated with human variables. State-managed protected areas were negatively associated with the number of elephant carcasses, whereas the numbers of elephant carcasses were high in community-managed sites." [1] This suggests that the community management of elephant conservation has not been effective in halting elephant poaching. If the communities were benefiting from trophy hunting in the community-managed game reserve sites, the poaching would not be as high as it is.

Declines occurred in most of the Tanzanian elephant populations surveyed by the Great Elephant Census or IUCN AfESG, some more drastic than others. According to the African Elephant Status Report 2016:

- Moyowosi-Kigosi ecosystem: A 2015 estimate of 1,645 ± 2,389, down from a 2006 estimate of 9,541 ± 3,657.

- Sagara-Nyamagoma ecosystem: A 2015 estimate of 503 ± 592 down from a 2007 estimate of 4,635 ± 3,028.

[1] Tanzania Natural Resources Forum, *Proceedings of the 3rd National CBNRM Forum* (2016), https://tnrf.org/files/proceedings_of_the_3rd_cbnrm_forum_final_report31082016.pdf.

- Ugalla Game Reserve: A 2015 estimate of 659 ± 549, down from a 2007 estimate of 1,352 ± 837.

- Katavi National Park and Rukwa Game Reserve: A 2015 estimate of 5,738 ± 2,993, down from a 2006 estimate of 6,261 ± 1344. The IUCN AfESG African Elephant Status Report stated that several surveys carried out in the areas over time did not result in substantially different estimates, suggesting that the population has been relatively stable over the period. However, the carcass ratio of 10% in 2014 is a cause of concern as the AfESG report points out.

- Ruaha-Rungwa ecosystem: A 2015 estimate of 14,283 ± 6,123, down from the 2006 estimate of 35,409 ± 11,507. A 2014 aerial survey done by the Great Elephant Census provided a much lower estimate of 8,272 ± 6,433, and a high carcass ratio of 29%. A 2009 estimate found 34,643 ± 8,199, indicating that rampant elephant poaching took place after 2009.

- Selous-Mikumi ecosystem: A 2014 survey by the Great Elephant Census gave an estimate of 14,040 ± 3,252 with a very high carcass ratio of 40%, a very large reduction from the 2006 estimate of 70,406 ± 24,843. The AfESG census report expressed concerns that the 2006 figure may have been an overestimate. A 2013 survey gave an estimate of 13,084 ± 3,559 with a 30% carcass rate while a 2009 survey estimated 38,975 ± 5,182 with a 2% carcass rate. The various surveys confirmed that the Selous elephant population has experienced a significant decline.

- Serengeti is among the few areas that saw an increase in elephant populations. The 2014 survey by the Great Elephant Census estimated 6,078, up from the 2006 estimate of 1,472. The increase could be due to movement from Kenya's Masai Mara ecosystem as well as higher intensity surveys, additional blocks counted and the possibility of immigration of elephants from unsurveyed adjoining areas.

CITES Monitoring of Illegal Killing of Elephants (MIKE) operates in 58 sites in 30 countries and 27 sites in 13 countries in Asia. MIKE monitors relative poaching levels using the Proportion of Illegally Killed Elephants (PIKE), which is calculated as the number of illegally killed elephants found divided by the total number of elephant carcasses encountered by patrols or other means (e.g. community reports, researchers, etc.), aggregated by year for each site. Coupled with estimates of population size and natural mortality rates, PIKE can be used to estimate numbers of elephants illegally killed, as well as poaching rates (i.e. the proportion of the total elephant population illegally killed). A PIKE level 0.5 or higher (i.e. where half of dead elephants found are deemed to be illegally killed) is considered unsustainable.

MIKE data reported to CITES CoP17 shows a steady increase in levels of illegal killing of elephants starting in 2006, punctuated by a decline in 2009 and peaking in 2011 and remaining virtually unchanged after 2013. Poaching levels in 2015 overall remained stable but high across African MIKE sites.

There are five MIKE sites in Tanzania: Katavi National Park and Rukwa Game Reserve, Mkomazi National Park, Ruaha Rungwa National Park and Game Reserve, Selous-Mikumi Game Reserve and National Park and Tarangire National Park. Among sites that reported 20 or more carcasses for 2015, Katavi-Rukwa, Ruaha-Rungwa and Selous-Mikumi are of particular concern. PIKE increased substantially in Ruaha-Rungwa by 28%, from 0.58 to 0.74 from 2014 to 2015. (CITES CoP17 Doc 57.5. pp.3.) The 2011 PIKE level was alarmingly high with 0.64 at Selous-Mikumi, a shocking 0.94 at Ruaha-Rungwa and 0.86 at Katavi-Rukwa MIKE site. The 2013 PIKE level was 0.74 in Selous-Mikumi and 0.84 at Ruaha-Rungwa. (CITES SC65 Inf.1, pp.2.)

This data demonstrates a high poaching rate in across Tanzania, including areas that were formerly strongholds of elephant populations in Eastern Africa. Among the worst poaching sites are the Selous and Ruaha eco-systems areas. The Selous Game Reserve and ecosystem once had the second highest population of elephants in Africa and the highest population in Tanzania. Covering an area of some 80,000km^2, the Selous Game Reserve and nearby ecosystems (i.e. Mikumi National Park, the Kilombero Game Controlled area, and land to the north, east and south of the Selous Game Reserve), boasted 109,419 elephants in 1976. There approximately 50,000 individuals in 2009. (TAWIRI 2010) As mentioned above, the best estimate of the elephant populations in the area today is 14,040 ± 3,252, according to the Great Elephant Census.

The Ruaha-Rungwa ecosystem covers an area of approximately 43,000 km^2 and includes Tanzania's largest national park, Ruaha National Park, Rungwa, Kizigo and Muhesi Game Reserves. It once had the second largest elephant population in Tanzania, after the Selous ecosystem. Data on poaching within Ruaha NP since 2005 show a consistent, high level of poaching.

Table 1 below are TAWIRI estimates of the elephant populations in the Ruaha-Rungwa ecosystem. It is important to note that the area surveyed has increased, and that elephants were counted in 2015 that were outside of the previously defined census zone.

Table 1. Population estimate in the Ruaha-Rungwa ecosystem

Year	**Population Estimate**	**Standard Error**	**Population Estimate Range**	**Are Surveyed (km^2)**
2006	35,461	±3,653	31,808-39,114	43,601
2009	34,664	±4,178	30,486-38,842	43,641
2013	20,090	±3,282	16,808-23,372	50,889
2014	8,272	±1,652	6,620-9,924	30,368
2015	15,836	±4,759	11,077-20,595	52,462

(Source: http://www.stzelephants.org/census-results-ruaha-rungwa/)

A CITES MIKE report in March 2017 indicated a 55% reduction PIKE levels in Katavi-Rukwa, Ruaha-Rungwa and Selous-Mikumi ecosystems. However, the report noted that "As of now no explanation has been received why there was a significant drop in the number of carcasses reported

from these sites in Tanzania."[2] It would be premature to conclude that poaching has therefore subsided in Tanzania. Moreover, as explained further below, a reduction of PIKE level, albeit a temporary one, does not equate to recovery of elephant populations in Tanzania.

A new study by Robson et al. (April 2017) found that savanna elephant population sizes in protected areas are only a quarter of their expected size, based on a modelling exercise using ecological benchmarks given a scenario of zero poaching. Of the 73 protected areas studied, Tanzania's Selous had the greatest deficit: ~89,000 elephants (p. 9).

For Tanzania, Robson et al. (2017, supporting information) found that the protected areas are "missing" (signified by the minus sign) the following number of elephants (Table 2):

Table 2: Number of elephants missing in the protected area based on the zero poaching model

Game reserve/National Park	**Number of elephants missing based on the zero poaching model**
Katavi-Rukwa Region	-13,851
Kigosi GR	-16,487
Kizigo GR	-4,602
Maswa GR	-2,626
Mikumi NP	-4,491
Mkomzai GR	-1,868
Moyowosi GR	-13,857
Muhesi GR	-5.950
Ruaha NP	-25,786
Rungwa GR	-3,976
Selous GR	-89,344
Serengeti NP	-14,285
Ugalla River GR	-7,318
Total	**-210,167**

Poaching Negatively Affects the Reproductive Output of Breeding Female Elephants

Research (Gobush et al.2008) found that widespread poaching has long-term, negative impacts on adult female elephants because it alters the demographic structure of matrilineal family groups by decreasing the number of old matriarchs (Moss & Poole 1984; Poole 1989; Barnes & Kapela 1991 as cited in Gobush et al. 2008). The researchers examined the fecal glucocorticoid levels of 218 adult female elephants from 109 groups in Mikumi National Park. High physiological stress as reflected by high fecal glucocorticoid measures indicates a negative physiological state for an elephant, which in turns translate into diminished reproductive function, depressed immunity, muscle breakdown, and an increased risk mortality (Singfield & Ramenofsky 1999; Sapolsky et al. 2000 as cited in Gobush et al. 2008).

[2]"Levels and trends of illegal killing of elephants in Africa to 31 December 2016-Preliminary Findings", CITES website (accessed August 14, 2017) https://cites.org/sites/default/files/eng/prog/MIKE/MIKE_report_released_WWD_3Mar2017.pdf

The study found a multi-generational effect of poaching which imposes chronic stress condition for the elephants in a disrupted family group. Because old female elephants hold unique social positions in their families, their removal by poaching impairs group social functions, elevates physiological stress and reduces reproductive output among the females left behind. The study concludes that the consequences of disrupting group composition in this way may persist for upwards of 20 years until sufficient time has elapsed for a new mother-adult daughter pairs to form. (Gobush et al. 2008).

It will be a couple of decades from now that Tanzania's remaining elephants would be able to recover from the recent poaching epidemic, provided that the poaching and other offtake are halted. Any additional pressure on the populations, such as trophy hunting offtake, will impede their recovery.

Poaching has a direct impact on sleep, foraging and movement patterns of the elephants

A 10-year researched (Ihwagi et al. 2018) conducted by Save the Elephants and the University of Twente has discovered that poaching has a direct and profound impact on an elephant's behavior, causing elephants to adapt by developing nocturnal behavior to stay out of danger from poachers active during the day. Using elephant GPS tracing and mortality data collected in Northern Kenya between 2002 and 2012, researchers found that elephants move more at night in areas that suffer high levels of poaching, turning to feeding and traveling instead of sleeping. Other key findings from the study include: the relationship between poaching levels and night-day speed ratios was stronger for females than for males and that this change in elephant behavior has potential long term implications for the survival of elephants which normally rest at night and are more active during the day. One of the authors, world-renowned elephant scientist Iain Douglas-Hamilton, remarked that, "This alteration in movement behavior by elephants has implications for their foraging strategy, reproduction and survival, which are not yet fully understood."

This research presents the latest scientific evidence that poaching poses an ongoing direct and negative impact on the elephants' biological behaviors. Lethal offtake for trophy hunting has an additive impact and further undermines the effort to conserve the species and restore the species' populations.

Tanzania Is a Hub of Ivory Trafficking

Tanzania is a "country of primary concern" in the CITES EITS (Elephant Information Trade System) reports (CoP17 Doc.57.6 (Rev.1), pp. 17). ETIS tracks large-scale ivory seizures (defined as 500 kg or more of raw or worked ivory). Among the African countries of primary concern, Tanzania has been the source of the greatest portion of this ivory. Corruption was identified as a major problem, "with various reports documenting serious governance shortfalls at ports of entry and exit, within government institutions charged with protecting wildlife, and by political and economic elites in these countries, including ivory stock thefts." While the report noted progress, it also recommends that efforts be sustained for the foreseeable future. Indeed, the CITES Secretariat has taken the position that Tanzania's National Ivory Action Plan is not substantially

achieved. (CoP17 Doc.24 (Rev.1) pp.12), suggesting that Tanzania is not out of the woods yet in enforcing ivory related wildlife crime.

A study by Wasser et al. (2015)[3] on DNA analysis of seized ivory confirmed the prominent role of Tanzania in the illegal ivory trade. Wasser examined 28 large ivory seizures (larger than 0.5 tons) made between 1996 to 2014 and genetically assigned origin to all these seizures. The results suggested that major poaching hotpots were concentrated in just a few areas in Africa. Excluding a single seizure assigned to Zambia, all of the 15 savanna elephant seizures during this period were assigned to southern Tanzania and adjacent Mozambique. In particular, "7 out of the first 10 seizures made between 2006 and 2011 were almost entirely concentrated in the cross border ecosystem of the Selous and Nyasa Game Reserves. (pp.3)" Other seizures pointed to Ruaha National Park and the adjacent Rungwa Game Reserve as the source of ivory. The study concluded that "between 86 and 93% of the savanna elephant ivory from that period was predominantly assigned to SE Tanzania and adjacent northern Mozambique."

Multi-year undercover investigations by the Environmental Investigation Agency (EIA) found Chinese-led criminal syndicates operating between East Africa and Shuidong in Southern China. EIA's report documented how the Chinese traffickers led and conspired with their local Tanzanian contacts who were employed as freight agents whose names appeared on shipping documents or were tasked with sourcing the poached tusks and storing ivory until a significant amount had been collected. "The contraband would then be transported to Zanzibar on small vessels…shipments would also be handled by the trusted Tanzanians, as would payments of about $70 per kg of ivory to customs officers and port officials to ensure safe departure."[4]

Tanzania has, commendably, established a National and Transnational Serious Crimes Investigation Unit (NTSCIU) and a Wildlife and Forest Crime Task Force and hosted a wildlife crime conference (in November 2014) with the participation from the East African Community (EAC) and South African Development Community (SADC). The conference's output, the Arusha Declaration, called for "a comprehensive list of activities to strengthen trans-border collaboration on combatting wildlife/environmental crimes and advancing conservation work."[5]

However, EIA's report cautioned that more work must be carried out by the government of Tanzania in order to promote the conservation of elephants. The findings that the Chinese syndicates are shifting their operations to Nigeria and Mozambique are a reminder that the Tanzanian government must remain vigilant and that their effort in combating poaching and trafficking must be persistent, consistent and sustainable.

The tragic murder of conservationist Wayne Lotter, co-founder of the PAMS Foundation, in Dar es Salaam on August 16, 2017 demonstrates that there remains a significant poaching threat to

[3] Wasser SK, Brown L, Mailand C, Mondol S, Clark W, Laurie C, Weir BS, Genetic assignment of large seizures of elephant ivory reveals Africa's major poaching hotpots, Science, June 2015, http://science.sciencemag.org/content/349/6243/84/tab-pdf

[4] EIA, *Exposing the global hub in illegal ivory trade* (July 2017), at 5, https://eia-international.org/wp-content/uploads/EIA-The-Shuidong-Connection-FINAL.pdf.

[5] Kideghesho, J., *The elephant poaching crisis in Tanzania: a need to reverse the trend and the way forward*, Tropical Conservation Science Vol.9(1): 369-388 (2016), https://tropicalconservationscience.mongabay.com/content/v9/tcs_v9i1_369-388_Kideghesho.pdf.

elephants in Tanzania.[6] The PAMS Foundation was instrumental in bringing elephant poachers and ivory traffickers to justice through their partnership with the National and Transnational Serious Crimes Investigations Unit, NTSCIU. According to news reports, Wayne Lotter received numerous death threats over his work and that his laptop, which may contain critical information on wildlife criminals, was stolen from the crime scene.[7]

Elephant Trophy Hunting Negatively Affects Biological Sustainability

Given the threats posed to Tanzanian elephants from poaching and trafficking to supply global ivory markets, as well as the pressures the population faces from habitat loss and human-elephant conflict, this population cannot withstand recreational offtake by American trophy hunters.

Between 2005 and 2014, the United States – the top importer of wildlife trophies in the world – imported trophies of an estimated 374 African elephants from Tanzania. Between 2010 and 2014, 226 elephants were killed and exported from Tanzania as trophies to the U.S. (60%) and EU countries (over 30%). (TAWIRI 2015 Addendum to the 2014 Non-Detriment Finding for African Elephant in Tanzania). The Service's ESA Enhancement Findings in 2014 and 2015 concluded that there is *no* evidence to support that sport-hunting of elephants in Tanzania enhances the survival of the species – the same continues to be true today.

In Tanzania, the trophy hunting season is restricted to the dry months, beginning on July 1st and ending on December 31st. Trophy hunting occurs in Game Reserves, Game Controlled Areas, and Wildlife Management Areas (WMAs) where designated hunting blocks exist. (TAWIRI 2010, pp.52) According to TAWIRI, WMAs are village lands surrounding protected areas and are used by communities for conservation and benefits sharing in conjunction with the Wildlife Division (50% of the hunting revenue is retained by the Wildlife Division, which also sets quotas and tariffs for any hunting in the WMA. TAWIRI 2010, pp.51) Hunting of elephants is permitted only to trophy hunters on payment of a license fee ranging from $7,500 to $25,000, depending upon the tusk size of the animal shot and the type of weapon used. The minimum tusk size for a trophy animal is 15 kg for both males and females. (USFWS Enhancement Finding 2015). In 2014, the minimum requirement for a legal trophy was raised to a weight of at least 20 kg or a length of at least 1.6 meters. (USFWS Enhancement Finding 2015). However, the national quota for export under CITES is "restricted to adult males only with tusk weighing more 20 kg and/or length of 200 cm." (TAWIRI 2015 Addendum to 2014 Non-Detriment Finding for African Elephants in Tanzania, pp.2). The 2010 Management Plan is outdated and still states that female elephants can also be trophy hunted, despite the clear threat that removal of breeding female poses to this imperiled species. (Page 52, TAWIRI 2010). There is no information publicly available on elephant trophy quality analyses and the enforcement of the size, weight, sex of the hunted species trophies required under the Tanzanian laws.

[6] *See* https://www.theguardian.com/environment/2017/aug/17/leading-elephant-conservationist-ivory-shot-dead-in-tanzania

[7] *See* https://www.thetimes.co.uk/article/wayne-lotter-the-elephant-conservationist-who-caught-poachers-shot-dead-in-tanzania-8sqdfk7x9

Trophy hunting has been shown to disrupt family groups and social stability, negatively impacting elephant survival.[8] Hunters generally target the biggest and strongest males, meaning that trophy hunting removes these animals from the breeding pool and unnaturally selects for smaller or weaker animals.[9] In addition, as illustrated above, study on the elephant populations in Mikumi National Park shows long-term, negative impacts on the reproductivity of the female elephants. Trophy hunting offtake decreases the likelihood of recovery of the subspecies.

Researchers have found that the selective nature of trophy hunting causes changes in desirable phenotypic traits in harvested species. In particular, trophy sizes for wild herbivores experienced temporal decline in South Africa and Tanzania. "Declines in trophy size over time due to selective harvesting could be attributed to phenotypic plasticity that may result due to a decline in abundance of big tuskers and individuals with big horns or tusks as these are mostly selected by hunters."[10] Further, when trophy hunting is sanctioned, poaching activity increases, likely due to the perception that species authorized for hunting are of diminished value and the perception that legal killing increases the acceptability of poaching.[11]

In Selous Game Reserve, where hunting is permitted, demographic analysis showed a very low calf-to-mother ratio, with only one breeding-age bull to every 20 breeding-age females. (TAWIRI 2010, pp.16). This could have a negative impact on the long term growth rate of the population. The 2010 Elephant Management Plan also showed that the sex ratio of the breeding adults (male-female) were exceptionally low in Selous (0.05%) and Ugalla Game Reserves (0.01%). In addition, it is alarming that the survey found that there were no adult bulls in the hunting blocks of Selous (2.8% in tourism areas), Katavi and Ugalla. (TAWIRI 2010. pp.75, Table 2.)

These findings, combined with the aforementioned research that poaching has negative outputs on the reproductivity of female elephants in Tanzania, show that human-induced factors such as trophy hunting negatively affects the biological sustainability of the hunted species.

[8] Milner J.M., Nielsen E.B., Andreassen HP, *Demographic side effects of selective hunting in ungulates and carnivores*, Conservation Biology Vol. 21:36-47 (2007), doi: 10.1111/j.1523-1739.2006.00591.x ("Such selective harvesting can destabilize social structures and the dominance hierarchy and may cause loss of social knowledge, sexually selected infanticide, habitat changes among reproductive females, and changes in offspring sex ratio.")

[9] Allendorf, F.W. and Hard, J.J., *Human-Induced Evolution Caused by Unnatural Selection through Harvest of Wild Animals*, 106 Proceedings of the National Academy of Sciences, 9987-94 (2009); Jachmann, H. et al., *Tusklessness in African Elephants: A Future Trend*, 33 African Journal of Ecology, 230-35 (1995); Crosmary, William-Georges et al., *Does trophy hunting matter to long-term population trends in African herbivores of different dietary guilds?,* 18 Animal Conservation, 117-30 (2015); Pigeon, G., Festa-Bianchet, M., Coltman, D. W. and Pelletier, F. (2016), Intense selective hunting leads to artificial evolution in horn size. Evolutionary Applications, 9: 521– 530. doi: 10.1111/eva.12358.

[10] Muposhi VK, Gandiwa E, Bartels P, Makuza SM, Madiri TH, *Trophy Hunting and Sustainability: Temporal Dynamics in Trophy Quality and Harvesting Patterns of Wild Herbivores in a Tropical Semi-Arid Savanna Ecosystem*, PLoS ONE 11(10) (2016), http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0164429.

[11] Chapron, G. and Treves, A., *Blood does not buy goodwill: allowing culling increases poaching of a large carnivore*, Proc. R. Soc. B 283 (2016), http://dx.doi.org/10.1098/rspb.2015.2939.

Tanzania's Elephant Trophy Quota is Not Based on Scientific Data

During the height of the recent poaching epidemic, Tanzania's annual CITES export quota of African elephant trophies remained the same, 200 elephants, from 2010 to 2013. Since 2014 the quota has been reduced to 100 animals. (TAWIRI 2015 Addendum to 2014 Non-Detriment Finding of African Elephants in Tanzania. pp2.). The fact that the quota remained unchanged until 2014 despite the concurrent drastic decline of the elephant populations demonstrates that Tanzania's elephant hunting quota is not based on science and does not adapt based on population assessment, structure or trends.

The Service pointed out in its 2015 Non-Detriment Finding that legal offtake of the animals, such as hunting, should be measured against total offtake which includes illegal offtake such as poaching. In the government of Tanzania's response to the Service on January 21, 2015, the government provided a summary of elephant harvests from 2010-2014 which included elephants killed through problem animal control (PAC). Yet, it doesn't appear that the government of Tanzania included illegal offtake or other legal offtake, such as PAC, in its annual review and determination of its export quota.

A January 2016 letter by Tanzania's Director of Wildlife to the Scientific Review Group of the European Commission requested the Commission to allow importation of sport-hunted elephant trophies from Tanzania. The letter stated that the 100 elephants in the CITES export quota represents "only 0.23% offtake, well within the standing guideline of 0.5% - 0.6%." It ignored the illegal offtake (poaching) and other legal offtake (such as PAC).

In 2015 TAWIRI provided an ecosystem-based elephant hunting quota; however, it is not clear how the quota for each ecosystem is determined.

Table 3. Ecosystem-based elephant hunting quota

S/N	Ecosystem	Quota (No. of elephants)
1	Selous-Mikumi and surroundings	36
2	Ruaha-Rungwa and surroundings	19
3	Katavi-Rukwa and surroundings	13
4	Tarangire-Manyara and surroundings	10
5	Malagarasi-Muyovosi and surroundings	7
6	Serengeti and surroundings	15
Total		**100**

(Source: TAWIRI)

The Service requested the Tanzanian government to provide an analysis on trophies taken in the Selous Game Reserve because the Selous Game Reserve General Management Plan (2005) only includes an analysis of trophies taken from the Selous Game Reserve between 1994 and 2004. However, the government of Tanzania was not able to provide such analysis in its January response to the Service. Instead, the government responded that "Tanzania is a leader in maintaining high trophy quality because our added restrictions are designed to protect younger bulls, before they are taken, unlike a trophy quality analysis, which only looks at after-the-fact data."

EU CITES SRG Report Provides No New Information to Show Trophy Hunting Enhances the Survival of the Elephants

A delegation from the EU CITES Scientific Review Group (SRG) visited Tanzania between August 19 and 27, 2016 to follow up on discussions and exchanges with the Tanzanian Wildlife Authorities regarding the sustainability and management of lion and elephant trophy hunting. Subsequently, the SRG recommended a "Positive Opinion" which allows the import to the EU of trophy animals taken from Serengeti, Tarangire-Manyara, Katavi-Rukwa, and Selous-Mikumi ecosystems among other conditions. As for trophy animals taken from Ruhaha-Rungwa and Malagarasi-Muyovozi (and Burigi-Biharamulo) ecosystems, the SRG maintains the position that a confident non-detriment finding for these ecosystems cannot be established at this stage.[12]

The EU recommendations are based among a host of factors, including the current CITES quota of 100 elephants set by the Tanzanian government. The quota represents 0.24 percent of the total elephant population (Chase MJ et al.) and 0.20 percent on the basis of the updated 2015 total estimates by IUCN African Elephant Specialist Group, and doesn't exceed 0.3 percent of managed population which is the minimum off-take to maintain high level trophy quality, and well below the standing population guidelines of the total population. The quota information in the EU SRG report mostly recycles information from TAWIRI's 2015 submission to the Service.

As discussed above, it does not appear that the elephant trophy quota, that of national and each ecosystem, considers illegal offtake and other legal offtake. As the Service notes in its 2015 Non-Detriment Finding, "sustainability is measured against total offtake, including illegal offtake" and that "in order to evaluable whether offtake from trophy hunting is sustainable, all losses to the African elephant population, including illegal offtake, must be considered."

In addition, while the Tanzanian government provided a trophy quota for each of the six ecosystems, there is no information on the estimated offtake, such as natural mortality or problem animal control for each ecosystem and how that is calculated into the total offtake, both illegal and legal, of each ecosystem.

SRG recommends resumption of hunting at worst elephant poaching site

It is particularly concerning that the EU SRG has recommended a Positive Opinion for trophies taken from the Selous-Mikumi ecosystem. The EU report cited elephant population status and trend from a 2016 TAWIRI presentation. In 2009 there were an estimate of 44,806 elephants and in 2014, the number of elephants dropped to 15,217. Trophy hunting has existed in Selous for decades, yet poaching in the Selous-Mikumi ecosystem was among the worst in Tanzania. The high number of poached elephant in the Selous area does not support the claim that trophy hunting revenues were used effectively to combat poaching. It also suggests that the communities were not

[12] "A Report to the EU CITES Scientific Review Group on the EU Experts Mission to Assess the Sustainability and Management of Lion and Elephant Trophy Hunting in Tanzania". http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=33601&no=49 ("EU SRG Report").

benefiting from the trophy hunting revenues and therefore did not see the incentive to conserve the elephants.

We disagree with the approach of EU SRG who issues recommendations for each ecosystem, rather than making a determination for the country as a whole. This approach fails to take into account that elephants are migratory species and some are part of transboundary populations shared with neighboring countries. It can also reward an otherwise corrupt government or industry or remove incentives to improve inadequate country-wide management scheme with trophy hunting authorizations when reform is actually called for. We agree with the Service's approach that considers the overall conservation and management of the species in the country, rather than breaking it up by specific ecosystem.

SRG report prematurely concludes that poaching is stabilized

The EU SRG report finds that "the wave of poaching that hit Tanzania until 2012/2013 has probably decreased" based on carcass count data and population status. The NTSCIU provided carcass counts on the number of new carcasses, showing a decline from 219 carcasses in 2013 to 16 as of June 2016. TAWIRI caveated the 2014 survey results of the Great Elephant Census and commented that the "follow-up 2015 census conducted in Ruaha-Rungwa ecosystem suggests the population may not have declined to such an extent as reported in 2014". However, the same report pointed out that "further studies are required to understand localized migrations…and some populations remain severely threatened and in decline and continued monitoring and research is essential to verify the trend, as well as the theories around the fluctuations in elephant populations." (Page 18-19, EU SRG Report).

As iterated above, the EU SRG maintains a Negative Position on trophy animals taken from the Ruaha-Rungwa and Malagarasi-Muyovozi (and Burigi-Biharamulo). The SRG remarked that even though quota allocated for these two ecosystems "do not exceed 0.3% of the managed population, "the significant declines and high carcass ratio, together with the lack of information on the extent or impact of anti-poaching measure in these regions on illegal killings means a confident non-detriment finding for these ecosystems cannot be established at this stage." (EU SRG Report, p.6)

Tanzania Wildlife Management Authority (TAWA) Wildlife Division responded in April 27, 2017 urging the EU SRG to reconsider its Negative Positions for trophy animals from these three eco-systems. TAWIRI state that the carcass ratio (1+2) was extremely low in these three eco-systems, habitat loss due to hunting blocks' conversion to agro-pastroal lands was a concern, and the weight and length minimum size of the hunted elephants was reasonable. TAWIRI also argued that safari operators can provide increased protection for elephants. However, there is missing information in the TAWA's response as the response put down "xxx hunting blocks totally xxxxx km^2" when referring to the hunting blocks that will be converted to agro-pastoral land after the EU visit. (EU SRG Report, p.6) This incomplete information is a reminder that information provided by the Tanzania government should be subject to verification by a third-party or independent source.

There are contradictions in the EU SRG's decisions on forming a Positive or Negative Position for trophy animals from each ecosystem. The report cited carcass estimated for the six ecosystems in Tanzania in 2014, provided by TAWIRI in August 2016. Selous-Mikumi ecosystem has the highest carcass ratio (39%), followed by Ruaha-Rungwa ecosystem (15.3%). (EU SRG Report, 2016, p.20. Figure 5 (a-f)). Trophy hunting quota for Selous in 2015 was set at 0.23% of the managed population while the quota for Ruaha was set at 0.12%. Yet, Selous, where the EU

delegation visited, was given a Positive Position while Ruaha was given a Negative Position. (EU SRG Report, 2016, p.25. Table 6).

A 2017 paper published in the African Journal of Ecology (Kyando et al. 2017) identifies areas within the Eastern Selous Game Reserve (ESGR) that are at higher risk of elephant poaching and attributes the lack of economic opportunities as a main reason for the involvement in poaching by local people adjacent to the ESGR. The paper analyzed the data on the distribution of poached elephants and the seasons of poaching from 2008 to 2013. Authors found that almost 60% of poaching incidents occurred within 20km inside the reserve from the boundary of the reserve and that there was much higher poaching frequency during the wet season than the dry season. Trophy hunting proponents consistently complained that the prohibitions of Tanzania's elephant trophy imports by the U.S. and the EU, in 2014 and 2015 respectively, removes the local community's incentives to conserve the elephants. Yet, this paper studying the poaching data from 2008 to 2013 showed that the lack of economic opportunities had long existed before the trophy import bans, indicating that trophy hunting revenues repeatedly fail to motivate the local communities to protect the elephants from poaching.

Until there is substantiated or peer-reviewed research findings on updated poaching statistics in Tanzania, it would be premature to conclude that Tanzania's elephants are no longer threatened with extinction by poaching. In addition, a minor fluctuation of the elephant populations towards a possible increase (yet to be substantiated by independent scholars) from 2014 to 2015 does not alter the devastating fact that Tanzania's elephants have drastically declined since 2009 and need significant time and protections to rebound.

The SRG Report lacks input from independent sources, relies heavily on trophy hunting interests and the government's data.

The EU SRG delegation met with numerous groups and government representatives. They visited and received input from trophy hunting outfitters in the Selous Game Reserve. Missing from the list of people that the EU SRG met are independent sources of data that do not depend on trophy hunting revenues and do not fear retribution for disagreement with claims by the government.

One group that the EU SRG delegation met was communities in the Wild Management Areas (WMAs). They are a key stakeholder group of rural development and whose revenues are primarily driven from trophy hunting. There are currently 38 WMAs established, covering an approximately 50,000km^2. In July 2015, the government raised "the game fee-sharing percentage for rural communities in the WMAs to 65%, and 70% of conservation, observation and permit fees from tourist hunting activities. It is also a legal requirement for Hunting Operators within a WMA to contribute a minimum of five thousand USD to the villages, in addition to the block, permit and conservation fees)." (EU SRG Report, p.25) Out of the 38 WMAs, the EU delegation spoke to community leaders and district councilor's from two WMAs near the Selous Game reserve. Given that these communities have a financial interest in receiving funds from trophy hunting revenues, there is little doubt that their views align with the trophy hunting outfitters.

The EU delegation did not appear to meet with those who are not in search of trophy hunting revenues or who hold alternate views, such as those employed in the photographic tourism sectors. In fact, the socio-economic benefits of trophy hunting revenues to the local communities have routinely been exaggerated by the hunting proponents. A 2017 report revealed that for eight countries surveyed (Botswana, Ethiopia, Mozambique, Namibia, South Africa, Tanzania, Zambia

and Zimbabwe), of the $17 billion in annual tourism spending, trophy hunting adds less than $132 million or just 0.78% of that total (Economists at Large 2017, p. 3). Tourism in these countries accounts for between 2.8% and 5.1% of gross domestic product (GDP) (*Ibid*). Trophy hunters contribute only an estimated 0.03 percent of GDP. Finally, non-trophy hunting tourism employs 132 times more people than trophy hunting (*Ibid*).

In addition, corruption has long plagued Tanzania's wildlife management and conservation. Tanzania ranks in the bottom third of all countries with respect to government corruption, and reports have shown inconsistent and arbitrary application of wildlife laws. (Missing the Mark, pp.16) Freedom House notes that "corruption remains a serious problem, and is pervasive in all aspects of political and commercial life, but especially in the energy and natural resources sectors." (Missing the Mark, pp.17). *See also* Declaration of Craig Packer (attached). As discussed further below, the hunting business is one of the most corrupt sectors in a country with increasing public attention on corruption. *(*Benjaminsen et al. 2013). Research by the Library of Congress cautioned, "the process of allocating and monitoring hunting concessions is said to be riddled with widespread corruption. The Minister of Natural Resources and Tourism and top Wildlife Department officials were recently fired for taking bribes in exchange for assigning hunting blocks and allowing for over a hundred live animals to be shipped abroad. Poaching is another, grave problem. Difficulties in collecting evidence and flaws in the criminal justice system make it challenging to prosecute offenders."[13]

Tanzania Disregards and Exceeds its CITES Export Quota Amid Rampant Poaching

From 2014 to present, the annual CITES export quota for the African elephant trophies from Tanzania is 200 tusks (hunting trophies from 100 animals).[14] From 2007 to 2013, the annual quota was set at 400 tusks (hunting trophies from 200 animals). From 2003 to 2006, the annual quota was set at 200 tusks (from 100 animals). From 2000 to 2002, the quota was set at 100 tusks (hunting trophies from 50 animals).[15] Despite alarming levels of poaching and decimated elephant populations, trophy hunting of elephants continues to be permitted.

Even with these very high export quotas, data from the CITES Trade Database demonstrate that Tanzania exceeded its export quota for elephant tusks in 2006 (quota = 200; actual export = 285) and 2009 (quota = 400; actual export = 445) (Table 1).

[13] Wildlife Trafficking and Poaching, January 2013, The Law Library of Congress, Global Legal Research Center, https://www.loc.gov/law/help/wildlife-poaching/index.php

[14] https://cites.org/eng/resources/quotas/export_quotas?field_party_quotas_tid=&field_full_name_tid=&field_export_quotas_year_value%5bvalue%5d%5byear%5d=2017&items_per_page=50&page=18

[15] https://cites.org/sites/default/files/common/quotas/2002/latest.pdf

Table 4. CITES Trade Database, exports of tusks and trophies from Tanzania.

App.	Taxon	Term	Unit	Country	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
***Loxodonta africana* trophies imported from Tanzania, 2006-2015**														
I	Loxodonta africana	trophies		TZ	66	115	138	130	101	90	87	44	43	9
II	Loxodonta africana	trophies		TZ	0	0	0	2	2	0	1	1	0	2
	TOTAL TROPHIES				**66**	**115**	**138**	**132**	**103**	**90**	**88**	**45**	**43**	**11**
	TOTAL TROPHY TUSKS*				**132**	**230**	**276**	**264**	**206**	**180**	**176**	**90**	**86**	**22**
***Loxodonta africana* tusks imported from Tanzania, 2006-2015**														
I	Loxodonta africana	tusks		TZ	153	45	62	181	138	86	42	25	37	9
II	Loxodonta africana	tusks		TZ	0	0	0	0	0	0	3	2	0	0
	TOTAL TUSKS				**153**	**45**	**62**	**181**	**138**	**86**	**45**	**27**	**37**	**9**
Totals:														
	TOTAL TROPHY TUSKS*				132	230	276	264	206	180	176	90	86	22
	TOTAL TUSKS				153	45	62	181	138	86	45	27	37	9
	GRAND TOTAL TUSKS				**285**	**275**	**338**	**445**	**344**	**266**	**221**	**117**	**123**	**31**
	CITES TUSK EXPORT QUOTA				200	400	400	400	400	400	400	400	200	200

* 2 tusks/trophy

Thus, between 2007 and 2013, when Tanzania's elephant populations were the largest source of ivory in illegal trade according to Wasser et al. (2015), Tanzania also permitted the killing of up to 200 elephants for sport and in 2009 even exceeded their own tusk export quota. This history of noncompliance with CITES export quotas is a major concern for the continued survival of elephants in Tanzania.

Questionable Management of Elephant Trophy Hunting

The government of Tanzania maintains the position that "80% of the funds used for anti-poaching in the areas managed by the Wildlife Division/Tanzania Wildlife Authority comes from trophy hunting." (2016 Letter to EU SRG. Pp.5) However, the fact remains that the worst poaching took place in southern Tanzania in Selous and Ruaha ecosystems where trophy hunting was permitted, again undermining the notion that trophy hunting provides a net benefit to elephants.

According to an International Union for Conservation of Nature ("IUCN") analysis from 2009, Africa's eleven primary big-game hunting countries only contributed an average of 0.6 percent to the national GDP.[16] Of this marginal profit, studies suggest that as little as 3-5 percent of trophy hunting revenues are actually shared with local communities.[17] Indeed, one economic report finds that Safari Club International has grossly overstated the contribution of big game hunting to eight African economies, including Tanzania, and that overall tourism in Africa dwarfs trophy hunting as a source of revenue.[18]

A 2017 study (Economists at Large 2017) that surveyed eight Eastern and Southern African countries found that trophy hunting operators and groups overstated the economic benefits and local employment derived from trophy hunting. Trophy hunting proponents claim that trophy hunting contributes $426 million dollars while in reality it is less than $132 million per year, roughly 0.78% or less of the $17 billion in overall tourism in the focused countries. In addition, trophy hunting employs in the range of 7,500 to 15,500 jobs rather than 53,000 jobs as trophy hunting proponents claim, representing roughly 0.76% or less of average direct tourism employment. With regard to the share of tourist spending from trophy hunting, on average, in Tanzania, trophy hunters' spending represent a mere 0.9 percent of the total tourist receipts.

A multitude of problems impeding Tanzania's effective management and conservation of wildlife have existed for decades. The Service' 2015 NDF noted that "as of June 2010, six out of the ten WMAs with user-rights had entered into business agreements with the private sector worth over $3.3 million, however, it appears that only a small proportion of this money has been made available to the local communities. Overall, the WMAs have had a low capacity for generating income for socio-economic development, and as such, have not provided an incentive to local communities to support or even tolerate wildlife as a potential source of renewable revenue." The

[16] IUCN, *Big Game Hunting in West Africa. What is its Contribution to Conservation?*, Programme Afrique Centrale et Occidentale (2009), https://portals.iucn.org/library/efiles/edocs/2009-074-En.pdf.
[17] Economists at Large, *The $200 Million Question: How Much Does Trophy Hunting Really Contribute to African Communities?* (2013), http://www.ifaw.org/sites/default/files/Ecolarge-2013-200m-question.pdf.
[18] Economists at Large, *The Lion's Share? On the Economic Benefits of Trophy Hunting* (2017), http://www.hsi.org/assets/pdfs/economists-at-large-trophy-hunting.pdf.

Service further noted that the new provisions in the revised Tanzania Wildlife Management Area Regulations 2012 gave WMAs with "approximately 60-65% of the total hunting revenue. Despite the improvements in administering the WMA system, there is information indicating that revenue retention by WMA's is still insufficient to finance and encourage sound management decisions within these areas."

A 2013 Evaluation Report[19] by the USAID found a litany of problems on WMAs, from governance, economic, conservation challenges to challenges in the process of establishing WMAs and challenges to understanding the impacts of WMAs on constituent villages. The report found that problems in wildlife sector governance and structural and economic management have persisted for the past decade. (USAID 2013 Report. Pp.48) For instance, the report pointed out lack of transparency and accountability among WMA stakeholders. "Villagers and even village councils do not know the details of investor contracts or payment terms, let alone when and what income will return to the WMA for distribution." (USAID 2013 Report. Pp 18.) The report found that while "the TAWIRI collects information on changes in wildlife numbers and movement patters, but there has been criticism of how this information is used, especially in relation to issuing hunting quotas. There does not appear to be a clear link between information collected by TAWIRI and decisions on what quotas are issued for different species." (USAID 2013 Report. Pp.26)

Wildlife scientists cautioned many weaknesses in how hunting revenues are distributed. (Nelson, Lindsey and Balme 2013). For instance, revenues from trophy hunting bypassed the communities and landholders. The allocation of hunting blocks give government officials the discretion to assign valuable hunting concessions, "creating conditions conducive to corruption and the use of hunting blocks for political patronage." (Nelson & Agrawal, 2008; Leader-Williams et al., 2009 as cited in Nelson, Lindsey and Balme 2013). There has been a tendency to establish unsustainably high quotas and encouragement of excessive and unselective harvest. Attempts to overhaul the bidding system for hunting concessions in the mid-1990s, which would have reduced corruption and devolved rights over wildlife management and benefits, were blocked by government officials due to lobbying by national and international trophy hunting organizations (Baldus & Cauldwell, 2004 as cited in Nelson, Lindsey and Balme 2013).

Benjaminsen et al. in their 2013 paper, published on behalf the Institute of Social Studies in The Hague, express concerns about the Tanzanian government's increasing control over incomes generating from wildlife utilization in the name of "community-based" conservation. They observe that "This process of reconsolidation of state control over wildlife management is also playing out in contests over control of the two main income-generating activities in the sector: photo safaris and sport hunting…. In addition to control over hunting profits, the management of hunting through the quota system has also been reconsolidated under state control….it seems that the hunting industry is simply too lucrative for decentralization." (Benjaminsen et al. 2013, p.10)

Intimidation of the local non-consumptive proponents by trophy hunting outfitters occurs. For instance, a hunting block in Loliondo area was controlled by Ortello Business Corporation (OBC), a company owned by the royal family of the United Arab Emirates. The local Massai communities did not want to enter or renew the contract with the company because of a series of conservation

[19] United States Agency for International Development, *Tanzania Wildlife Management Areas Evaluation* (2013), http://pdf.usaid.gov/pdf_docs/pdacy083.pdf.

related complaints against the company. For instance, resident were concerned by what they saw as indiscriminate capture and killing of animals. Yet OBC continued to operate with direct connections to and support from the central government, but without the support of villagers. "Massai complained that OBC harassed non-consumptive tour operators working in the area…More serious complaints about OBC included intimidation and threats, harassment and detention, and even torture by the OBC security forces." (Benjaminsen et al. 2013. p.13)

Despite the claim that trophy hunting revenues are used on boosting anti-poaching measures, evidence suggests that these measures did not mitigate the poaching epidemic. Selous Game Reserve is a prime example. Selous Game Reserve is split into 47 operating blocks, of which only four are for photographic tourism while the rest, 43, are assigned for sport hunting. (TAWIRI 2010, pp.14) Prior to 2005 a Revenue Retention Scheme was in operation, whereby 100% of revenue from photographic tourism, and 50% from hunting operations, was retained for management of the Game Reserve. In 1997 the Reserve earned US $2,300,000 annually and retained US $1,703,000, and by 2003 the revenue retained had increased to US $2,800,000. Following National budget reductions in 2004, the amount retained by the Reserve declined dramatically to approximately US $800,000 in 2008. (TAWIRI 2010). The drop in revenue coincides with a period of increased poaching in the Reserve and suggests that anti-poaching operations are severely underfunded. (TAWIRI 2010, pp.15).

According to Chief Warden in Selous Game Reserve during 1994 to 2008 and 2012-2015, Benson Kibonde, import bans on hunting trophies have severe impact on the level of anti-poaching activities because "85% of the Selous retention scheme fund come from hunting. If any amount of the hunting revenue is compromised, the registered success in anti-poaching efforts could be seriously jeopardized." (IUCN Briefing Paper, April 2016. pp15.) However, clearly, given the poaching statistics noted earlier, there is no "registered success" in anti-poaching efforts, driven from trophy hunting revenues, in the Selous Game Reserve.

Habitat loss and fragmentation, in addition to human growth, continue to compound the challenges to preserve the species and their habitat. A study on the Rombo area in North East Tanzania found that 75% of the land in the study area was covered by settlement and seasonal agriculture in the year 2015. The Rombo area had a continued human population increase of 30% over the past 25 years. With this rate of population increase, more agricultural land is likely to be converted to settlement and, thus, reducing elephant dispersal area. (Mmbaga et al. 2017)

A 2017 study examined the implication of upgrading conservation areas from Game Reserves to National Parks on local community livelihoods, drawing on lessons from Saadani National Park in Tanzania. Unlike game reserves where licensed human consumptive uses, such as trophy hunting, are permitted, National Parks allow only controlled non-consumptive uses, such as walking safaris, game driving and photographic tourism. The authors concluded that while there are problems and challenges to be resolved, people's livelihoods after change of status from a Game Reserve to a National Park has been more positive than negative. The study also reported that despite some problems they encounter, villagers were very positive about the national park designation because their life was reported to have improved as a result of the status change. Villagers also reported improved social infrastructure and job opportunities including expanded market for their goods. (Michael E. 2017)

There is no proof that trophy hunting of elephants in Tanzania in 2016 or beyond enhances the survival of the species. On the contrary, given the massive reduction of elephant populations due to poaching, trophy hunting has only added to the staggering loss of the animals in the country. Several reports, including a 2013 report from the U.S. Agency for International Development point out the failure of Tanzanian authorities to manage land and wildlife effectively and show little evidence that trophy hunting is contributing positively to wildlife conservation.[20]

Conclusion

Sixty percent of Tanzania's elephant population has disappeared since 2009. Tanzania is identified as a major ivory trafficking hub, with 86 to 93% of global large ivory seizures coming from concentrated areas in Tanzania in the last few years. Despite the pro-hunting claim the trophy hunting benefits conservation, the worst poaching epidemic took place in Selous Game Reserve where trophy hunting was allowed.

The current Tanzania Elephant Management Plan was drafted during the height of the poaching and ivory trafficking crisis, seven years ago. Tanzania does not have an updated Management Plan in place that reflects its current elephant population status and trends and corresponding management and conservation strategies. In addition, Tanzania's CITES National Ivory Action Plan was deemed not substantially achieved by the CITES Secretariat. The country's national export trophy quota, including quota for each ecosystem, lacks scientific basis and fails to account illegal offtake and other legal in its assessment of quota.

Thus, trophy hunting of elephants in Tanzania cannot be said to enhance the survival of the species, and issuing an import permit for elephant trophies from Tanzania would therefore violate the Endangered Species Act and FWS regulations. We likewise suggest that at this juncture trophy hunting results in a sufficient offtake of elephants that the Service cannot determine that it is not detrimental the survival of the species. If the Service does issue any positive regional findings or any elephant trophy import permits from Tanzania, HSUS, HSI, and CBD will consider seeking judicial review of such decisions. Further, this letter serves as formal opposition to any application for an import permit for a lion trophy from Tanzania and HSUS, HSI, and CBD request that FWS provide ten days advance notification (via email, afrostic@humanesociety.org) prior to the issuance of any such permits. *See* 50 C.F.R. §§ 17.22(e), 17.32.[21]

Sincerely,

[20] United States Agency for International Development. *Tanzania Wildlife Management Areas Evaluation – Final Evaluation Report*. USAID. July 15, 2013. Web. < http://pdf.usaid.gov/pdf_docs/pdacy083.pdf>.

[21] HSUS has previously called on FWS to publish notice in the Federal Register of threatened species permit applications, and we reassert that such action is essential to create transparency in FWS' enhancement analysis for African lion activities, consistent with the intent of ESA Section 10. Similarly, it is arbitrary for the Service to explicitly apply the notification requirements of 50 C.F.R. § 17.22(e) to certain types of threatened species permits (i.e., those for Safe Harbor Agreements and Candidate Conservation Agreements with Assurances) but not to other threatened species permits (i.e., for incidental take and import).

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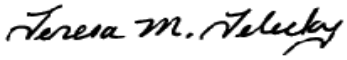

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REFERENCES ATTACHED:

Allendorf, F.W. and Hard, J.J., *Human-Induced Evolution Caused by Unnatural Selection through Harvest of Wild Animals*, 106 Proceedings of the National Academy of Sciences, 9987-94 (2009)

Benjaminsen TA, Goldman MJ, Minwary MY, Maganga FP. *Wildlife Management in Tanzania: State Control, Rent Seeking and Community Resistance*. Development and Change Volume 44, Issue 5 (2013)

Chapron, G. and Treves, A., *Blood does not buy goodwill: allowing culling increases poaching of a large carnivore*, Proc. R. Soc. B 283 (2016), http://dx.doi.org/10.1098/rspb.2015.2939

Chase MJ, Schlossberg S, Griffin CR, Bouché PJC, Djene SW, Elkan PW, Ferreira S, Grossman F, Kohi EM, Landen K, Omondi P, Peltier A, Selier SAJ, Sutcliffe R., *Continent-wide survey reveals massive decline in African savannah elephants*, PeerJ 4:e2354 (2016), https://peerj.com/articles/2354/

Crosmary, William-Georges et al., *Does trophy hunting matter to long-term population trends in African herbivores of different dietary guilds?,* 18 Animal Conservation, 117-30 (2015)

Economists at Large, *The $200 Million Question: How Much Does Trophy Hunting Really Contribute to African Communities?* (2013), http://www.ifaw.org/sites/default/files/Ecolarge-2013-200m-question.pdf

Economists at Large, *The Lion's Share? On the Economic Benefits of Trophy Hunting* (2017), http://www.hsi.org/assets/pdfs/economists-at-large-trophy-hunting.pdf

Environmental Investigation Agency, *Exposing the global hub in illegal ivory trade* (July 2017), at 5, https://eia-international.org/wp-content/uploads/EIA-The-Shuidong-Connection-FINAL.pdf

Gobush KS, Mutayoba BM, and Wasser SK, *Long-Term Impacts of Poaching on Relatedness, Stress Physiology, and Reproductive Output of Adult Female African Elephants*, Conservation Biology (Sept. 2008)

HSUS, HSI, IFAW, and The Fund for Animals, *Petition to the Secretary of the Interior to List the African Elephant (*Loxodonta africana*) as Endangered Pursuant to the Endangered Species Act* (Feb. 11, 2015)

Ihwagi F.W. et al., *Night-day speed ratio of elephant as indicator of poaching levels. Ecological Indicators*, 84:38-44 (2018), https://doi.org/10.1016/j.ecolind.2017.08.039

IUCN, *Big Game Hunting in West Africa. What is its Contribution to Conservation?*, Programme Afrique Centrale et Occidentale (2009), https://portals.iucn.org/library/efiles/documents/2009-074-En.pdf

IUCN Briefing Paper, Informing Decision on Trophy Hunting (April 2016), https://www.iucn.org/downloads/iucn_informingdecisionsontrophyhuntingv1.pdf

Jachmann, H. et al., *Tusklessness in African Elephants: A Future Trend*, 33 African Journal of Ecology, 230-35 (1995)

Kideghesho, J., *The elephant poaching crisis in Tanzania: a need to reverse the trend and the way forward*, Tropical Conservation Science Vol.9(1): 369-388 (2016), https://tropicalconservationscience.mongabay.com/content/v9/tcs_v9i1_369-388_Kideghesho.pdf

Kyando M., Ikanda D., and Røskaft E., *Hotspot elephant-poaching areas in the Eastern Selous Game Reserve, Tanzania*, African Journal of Ecology Vol. 55, 365-371 (2017)

Michael, E., & Naimani, G. M. *Implication of Upgrading Conservation Areas on Community's Livelihoods: Lessons from Saadani National Park in Tanzania*, Journal of the Geographical Association of Tanzania, 36(1) (2017)

Milner J.M., Nielsen E.B., Andreassen HP, *Demographic side effects of selective hunting in ungulates and carnivores*, Conservation Biology Vol. 21:36-47 (2007)

Mmbaga E.M, Munishi L.K. & Treydte A.C., *How dynamics and drivers of land use/land cover change impact elephant conservation and agricultural livelihood development in Rombo, Tanzania*, Journal of Land Use Science (2017), https://10.1080/1747423X.2017.1313324

Muposhi VK, Gandiwa E, Bartels P, Makuza SM, Madiri TH, *Trophy Hunting and Sustainability: Temporal Dynamics in Trophy Quality and Harvesting Patterns of Wild Herbivores in a Tropical Semi-Arid Savanna Ecosystem*, PLoS ONE 11(10) (2016), http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0164429

Nelson F., Lindsey P., Balme G., *Trophy hunting and lion conservation: a question of governance?*, Oryax Vol. 47, Issue 4 (2013), https://www.researchgate.net/publication/257201788_Trophy_Hunting_and_Lion_Conservation_A_Question_of_Governance

Pigeon, G., Festa-Bianchet, M., Coltman, D. W. and Pelletier, F., *Intense selective hunting leads to artificial evolution in horn size*, J. Evolutionary Applications Vol. 9, 521-530 (2016), http://marco.recherche.usherbrooke.ca/pdffiles/PigeonEvolApplic16.pdf

Representative Raul M. Grijalva, *Missing the Mark: African Trophy Hunting Fails to Show Consistent Conservation Benefits*" (June 13, 2016), *available at* http://democrats-naturalresources.house.gov/imo/media/doc/Missing%20the%20Mark.pdf

Robson AS, Trimble MJ, Purdon A, Young-Overton KD, Pimm SL, van Aarde RJ, *Savanna elephant numbers are only a quarter of their expected values*, PLOS One (April 2017), http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0175942

Tanzania, Letter to the Species Review Group of the European Commission (Aug. 2015)

Tanzania Natural Resources Forum, Proceedings of the 3rd National CBNRM Forum (2016) https://tnrf.org/files/proceedings_of_the_3rd_cbnrm_forum_final_report31082016.pdf

Tanzania Wildlife Research Institute (TAWIRI), *Tanzania Elephant Management Plan 2010-2015* (2010), https://www.stzelephants.org/download/elephant-demography/TEMP%202010-2015.pdf

TAWIRI, Addendum to 2014 Non-Detriment Finding for African Elephants in Tanzania (2015)

United States Agency for International Development, *Tanzania Wildlife Management Areas Evaluation* (2013), http://pdf.usaid.gov/pdf_docs/pdacy083.pdf

USFWS, Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Tanzania during 2014, https://www.fws.gov/international/pdf/enhancement-finding-2014-elephant-Tanzania.PDF

USFWS, Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Tanzania during 2015, https://www.fws.gov/international/pdf/enhancement-finding-2015-elephant-Tanzania.PDF

USFWS, *Non-detriment finding for Tanzania elephants* (2014), https://www.fws.gov/international/pdf/non-detriment-finding-2014-elephant-Tanzania.pdf

USFWS, *Non-detriment finding for Tanzania elephants* (2015), https://www.fws.gov/international/pdf/non-detriment-finding-2015-elephant-Tanzania.pdf

Wasser SK, Brown L, Mailand C, Mondol S, Clark W, Laurie C, Weir BS, *Genetic assignment of large seizures of elephant ivory reveals Africa's major poaching hotpots*, Science Vol. 349 (June 2015), http://science.sciencemag.org/content/349/6243/84/tab-pdf

October 5, 2017

Mr. Timothy Van Norman
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Re: Imports of African Lion Trophies from Tanzania Must Not Be Permitted

Dear Chief Van Norman & Chief Gnam:

Since the Endangered Species Act (ESA) listings went into effect for *Panthera leo leo*[1] and *Panthera leo melanochaita* on January 22, 2016 (80 Fed. Reg. 79999 (Dec. 23, 2015)), not a single lion trophy has been permitted to be imported from Tanzania to the U.S., a necessary reprieve after many years when American trophy hunters imported hundreds of lions trophies per year. On behalf of The Humane Society of the United States (HSUS), Humane Society International (HSI), and Center for Biological Diversity (CBD) we write to strongly urge the U.S. Fish and Wildlife Service ("FWS" or "the Service") to issue a negative enhancement finding for Tanzanian lions, as it cannot be demonstrated that trophy hunting of lions in Tanzania affirmatively benefits the conservation of the species.

Pursuant to the new regulation for *Panthera leo melanochaita* (50 C.F.R. § 17.40(r)), the Service can only issue a permit to import a lion trophy from east or southern Africa if the best available science supports a finding that trophy hunting enhances the survival of this subspecies. It is critical that FWS apply the precautionary principle and strictly scrutinize the impacts that trophy hunting

[1] HSUS, HSI, and CBD fully expect that no permits will be issued to import trophies of endangered *Panthera leo leo*, as this subspecies is on the brink of extinction and cannot sustain recreational offtake. As the U.S. Fish and Wildlife Service (FWS) acknowledged in the lion listing rule, in western and central Africa, "[m]anagement programs do not appear to be sufficient to deter unsustainable offtakes" and "experts agree that there is no level of offtake that would be sustainable for *P. l. leo* populations…" 80 Fed. Reg. at 80040.

has on African lions – indeed, as recently published in *Nature*, overutilization, including trophy hunting, is the biggest threat to biodiversity.[2]

ESA Requirements for Lion Trophy Imports

Pursuant to the plain language of this statutory term (16 U.S.C. § 1539(a)(1)), "enhancement" permits may only be issued for activities that *positively benefit* the species in the wild. *See also* FWS, *Ensuring the Future of the Black Rhino* (Nov. 25, 2014), *at* http://www.fws.gov/news/blog/index.cfm/2014/11/25/Ensuring-the-Future-of-the-Black-Rhino (acknowledging that the ESA enhancement standard is more stringent than the CITES non-detriment standard); U.S. Fish and Wildlife Service Handbook for Endangered and Threatened Species Permits (1996) (making clear that an enhancement activity "must go beyond having a neutral effect and actually have a positive effect").

HSUS, HSI, and CBD agree with the standard that FWS established in the 4(d) Rule for *Panthera leo melanochaita*, requiring that,

> "when making a determination of whether an otherwise prohibited activity enhances the propagation or survival of *P. l. melanochaita*, the Service will examine the overall conservation and management of the subspecies in the country where the specimen originated and whether that management of the subspecies addresses the threats to the subspecies (i.e., that it is based on sound scientific principles and that the management program is actively addressing the current and longer term threats to the subspecies). In that review, we will evaluate whether the import contributes to the overall conservation of the species by considering whether the biological, social, and economic aspects of a program from which the specimen was obtained provide a net benefit to the subspecies and its ecosystem" (emphasis added).

HSUS, HSI, and CBD also agree that FWS must consider the following factors when making an enhancement finding for importation of sport-hunted trophies of *P. l. melanochaita*:

> "(a) Biological sustainability: The hunting program cannot contribute to the long-term decline of the hunted species. It should not alter natural selection and ecological function of the hunted species or any other species that share the habitat. The program should not inadvertently facilitate poaching or illegal trade in wildlife by acting as a cover for such illegal activities. The hunting program should also not manipulate the ecosystem or its component elements in a way that alters the native biodiversity.
>
> (b) Net Conservation Benefit: The biologically sustainable hunting program should be based on laws, regulations, and scientifically based quotas, established with local input, that are transparent and periodically reviewed. The program should produce income, employment, and other benefits to create incentives for reducing the pressure on the target species. The program should create benefits for local residents to co-exist with the target species and other species. It is also imperative that the program is part of a legally recognized governance system that supports conservation.

[2] Sean L. Maxwell et al., *Biodiversity: The Ravages of Guns, Nets, and Bulldozers*, Nature Vol. 536, 143-145 (Aug. 11, 2016), *at* http://www.nature.com/news/biodiversity-the-ravages-of-guns-nets-and-bulldozers-1.20381.

(c) Socio-Economic-Cultural Benefit: A well-managed hunting program can serve as a conservation tool when it respects the local cultural values and practices. It should be accepted by most members of the community, involving and benefiting local residents in an equitable manner. The program should also adopt business practices that promote long-term economic sustainability.

(d) Adaptive Management: Planning, Monitoring, and Reporting: Hunting can enhance the species when it is based on appropriate resource assessments and monitoring (e.g., population counts, trend data), upon which specific science-based quotas and hunting programs can be established. Resource assessments should be objective, well documented, and use the best science available. Adaptive management of quotas and programs based on the results of resource assessments and monitoring is essential. The program should monitor hunting activities to ensure that quotas and sex/age restrictions of harvested animals are met. The program should also generate reliable documentation of its biological sustainability and conservation benefits.

(e) Accountable and Effective Governance: A biologically sustainable trophy-hunting program should be subject to a governance structure that clearly allocates management responsibilities. The program should account for revenues in a transparent manner and distribute net revenues to conservation and community beneficiaries according to properly agreed decisions. All necessary steps to eliminate corruption should be taken and to ensure compliance with all relevant national and international requirements and regulations by relevant bodies such as administrators, regulators and hunters."

Evidence is Insufficient to Support Claims that Lion Trophy Hunting in Tanzania Enhances the Survival of the Subspecies

The lion population in East Africa is estimated to range between 7,345 and 13,316 (Bauer *et al.* 2016, supplementary material, Table 7). This population accounts for between 39 and 42 percent of the total *Panthera leo* population (Id.), which may be as low as 20,000 remaining lions (Bauer *et al.* 2016). According to the 2016 IUCN assessment, well-studied lion populations in East Africa declined by as much as 59% since 1993 (Bauer *et al.* 2016, supplementary material, Table 2). In Tanzania, the lion population in four well-studied areas (Ngorongoro Crater, Katavi, Matambwe (Selous GR), Serengeti, and Tarangire) is estimated to have decreased by 66%, from 1,787 in 1993 to only 608 in 2014 (Bauer *et al.* 2016, supplementary material, Table 3). Shockingly, in Katavi, the lion population was assessed at 1,118 in 1993 but thought to be closer zero[3] in 2014 (Id.). Only one of these well-studied Tanzania populations, Serengeti, is estimated to have increased during this time, from 232 lions to 314 (*Id*.). According to a December 2015 analysis of lion conservation strategies, "Tanzania is possibly the country with most free-ranging lions in Africa, and several lion populations are contiguous with neighbouring countries. Successful lion conservation in

[3] While there may be some lions in Katavi, as claimed by anecdotal evidence from Tanzanian authorities (Benyr 2017, p. 8), the IUCN assessment reports "the value of published findings which is the value zero" actually "represents non-detection, not absence." (Bauer 2016b). *See also,* Declaration of Dr. Craig Packer (attached), which notes that Tanzania has expelled independent scientists and that sources affiliated with the hunting industry are now dictating alleged survey numbers.

Tanzania can preserve more lions than anywhere else." (Bauer *et al.* 2015). *See also* Mtui et al. 2016.

Therefore, Tanzania's lion population – which is critical to maintaining the species in the wild – has suffered a major decline in recent years and FWS must ensure that American trophy hunters do not contribute to additional decline of the population. Worryingly, a 2015 population modelling assessment led to a 37% probability that lions in East Africa will decline by a further 50% over the next two decades (Bauer *et al.* 2015).

In Tanzania, trophy hunting is prohibited only in the national parks and Ngorongoro Conservation Area (Brink *et al.* 2016, p. 2). An estimated 305,000 km^2, or 85% of protected land, is available to hunters. (Ibid) Hunting blocks are leased to hunting companies, which are then apportioned a quota for specific species for every hunting season (Ibid). As described herein, this management program is insufficient for the Service to rely on to make a finding that trophy hunting enhances the survival of lions in Tanzania.

Tanzania's wildlife management generally operates as follows:

> Management of the wildlife sector is split between management of National Parks by Tanzania National Parks (TANAPA), Forest Reserves by Forest and Beekeeping Division of the Ministry of Natural Resources and Tourism (MNRT), Ngorongoro by the Ngorongoro Conservation Area Authority (NCAA), and the rest of the areas by the Wildlife Division (WD) also of the MNRT. The key legislation allowing for wildlife management are the National Parks Ordinance of 1959, which covers wildlife within National Parks; Ngorongoro Conservation Area Ordinance of 1959; Forest Act of 2002 which covers Forest Reserves; and, the Wildlife Conservation Act of 1974. Overall legislation is now guided by the Wildlife Policy (MNRT, 2007) which confirms the government's overall right of ownership of wildlife . . . (Brink 2010, p. 6).

The following documents published online or submitted by the Tanzanian authorities to other governments (in order of more recent to oldest) represent publicly available information relevant to the Service's enhancement analysis for lion trophy imports from Tanzania:

- A Report to the EU CITES Scientific Review Group on the EU Experts Mission to Assess the Sustainability and Management of Lion Trophy Hunting in Tanzania (2016)
- Comment on ESA Status Review of African Lion. January 27, 2015. Ministry of Natural Resources and Tourism. The United Republic of Tanzania.
- The Tanzania Lion and Leopard Conservation Action Plan. February 20-22nd 2006. Tanzania Wildlife Research Institute (TAWIRI).
- Conservation Strategy for the Lion in Eastern and Southern Africa. 2006. IUCN/SSC Cat Specialist Group.
- 1995 Policy and Management Plan for Tourist Hunting.

As detailed below, these documents do not support a finding that lion trophy hunting in Tanzania enhances the survival of the subspecies.

- **The European Union's Scientific Review Group Assessment of Tanzanian Lion Trophy Hunting is Insufficient to Support an Enhancement Finding by USFWS**

In 2016, an EU-funded expert "study visit" took place in Tanzania and a report (Scientific Review Group or "SRG Report") was completed by three delegates – representing CITES authorities of the United Kingdom, Austria, and Hungary. The SRG Report recommended that the EU Scientific Review Group maintain a "positive opinion" allowing imports of Tanzanian lion trophies "in accordance with their current age-sex based restrictions and a total quota of 207 trophies, allocated in accordance with density recommendations (0.5 lions/1,000 km^2 (with the exception of Selous where 1.0/1,000 km^2))" (Benyr 2016, p. 6). This quota is unsustainable, as discussed further below.

SRG Report's recommendation for a "positive opinion" is unsubstantiated, with major gaps in the findings and proof is absent for the key claims. It would violate the Endangered Species Act and the Administrative Procedure Act for USFWS to rely on this EU position in making an enhancement finding for the import of lion trophies from Tanzania.

The findings are largely based on unpublished data, without the necessary scientific scrutiny

Many of the study's conclusions are based on unpublished reports and data presented by the Tanzanian government to the visiting delegates. Indeed the report itself acknowledges "It has not been possible to personally verify all the unpublished data provided by Tanzanian authorities during the course of the SRG field mission" (Benyr 2017, p. 3). Yet the authors state, "presented facts held up to scrutiny and did not reveal inconsistencies" (Ibid). However, only robust, unbiased, and transparent published research can hold up to scientific scrutiny. In this case, none of these unpublished findings are made available in the SRG Report, meaning it is impossible to establish their veracity or to rely on them with confidence.

The following are just a few examples of statements from the report, which are not supported with actual copies of the cited findings or other forms of evidence to prove the claims:

- "For the Selous Game Reserve, a recent survey revealed that lion densities have remained stable and even increased in some sectors since 2009 (Crosmary et al. 2016)" (Benyr 2017, p. 9).
    - The Crosmary et al. study cited is not available online nor are details of its conclusions cited in the SRG Report. Therefore, it is unclear if its findings have been peer-reviewed and thus verified.
- "A number of recent reforms of the wildlife regulations substantiate the political commitment of Tanzania to adopt best practice models and contribute to their improvement" (Benyr 2017, p. 9).
    - The SRG Report does not further explain what these recent reforms are or offer any details about them, thus not providing any support for this claim.

- "Currently, the international marketing of lion bones seems to be no serious problem in Tanzania" (Benyr 2017, p. 11).
    - The authors offer no evidence to back up this statement in the SRG Report. Therefore, on what grounds is this assumption made? A recent report from the Environmental Investigation Agency titled "The Lion's Share: South Africa's Trade Exacerbates Demand for Tiger Parts and Derivatives" cites to an April 2017 arrest in Vietnam of a suspected criminal network leader, Nguyen Mau Chien, known for trafficking of lion parts with an arrest history in Tanzania (Environmental Investigation Agency 2017, p. 8). The SRG Report too quickly dismisses lion bone trade as a low threat to Tanzania's lions.

The study lacks input from sources independent of the Tanzania authorities, including key lion biologists

The authors of the SRG Report met with numerous Tanzanian government representatives, managers of the Selous Game Reserve, other regional game officers, representatives of Wildlife Management Areas, hunting outfitters, tourism operators, and villagers, among others. The SRG Report states "[e]ssentially everyone we spoke to in Tanzania, which included representatives of all main stakeholders (even those that were critical of the governments past efforts to conserve the species), agreed that trophy hunting has a clear conservation benefit for lions" (Benyr 2017, p. 12). Yet input from additional key stakeholders is altogether missing.

Missing from this list of stakeholders are independent sources of input that do not depend on trophy hunting revenues and do not fear retribution for disagreeing with claims by the government. Indeed, in listing the African lion under the Endangered Species Act, the U.S. Fish and Wildlife Service stated that Tanzania's "transparency (in terms of trophy quality data) and the scientific objectivity of the evaluating body has been questioned." 80 Fed. Reg. at 80042.

For example, input is missing from various members of the African Lion Working Group, affiliated with the Cat Specialist Group, other than Dennis Ikanda who is a government employee (working for the Tanzania Wildlife Research Institute (TAWIRI)) and thus not an impartial voice. Further, the SRG Report questions the findings of lion experts – as in the case of the Hans Bauer et al. 2015 publication titled *Lion (Panthera leo) populations are declining rapidly across Africa, except in intensively managed areas* (Benyr 2017, p. 7) – without an opportunity for Dr. Bauer and the co-authors to explain the conclusions.

Additionally, it is well known that Dr. Craig Packer, who spent decades researching lions in Tanzania was expelled from the country after exposing corruption, especially within the lion trophy hunting industry (Packer 2015;[4] Declaration attached). Jerry Belant of Mississippi State University – who is directly affiliated with Safari Club International (SCI)[5] – is now in charge of

[4] Packer, C. Lions in the Balance: Man-Eaters, Manes and Men with Guns. University of Chicago Press (2015). ISBN 13: 978-0-226-09295-9.

[5] Dr. Belant's "research is a collaborative effort among MSU, SCI Foundation, Tanzania Wildlife Research Institute, and Tanzania National Parks, with primary funding provided by the SCI Foundation" (http://www.cfr.msstate.edu/wildlife/documents/WFA_Newsletter_summer2016.pdf). SCI Foundation is

lion population research in the Serengeti after Dr. Packer's forced removal from the project. Dr. Belant's research on dental characteristics in estimating the age of African lions is cited in the SRG Report, but Dr. Belant's relationship with SCI taints the veracity of his work, since SCI has a clear incentive to continue trophy hunting unfettered in Tanzania.

Population data provided in the SRG Report contradicts findings of top lion scientists and has not been peer-reviewed

In the discussion on "Population Size" (Benyr 2017, p. 6), the SRG document reports on a variety of unpublished surveys and population estimates. None of the drafts or final versions of these surveys are currently discoverable online and therefore presently not transparent. Determinations of trophy hunting sustainability cannot rely on data that has not undergone the process of scientific review. These unpublished and unavailable documents quoted in the SRG Report include:

- Crosmary, W.-G., D. Ikanada, F. A. Ligate, Kasanga Imani, Mkuburo Lameck, Lyamuya Richard, Ngongolo Kelvin, Sandini Pietro, and C. Philippe. 2016. The Selous Game Reserve is still a stronghold for African lions, Tanzania.
- TAWIRI Wildlife Division and TAWA. 2016. Non-detriment findings on African lion (*Panthera leo*) in the United Republic of Tanzania, including Enhancement findings June. Ministry of Natural Resources and Tourism - Wildlife Division.
- Dickman (in prep.) [Macdonald (2016) is cited as referencing Dickman, claiming "Our latest data suggest that Tanzania holds approximately 9,900 free-ranging lions in an estimated lion range of 380,000 km^2 (Dickman in prep.)."]

The recently completed Selous population survey using spoor counts is the first time a survey of this sort has ever been completed there, and therefore lacks a baseline for comparison or trend analysis purposes. Given this apparent lack of standardized methodology, it would be arbitrary and capricious to rely on this new data and such data likely does not offer a clear picture of what the anthropogenic impacts have been on the Selous population. Further, it appears that SCI funded this survey, at least in part, which undermines its impartiality.

Moreover, there is currently no population monitoring activity by independent scientists (Packer Declaration), with all data produced either by scientists employed by the government or funded by trophy hunting organizations. For example, as cited above, Dr. Belant's research in the Serengeti is funded by SCI. Further, Selous-based research by Dr. Henry Brink – an independent scientist – was also terminated and replaced by SCI-funded and government-supported researchers.

In the discussion on "Population Trends" (Benyr 2017, p. 7), the SRG Report offers a rebuttal to the published paper by Bauer et al. 2015, which cites to severe lion population declines throughout Africa and predicts dramatic declines in Tanzania. The SRG Report states "whilst this publication presents a valuable compilation of data several problems with the interpretation of the data exist which affects their assessment of trophy hunting in Tanzania" (Benyr 2017, p. 7). Unfortunately,

the report fails to acknowledge responses to such criticisms offered by the authors (Bauer et al. 2016a; Bauer 2016b).

Bauer et al. 2015 predicted a 37% chance that East African lion populations (including Tanzania) would decline by one-half over two decades. To come to this conclusion, the authors explain, "We compiled all credible repeated lion surveys and present time series data for 47 lion (*Panthera leo*) populations. We used a Bayesian state space model to estimate growth rate-λ for each population and summed these into three regional sets to provide conservation-relevant estimates of trends since 1990." (Bauer et al. 2015)

The SRG Report questions the findings in Bauer et al. 2015 findings claiming "unweighted means to summarize population trends emphasizes changes in small populations" and that "extrapolation of trends beyond the information-content of the available data has led to an exaggeration of the threat for a decline," while further concluding that "these considerations include no positive effects that a previous decline might have on the population growth by increasing availability of preferred habitats and food and reducing intraspecific conflicts" (Benyr 2017, p. 7). The paper further goes on to question the findings from one of the assessment sites in Katavi, Tanzania.

The points highlighted above are similar to that of Riggio et al. 2016, to which Bauer et al. 2016a respond as follows:

- Regarding "unweighted means to summarize population trends": "Our regional population analyses include all reported time series data for both increasing and declining populations; we calculated the projected growth rate λT of T years (7), but these metrics were not intended to provide a Bayesian forecast of population sizes (8). Weighting these metrics by population size would introduce a serious bias because sites that had previously suffered the largest declines would contribute relatively little to aggregated projected growth rates." (Bauer *et al.* 2016a)
- Regarding Katavi, Tanzania: "Our paper acknowledges the imprecision inherent in the Katavi time series of ground surveys, which were recently used to report a significant decline in lion numbers from 1995 to 2010 (5). Our Bayesian analysis fully considers uncertainty resulting from observation and process errors, and our conclusions do not depend on the Katavi time series: Excluding Katavi only reduces the probability of a one-half decline in three lion generations in East Africa from 37% to 32%." (Ibid)
- General comment: "Our assessment is based on the widely accepted criteria of the Red List and is entirely consistent with similar trends described for specific sites and for Africa as a whole (e.g., references 1, 4, 5, 23, 31, 32, and 38 of ref. 9)." (Ibid)

Despite Tanzanian authorities questioning the IUCN's assessment of lions, the IUCN Cat Specialist Group and its Lead Assessor – Dr. Hans Bauer – have stood by their initial assessment, as evidenced in a letter attached to this submission. (Bauer 2016b).

The SRG Report fails to identify serious concerns with the implementation of the lion trophy age verification system in Tanzania

As described by the SRG field visit team, "Since 2011, Tanzania has signed a Memorandum of Understanding with IGF Foundation which is a French based International organization for wildlife Conservation. IFG Foundation assists the Wildlife Division and now TAWA in organizing the collection and surveillance of lion trophies" (Benyr 2017, p. 18). The document offers a lengthy description of how the IGF and its government partners age and document the trophies.

This French organization – led by Director Dr. Philippe Chardonnet[6] - is affiliated with the trophy hunting industry. One of its four key objectives is "to safeguard the world's hunting heritage in order to guarantee its sustainability for future generations."[7] Dr. Chardonnet's findings and publications have repeatedly been criticized by independent lion scientists given the obvious bias to favor continuation of lion hunting in Tanzania.

Further, as discussed in the attached Declaration from Dr. Craig Packer, whose research and findings formed the basis for the aging verification system in place today, there are significant issues with the implementation of the age-verification system in Tanzania. Specifically, Tanzania's "age-assessment efforts are secretive: only members of the Tanzanian hunting fraternity are allowed to participate. This secrecy stands in stark contrast to the more transparent age-assessment practices in Mozambique and Zimbabwe. Further, there is also no evidence of penalties for noncompliance (such as reducing quotas)." (Packer Declaration at ¶ 8). This lack of transparency and objectivity make it impossible to be confident that lion "A" was shot by client "B" on date "C," creating ample opportunity for abuse of this system. Thus, the Service cannot be sure that all of the lions killed by trophy hunters in Tanzania are killed in compliance with minimum age restrictions, especially since there is no evidence that Tanzania has facilitated robust training of hunting guides to ensure that they know how to identify a lion's age in the field.

As discussed in the attached comments submitted by HSUS, HSI, and co-petitioners regarding the USFWS lion ESA listing, removing a male lion from a pride has cascading negative impacts on the other members of that pride. "Each male replacement has profound effects on the reproduction of multiple females. Tanzania currently allows about 500 lions and 400 leopards per year to be killed for sport in an area of 300,000 km^2 (1.67 lions and 1.33 leopards/1000 km^2). The proportion of male lions removed by trophy hunters in the mid- to late 1990s was unsustainable (28% /year in some areas)." (Packer 2011).

The field study inaccurately suggests that positive conservation outcomes are primarily dependent on trophy hunting revenues, and therefore availability of lion trophies.

The SRG Report makes the following claim: ". . . the quality of the protection and all anti-poaching activities for a large part of the lion range directly depend on the income generated by hunting. This income dropped by about 30% following the import bans for lion and elephant trophies enacted by the EU and the USA" (Benyr 2017, p. 13). Further, a chart on pg. 28 continues the line of reasoning that the declining hunting industry profits – allegedly the fault of lion trophy import

[6] Dr. Philippe Chardonnet Biography, IUCN 2003 World Parks Congress. https://www.wcs-ahead.org/bios/bio_chardonnet.html.

[7] Fondation François Sommer, The International Foundation for the Management of Wildlife (IGF Foundation). 18 Apr 2016. http://www.emploi-vert.fr/societe/fondation-igf-abritee-par-la-fondation-francois-sommer.

restrictions – have or will lead to a variety of other devastating outcomes: vacant hunting blocks, reduced responsible management, decreased incentives for community wildlife management, competition from other forms of land use, increase occupation by settlers, shortage of resources, increased poaching, and decreased scientific monitoring, etc. (Benyr 2017, p. 28). The SRG Report logic therefore follows that the lifting of the import restrictions by the US and EU will mitigate these concerns.

These claims do not hold water. The issues flagged by the SRG existed long prior to the implementation of any trophy import restrictions, when hunters shot and exported hundreds of African lions annually.

According to the SRG Report "Currently, 47 out of 157 hunting bock *[sic]* are vacant in Tanzania and therefore the auctions fetch suboptimal results and demands to lower the prices for hunting licenses arise. *Even more detrimental* for the conservation of lions could be the option to hunt unsustainably and move to another plot when the game population is depleted" (Benyr 2017, p. 27) (emphasis added).

The SRG document links the vacant lots, at least in part, to the lion trophy import restrictions and a 30% profit decline (Benyr 2017, p. 28). However, reports from as far back as 2012 indicate that at that time 19% of the hunting areas were *already* financially unviable (Campbell 2012, p. 5). Using the current estimate that 305,000 km^2 of the land is available to hunters (Brink et al. 2016, p. 2), 19% would in the present day represent 57,950 km^2 of unviable land.

The reasons for the unviability must therefore lie with other factors. One such factor is absence of wildlife because the outfitters, and consequently the government, are failing to protect these areas. Another factor is that blocks are allocated at such a low price that the fees fail to cover the costs of effective management, perpetuating corruption in the system. Indeed, the SRG Report itself acknowledges the money trophy hunting generates may never actually trickle down to benefit conservation ("TAWA also has the agenda to develop tourism and under this mandate the income from sustainable wildlife management can still be diverted into projects that do not benefit conservation or even counteract this objective" (Benyr 2017, p. 13)).

With respect to community incentives, such incentives were already extremely low when lion trophy imports were at their peak, because the communities received little of the money generated by trophy hunting (with much of that revenue inuring to the personal benefit of government officials and hunting guides). (Packer Delcaration) One study found that:

> Of the district allocation, officially 60 percent was budgeted for investment in villages near the blocks. In reality, few benefits filtered to local communities (Barrow 1996: 11); probably closer to 3-5 percent of hunting revenues actually reached villages where hunting occurred (Sachedina 2003: 7). Actual expenditure included projects more convenient to the District Council than villages supporting wildlife. Hunting revenue allocations may have been driven by political considerations. For example, infrastructure investments in Ruvu Remiti and Msitu wa Tembo, densely populated villages with large voting blocs . . . (Sachedina 2008, p. 150)

The SRG Report also claims that poaching may increase as a consequences of continued lion trophy import restrictions. Yet, if one examines elephant trophy hunting in Tanzania – which was at its peak when the U.S. made the decision to suspend elephant trophy imports from Tanzania – this argument does not hold. Because of poaching, Tanzania's elephant population is estimated to have fallen by 60% between 2009 and 2014. Clearly, the measures taken by the trophy hunting industry to prevent poaching were wholly insufficient and the industry's allegations that anti-poaching efforts will improve only if lion trophy import restrictions are lifted lack merit.

The SRG Report fails to take into account the detriment trophy hunting causes to photographic tourism and therefore local communities

Tourists who care about wildlife are less likely to visit regions or places with a reputation for not caring for their wildlife. Thus, when shocking trophy hunting news stories gain global attention (e.g. video exposing egregious trophy hunting cruelty by the company Green Mile Safari in Tanzania (Green Mile Press Release, 2016;[8] Fernholz, 2016[9])), photographic tourism also pays the price. Tanzanian tourism companies must spend resources on marketing themselves to stand apart from the negative press (Buckley 2014, p. 321).

Communities also incur costs when trophy hunters kill animals that are already in decline due to habitat destructions, human-wildlife conflict, disease, etc. A study on conservancy management quoted a Tanzanian villager from Emboreet as follows:

> We're more closely allied with the photographic operators than the hunters. They are finishing off the wildlife before we've had a chance to realize a profit from it. Hunters don't recognize us; they only recognize the government… 25 percent of hunting fees goes into the hole at the district. We're supposed to get 5 percent: we don't even see that. The WD controls everything. (Sachedina 2008, p. 152)

In fact, a 2017 report revealed that for eight countries surveyed (Botswana, Ethiopia, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe), of the $17 billion in annual tourism spending, trophy hunting adds less than $132 million or just 0.78% of that total (Murray 2017, p. 3). Tourism in these countries accounts for between 2.8% and 5.1% of gross domestic product (GDP) (Ibid). Trophy hunters contribute only an estimated 0.03 percent of GDP. Finally, non-trophy hunting tourism employs 132 times more people than trophy hunting (Ibid). Therefore, Tanzania has much more to lose – in terms of funds dedicated to conservation and communities, its economy, and jobs – from the damage trophy hunting can cause to Tanzania's tourism brand.

[8] Humane Society International. Tanzania urged to rescind hunting concession to Green Mile, a company accused of reckless, atrocious animal abuses. Press release. June 24, 2016. Available at: http://www.humanesociety.org/news/press_releases/2016/06/tanzania-hunting-green-mile-062416.html?referrer=https://www.google.com/.

[9] Fernholz, Tim. Leaked Videos of Wildlife Abuse Spark Corruption Scandal In Tanzania. Huffington Post July 01, 2016. Available at: http://www.huffingtonpost.com/entry/abusive-safari-company-tanzania_us_57769240e4b04164640fbba8.

- **Tanzania's Comments on the USFWS Status Review of the African Lion Is Inadequate to Support and Enhancement Finding by USFWS**

The most recent publicly available information from Tanzania regarding lion management and regulation of trophy hunting is the country's comment letter submitted to FWS during the ESA Status Review of African Lion (dated January 27, 2015, hereinafter ESA Comment). The submission addresses lion biology, range, and populations trends; remarks on the status review of the Africa lion; and management and monitoring of lion trophy hunting in Tanzania. However, the following analysis reveals serious gaps and questionable conclusions in the submission.

Tanzania cites to populations estimates that are now outdated and current numbers are much lower

According to the ESA Comment, the latest population estimates put the lion population in Tanzania at 16,800 individuals (ESA Comment 2015, p. 5; Mesochina *et al.* 2010). However, the latest IUCN analysis of *Panthera leo*, which post-dates these sources, estimates the total lion population in all of Eastern Africa to range between 7,345 and 13,316 lions (Bauer *et al.* 2016 supplementary materials, p. 17). Tanzania's population may therefore be even fewer than 7,345 lions because this East Africa assessment includes other East African countries like Kenya.

Further, the ESA Comment suggests that lion abundance is stable or increasing within protected areas, relying on anecdotal perceptions from "informants." (ESA Comment 2015, p. 5) The IUCN assessment directly contradicts this, stating that the lion population in four well-studied areas (Ngorongoro Crater, Katavi, Matambwe (Selous GR), Serengeti, and Tarangire) decreased by 66%, from 1,787 in 1993 to only 608 in 2014 (Bauer *et al.* 2016, supplementary material, Table 3). The information also notes that abundance outside of protected areas is decreasing.

As far as the continental data on which Tanzania basis its lion management decisions, there are likely discrepancies between Tanzania's estimates and globally accepted lion population numbers. The ESA Comment cites to Riggio *et al.* for the estimate that the global wild African lion population is 32,000 to 35,000 lions (ESA Comment 2015, p. 14). Yet it is now clear that there are probably as few as 20,000 African lions remaining continentally (Bauer *et al.* 2016). Although Tanzanian authorities wrote the ESA Comment prior to the publication of the 2016 IUCN assessment, Tanzania's lion management cannot be said to enhance the survival of the species when it doesn't rely on the best available science and accept the latest IUCN assessment.

The ESA Comment is missing details on methodology for lion hunting quota determination, which is likely unsustainable if the authorities are using outdated population data

In the five years prior to Tanzania's 2015 submission, Tanzania sold approximately 500 lion hunting permits each year. (ESA Comment 2015, p. 7) There is no detailed explanation in the document of how the Tanzanian government determined that this extremely high quota is sustainable. This number of lions is approximately 6.8% of the *entire* estimated lion population in East Africa (500 lions is 6.8% of 7,345).

A recent study proposed that a sustainable offtake level for lions in Tanzania is ≤ .92 lions per 1000 km^2 (Brink *et al.* 2016, p. 7). This is a generous allotment because a 2011 study recommended that the Tanzania lion quota be limited to .5 lions per 1000 km^2 (Packer *et al.* 2011, p. 142) and a 2016 Zambia study confirmed a similar recommendation (Creel *et al.* 2016). With the generous .92 lion limit, the total *potentially* sustainable take of lions for each single hunting block (estimated by the Tanzanian government to span the total of 304,399.95 km^2) would amount to only approximately 280 lions. (ESA Comment 2015, p. 7) If the more precautionary .5 lion limit is used, then the total quota would amount to only approximately 152 lions.

Both suggested limits are by far lower than the 500 permits sold annually. Further, considering that management issues on each hunting block are unique and it is impossible that each 1000 km^2 will contain huntable lions and that other causes of removal such as human-lion conflict and disease must be taken into account, the quota of 500 lions cannot be sustainable.

Of the 500 permits sold annually, in the 2011/2012 hunting season 85 lions were killed, in the 2012/2013 season 51 were killed, and in the 2013/2014 season 54 were killed (ESA Comment 2015, p. 21-22).

The ESA Comment understates the value of photographic tourism to its economy and conservation

The submission from Tanzania suggests, "[t]rophy hunting, including lions, is the main source of revenues for the Wildlife Division. . ." (ESA Comment 2015, p. 7) As one example, the ESA Comment states that for the financial year 2013/2014, the revenue accrued from tourist hunting was 16.7 million and from photographic tourism only 5 million (ESA Comment 2015, p. 8). This raises questions about the way tourism revenues are allocated in Tanzania, whether they are distributed appropriately, and if sufficient tourism dollars are diverted into conservation. Tourism's overall contribution to Tanzania's GDP was a whopping 5.1% of total GDP in 2014. (TanzaniaInvest 2014)[10] The ESA Comment offers no explanation as to why so few photographic tourism dollars are channeled into the Wildlife Division.

Tanzania's comment offers inconsistent information on the distribution of funds from trophy hunting to communities

In one part of the ESA Comment, the Tanzania authorities state that Wildlife Management Authorities (WMAs) get around 60-65% of the revenue from trophy hunting, whereas in another section the claim is that 75% of the block fees are disbursed to WMAs (ESA Comment 2015, p. 7). With inconsistent facts and absence of detailed breakdown of the distribution process followed to ensure that local communities accrue sufficient financial benefits from the trophy hunting operations, it is impossible to determine whether Tanzania's trophy hunting management offers the necessary socio-economic-cultural benefits to meet ESA enhancement criteria.

The ESA Comment claims trophy hunting is critical because it is viable in remote areas, but many blocks are adjacent to protected spaces

[10] TanzaniaInvest, TanzaniaInvest is happy to announce that its Newsletter Database of registered users recently surpassed the 10,000 mark. Sep 23, 2014. http://www.tanzaniainvest.com/economy/tanzaniainvest-10000-registered-newsletter-users

ESA Comment states "[h]unting is able to generate revenues under a wider range of scenarios than ecotourism, including remote areas lacking infrastructure, attractive scenery, or high densities of viewable wildlife." (ESA Comment 2015, p. 8) Yet the 1995 draft management plan said that protected areas, like national parks where photographic tourism thrives, are "core areas providing wildlife that can be hunted in surrounding areas once it voluntarily moves one kilometre outside" (Policy and Management Plan, p. 12). Therefore, many of the hunting blocks are actually in key ecoutourism hotspots, meaning there is potential these areas are attractive to tourists and therefore could remain protected and well-funded even if hunting was not permitted there. Further, unsustainable trophy hunting that occurs in the areas adjacent to protected areas can have a detrimental impact on the viability of these parks as hunting depletes wildlife and diminishes tourism's draw.

In fact, 60% of the lion's range lies in "core protected areas" and 80% of the estimated individuals "range inside National Parks, Game Reserves, Wildlife Management Areas, etc." (ESA Comment 2015, p. 9). Therefore, lions are trophy hunted in areas that would be very attractive for photographic tourism.

Tanzania mistakenly claims that trophy hunting does not contribute to lion overutilization

The ESA Comment concludes, "Trophy hunting is highly conservative and strictly controlled and thus does not constitute [sic] to the overutilization of the population." (ESA Comment 2015, p. 12) This is not accurate, in fact a 2016 study reveals, "trophy hunting of lions is having a negative impact on populations" (Brink *et al.* 2016, p. 9; Packer *et al.* 2011; Packer *et al.* 2009; Kiffner *et al.* 2009; Loveridge *et al.* 2006). The hunting blocks that killed the greatest number of lions, likely incentivized by a system that penalizes outfitters that utilized less than 40% of the quota (see above discussion), eventually showed the steepest drop in lion hunts (Brink *et al.* 2016, p. 10). The drop may be an indicator of falling lion population numbers in those blocks. It appears the penalty system is still in place (Brink *et al.* 2016, p. 10). Further, overhunting on one property can lead to population sinks in neighboring property, as lions from the un-hunted or under-hunted properties cross into the over-hunted blocks (Brink *et al.* 2016, p. 11). See detailed discussion below.

Problematic implementation of age identification requirements

Age-based lion hunting restrictions are in effect in Tanzania since the 2012/2013 hunting season (ESA Comment 2015, p. 15). Although the Tanzanian government has provided training to the hunting industry on identification of age appropriate lions as well as related guidelines, the ESA comments do not indicate that hunters have to pass any type of examination to prove their ability to age the lions. How does the government certify that the professional hunter is prepared to follow the guidelines? Further, the training must be continuous to ensure that improved aging methodology is disseminated to all hunting blocks. The ESA Comment provides insufficient information on this type of training and its effectiveness.

- **USFWS Cannot Rely on Tanzania's 2006 Lion and Leopard Conservation Action Plan to Make an Enhancement Finding**

Following upon the recommendation in the Conservation Strategy that each range state implement the 2006 plan at the national level, Tanzania adopted the 2006 Tanzania Lion and Leopard Conservation Action Plan (hereinafter Action Plan). Adapting the same objectives outlined in Table 1 (see above), the Action Plan further details Tanzania-specific actions as well as responsible entities for each action. The plan revealed significant concerns with lion trophy hunting management in Tanzania, enforcement of age limits on hunted lions, and general governance.

The 2006 action plan did not outline a program that would amount to a net conservation benefit

According to the action plan, "Trophy hunting has traditionally been based on a quota system, but lion quotas have never been set scientifically" (Action Plan, p. 70) and "[l]ions are essentially impossible to count, so lion quotas could never be scientifically based." (Action Plan, p. 73) Further, the plan addressed the challenges of conducting population censuses for lions and presented advantages to using "age-minimum" restrictions as a solution. Therefore, any evaluation of Tanzania's lion management must determine whether or not age limits for trophy hunted lions are appropriately complied with.

In 2004, the Tanzania Hunting Operations Association adopted a six-year age minimum for lion trophy hunting,[11] yet the trophy hunting industry failed to implement this requirement with internet advertisements including "numerous photographs of trophy lions shot in 2004 and 2005 that were clearly less than 4 yrs old." (Action Plan, p. 73) Further, lions on Tanzania's hunting reserves were rarely even reaching six years of age, with many trophy hunted at just two years old. (Packer *et al.* 2009, p. 6; Trophy Hunting and Big Cat Conservation Forum 2016, Dr. Craig Packer Slides[12]) Killing lions that are this young can be disastrous, potentially causing long-term declines.

As highlighted in the Action Plan, some of the major challenges to the implementation of the age restrictions were the lack of transparency and compliance from the hunting industry, as well as absence of training on estimating lion ages for the professional hunters. (Action Plan, p. 72, 73, and 77) The plan also reflected that the hunting industry applied inconsistent trophy measurement methods and record keeping at the time the plan was written. (Action Plan, p. 91) In summary, the Action Plan recommended to counter these problems of compliance by 1) requiring training for professional hunters; 2) requiring inspection for all lion trophies prior to export; and 3) requiring that a neutral third-party auditor perform all inspections.

If Tanzania's government authorities and hunting industry never implemented these recommendations, as it appears from available evidence, then the Service cannot lawfully make an enhancement population for lion trophy imports from Tanzania.

[11] In 2010, the six-year age limit was mandated through regulations issued by the Wildlife Division of the Ministry of Natural Resources and Tourism. However, these regulations did not enter into force until the 2012/2013 hunting season (ESA Comment 2015, p. 15).

[12] National Geographic. Trophy Hunting and Big Cat Conservation Forum. August 10, 2016. Available at: https://www.nationalgeographic.org/projects/big-cats-initiative/livestream/.

The 2006 Action Plan revealed significant issues precluding effective management and governance

According to the plan, a variety of impediments exited at the time that precluded the necessary governance structure that would effectively ensure that lion trophy hunting was biologically sustainable. As cited in the plan:

> Many of the threats to lions and leopards, including those listed above, can be linked to issues to do with management. For example, indiscriminate retaliatory killing, such as poisoning, might result because the local district office has not responded sufficiently rapidly to a request for problem animal control. Another example is that the lack of a clear legal framework outside protected areas and outdated laws leaves communities with little say in the way wildlife resources are used in their areas, and little clear benefits. Whilst these are being addressed through the Wildlife Management Area (WMA) framework, few WMAs have yet received formal approval. Many aspects of inadequate management often results from a lack of resources and personnel, as well as insufficient information, such as can be gained by monitoring. (Action Plan, p. 96)

Tanzania must present sufficient information to prove that the management and governance issues raised in the 2006 Action Plan have been resolved. Notably, the 2015 Review of Lion Conservation Strategies for CMS broadly criticized implementation of all 2006 commitments, including the Tanzania Action Plan as follows:

> In contrast, our analysis has shown that the Strategies have had mixed success: implementation of the Strategies has been fragmented and partial. The partial implementation may in some instances have slowed down the declines, but the fact is that the goal has not been achieved and that decline in numbers and range of lions continues across most of Africa. Many countries and organizations have implemented lion conservation projects; these surely mitigated declines and possibly contributed to objectives on conflict mitigation and distribution of benefits, but they were not explicitly implemented within the framework of the Strategies and have not resulted in the achievement of their objectives. We note that follow-up of the implementation of the Strategies has been absent, and we consider this to be an inherent weakness of the strategic planning process as practiced a decade ago. (Bauer *et al.* 2015, p. 16)

Therefore, Bauer *et al.* 2015 confirmed that overall implementation has been partial and that while some activities have slowed lion population declines, follow-up on the implantation is absent.

- **Tanzania's 2006 Conservation Strategy for Lions in Eastern and Southern Africa Has Not Even Been Implemented**

At the Eastern and Southern African Lion Conservation Workshop held in Johannesburg in January of 2006, the attending lion range states, specialists, and other attendees developed the Eastern and Southern African Lion Conservation Strategy (hereinafter Conservation Strategy).

The plan outlined a series of critiques of existing lion management strategies that necessitated the collective regional effort, among which were concerns with trophy hunting and general lion management:

- "Improperly managed trophy hunting was also considered to be adversely affecting several lion populations" (Conservation Strategy 2006, p. 20).
- "There is a widespread lack of government resources and professional capacity to undertake lion population monitoring and management" (Conservation Strategy 2006, p. 20).
- "Trophy hunting is an important revenue generator and management tool for governments, but concerns have been raised in some areas about potentially unsustainable offtakes" (Conservation Strategy 2006, p. 20).
- "Wildlife-integrated land use, policies and planning are non-existent in many places" (Conservation Strategy 2006, p. 22).
- "Multi-lateral Environmental Agreements and International Conventions (CBD, CITES, CMS, etc.) are often poorly integrated into regional and/or national policies, and sometimes contravene the sustainable use of lions" (Conservation Strategy 2006, p. 22).
- "Illegal trade is largely due to ineffective law enforcement, which is in turn due to weak capacity and motivation within law enforcement agencies and a lack of knowledge on this trade" (Conservation Strategy 2006, p. 22).

In ranking the threats to lion survival, the Conservation Strategy actually failed to assess the detrimental impact trophy hunting may have had on lion populations throughout Eastern and Southern Africa. The strategy states that when "[t]he technical session [] ranked a set of factors according to expected impact on the viability of all lion populations in the region," it excluded trophy hunting "due to the difficulty of separating potentially negative biological impacts on lion populations from improperly managed offtakes from potentially positive socio-economic impacts on lion conservation" (Conservation Strategy 2006, p. 20). Therefore this issue was not given the attention it deserves in the drafting of the Conservation Strategy.

The following table outlines the vision, goal, and six objectives of the Conservation Strategy:

Table 1: 2006 Conservation Strategy for the Lion in Eastern and Southern Africa Vision, Goal, and Objectives.

Vision: a sustainable environment for the mutual benefit of lion populations and people in perpetuity.	
Goal: To secure, and where possible, restore sustainable lion populations throughout their present and potential range within Eastern and Southern Africa, recognizing their potential to provide substantial social, cultural, ecological and economic benefits.	
Objectives	
Management:	To ensure effective conservation management of lions, their habitats and wild prey.
Mitigation:	To minimize and, where possible, eliminate human-lion related conflicts.
Socio-economics:	To equitably distribute the costs and benefits of long-term lion management.

Policy and land-use:	To develop and implement harmonious, comprehensive legal and institutional frameworks that provide for the expansion of wildlife-integrated land-use, lion conservation and associated socio-economic benefits in current and potential lion range.
Politics:	To ensure that global policies better reflect the will and intent of regional and national sustainable use policies and practices.
Trade:	To prevent illegal trade in lions and lion products while promoting and safeguarding sustainable legal trade.

Source: Conservation Strategy 2006, p. 24-40.

At the request of the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (CMS), subsequent to the adoption of a resolution on lions at the 11th Conference of the Parties to CMS in Quito (November 2014), a group of experts evaluated this and the other regional lion conservation strategy for West and Central Africa. The experts concluded that implementation has been disjointed and incomplete (Bauer *et al.* 2015, pg. 16). The analysis also stated, "[w]e cannot evaluate to what degree these activities were implemented within the framework of the IUCN Regional Lion Conservation Strategies, nor whether or to what extent they contribute to the achievement of their objectives." (Bauer *et al.* 2015).

The May 2016 African Lion Range State Meeting (Entebbe, Uganda) further confirmed these conclusions. The range States stated, "in light of limited technical and financial resources, many Range States struggled to implement and institutionalize the Strategies at the national level" and emphasized "that the lack of resources and capacity has impeded the implementation of lion conservation activities on the ground." (Entebbe 2016, pg. 2).

It is evident that there have been significant impediments to effective implementation of the 2006 Conservation Strategy for the Lion in Eastern and Southern Africa, including Tanzania. Noting this puts into question Tanzania's ability to ensure that any type of lion trophy hunting management program meets the enhancement criteria under the U.S. Endangered Species Act.

- **Tanzania's 1995 Policy and Management Plan for Tourists Hunting Remains Unimplemented and Cannot Support an Enhancement Finding by USFWS**

The proposed 1995 Policy and Management Plan for Tourist Hunting (hereinafter Policy and Management Plan) offered recommendations to improve Tanzania's trophy hunting management. Although the 1995 Director of Wildlife approved the plan, Tanzanian authorities never implemented it (Brink *et al.* 2016, p. 12).

Draft 1995 plan did not meet ESA biological sustainability requirements

The draft plan provides that although trophy hunting is not permitted in National Parks and Ngorongoro Conservation Area, these conservation spaces are "core areas providing wildlife that can be hunted in surrounding areas once it voluntarily moves one kilometre outside" (Policy and Management Plan, p. 12). Such utilization of conservation areas is highly problematic because it may lead to long-term population declines within the protected areas, as animals from the park cross over into hunting blocks.

Another section of the proposed 1995 plan outlines the "kill" target for the quota, where it states that every land owner allocated a block must "ensure that no less than 40% of the prescribed animal quota is utilized" and requires that a penalty be paid in the case this target is not reached (Policy and Management Plan, p. 15). This type of system forces hunting block owners to ignore their own management decisions, which may including hunting fewer lions than 40% of the quota, or face a penalty.

Further, the draft plan outlines that "sustainable" quotas will be determined by the Department of Wildlife based on: "a) Available data from aerial and ground censuses; b) Data from standard questionnaires completed by wildlife and village scouts, who accompany hunting clients, on animal abundance and sightings and hunting success; c) Data from outfitters on all animals hunted, including on trophy size using the standard Safari Club measuring system, and on other biological parameters such as hunting success, body weights and measurements, and age; d) Data from village scouts living within hunting areas, where rural communities have begun to manage wildlife" (Policy and Management Plan, p. 16). However, lion populations are notoriously difficult to estimate. According to the Tanzania Lion and Leopard Conservation Action Plan, "[t]he only reliable method for counting lions is through individual recognition and intensive study . . ." (Action Plan, p. 71). It further confirms that that while the Ngorongoro Crater may be "the easiest ecosystem in the world to count lions," it has been "impossible to obtain comparable data on the Tarangire lions." (Ibid.) Therefore, the four-step plan outlined for quota determinations was unlikely to produce biologically sustainable limits.

Draft plan acknowledges that communities saw little benefit from trophy hunting of lions

First, the draft plan recognized that "to date, the rural communities on whose land tourist hunting takes place, or which border hunting blocks, have received few tangible benefits from the industry." (Policy and Management Plan, p. 4) While the plan proposes that "[t]o effect a general policy of community-based conservation throughout Tanzania, Wildlife Management Areas will be established and managed by rural communities which form Authorised Associations," it also proposes that "interim arrangements" be made for management of hunting blocks whereby "the Director will approve all quotas for, and make all arrangements . . . on behalf of the respective rural communities" and "will continue to collect fees deriving from these hunting blocks" (Policy and Management Plan, p. 18). The draft plan offered no indication on how long this interim phase would last and when the community involvement would increase.

Despite changes in the regulatory framework of Wildlife Management Areas (WMA) since 2012 – which endeavored to strengthen links between wildlife management and communities – the desired outcomes have not been achieved. In fact, the Service has already found that "the revenue retention by WMAs is insufficient to "finance and motivate sound management decisions" and WMAs are "not sufficiently effective to lift rural communities out of poverty." (FWS 2015 NDF, p. 3)

Trophy Hunting in Tanzania is Biologically Unsustainable and Contributes to Long-term Decline

The negative effects of trophy hunting on lion populations in Tanzania are well-documented. According to the latest IUCN assessment, trophy hunting ". . . may have at times contributed to population declines in Botswana, Namibia, Tanzania, Zimbabwe (Packer *et al.* 2009, 2011, 2013), Cameroon (Croes *et al.* 2011) and Zambia (Rosenblatt *et al.* 2014)" (Bauer *et al.* 2016).

Between 1996 and 2008, lion offtakes across Tanzania dropped by 50% (a strong signal of a declining population)[13], with the sharpest decrease in areas where the initial harvest was the highest (Packer *et al.* 2011, p 142). The study found that "[a]lthough each part of the country is subject to some form of anthropogenic impact from local people, the intensity of trophy hunting was the *only* significant factor in a statistical analysis of lion harvest trends" (emphasis added) (Packer *et al.* 2011, p.142). The 2014 analysis from Dolrenry *et al.* (2016) confirms that lions are significantly threatened in Tanzania despite the presence of a "strong trophy hunting sector," in part due to "overexploitation due to poor management of trophy hunting" (Dolrenry *et al.* 2016, p. 1).

Following "dramatic declines in lion harvests that resulted from over-hunting," Tanzania "has taken measures to limit lion offtakes to males that are at least 6 years of age." (CITES Periodic Review AC27 2014, p. 14) Given this threat, the CITES Animals Committee recommended in 2014 that "[g]iven the overall rarity of the species and its extreme sensitivity to habitat loss and problem animal conflict, hunting offtakes should be monitored far more closely so as to minimize the impact of international trade." (Ibid)

Most recently, Brink *et al.* (2016) assessed the Tanzanian lion trophy hunting industry, and determined that financial interests and the temptation of short-term returns have led to unsustainable offtakes of lions from hunting blocks. (Brink *et al.* 2016, p. 3) In Tanzania, some hunting blocks are managed long-term and some are subleased and used short-term. Hunting companies with short-term use blocks (including those available in Msolwa, Ilonga and Matambwe) have a lower incentive to manage the lion population with a long-term view and are documented to have the highest offtake (twice the recommended number). (Brink *et al.* 2016, p. 11) While generating the greatest income for the government, the overharvest has led to declines in annual lion offtake (i.e. a scarcity of lions) at a cost to neighboring unhunted areas from which better-managed populations cross over into the hunting areas. (Brink *et al.* 2016, p. 11)

Significant Issues with Hunting Quota Guidelines, both Historically and Under Current Practice

Tanzania lacks accurate and updated lion abundance information

Sustainable hunting quota allocation requires accurate and current estimates of abundance. Lion abundance can be difficult to monitor because "their biological traits (e.g. low density, cryptic

[13] "[P]revious researchers have suggested that hunting offtake data are a proxy for this population data, principally because hunting companies put a large amount of effort into finding lion trophies, and so any changes in the underlying population are reflected in the number of lions hunted." (Brink *et al.* 2016, p. 6)

colouration and behaviour) make them difficult to monitor and hence wildlife managers rarely have access to reliable information on population trends, and long-term information at the community level is almost completely lacking." (Durant *et al.* 2011, p. 1490) Further, because lion populations can decline very quickly and dramatically, it is recommended that estimates are "frequently up-dated." (Action Plan 2006, p. 72) In the absence of reliable data, the government must err on the side of extreme caution when determining a sustainable offtake quota, which is not the current practice.[14]

The latest Tanzania-specific lion abundance estimate is from Mésochina et al. (2010), seven years ago. January 2015 comments from the Ministry of Natural Resources and Tourism submitted to FWS rely, in part, on data from 321 "informants" in Protected Areas and in Districts (ESA Comment 2015, p. 5). This anecdotal data concludes that lion abundance is "stable or increasing within Protected Areas" and "decreasing outside Protected Areas." (Ibid). Yet the Ministry offers no information about the identity of these informants, nor about the potential basis for these conclusions, meaning there is little transparency and no opportunity for scientific review.

The International Union for Conservation of Nature (IUCN) 2016 assessment for *Panthera leo* contradicts these informant conclusions. According to inferred lion population trends based on interpolated census data from 1993 through 2014 in 47 monitored lion subpopulations, the populations of all but one Protected Area have significantly declined.

Table 1: IUCN 2016 *Panthera leo* Assessment: Supplementary Information (Population Trends)

Sample Tanzania Subpopulation	Estd. Lions (1993)	Est. Lions (2014)	Percent Change
Ngorongoro Crater	61	55	-10%
Katavi*	1,118	0	-100%
Matambwe	124	98	-21%
Serengeti	232	314	+35%
Tarangire	252	141	-44%
Total	**1,787**	**608**	**-66%**

*In Katavi National Park, "[l]ions are extant but at a density so low as not to be detected" and its "population decline remains uncontested." (Bauer *et al.* 2016)

As Table 1 demonstrates, the monitored subpopulations of Ngorongoro Crater, Katavi, Matambwe, and Tarangire, are estimated to have fallen by 10%, 100%, 21%, and 44% respectively between 1993 and 2014. Therefore, it is unclear how the informants were able to determine that populations in Protected Areas are "stable or increasing," when that directly opposes the IUCN findings. Many questions remain unanswered about this conclusion. What was the methodology used to estimate the current population? Were the findings initially made for a smaller segment and then

[14] We further note that Tanzania is in category 3 for national legislation implementing CITES and generally believed to not meet the requirements for implementing CITES. (Available at: https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-22-A3-R1.pdf).

extrapolated to the entire subpopulation site? What is the period of time for which the populations were found to be "stable or increasing"?

Populations outside Protected Areas are poorly monitored and therefore it is impossible to assess the accuracy of the informant conclusion that lion populations outside Protected Areas are decreasing. All of this brings into question the ability of the Tanzania government to monitor trends in populations appropriately and to base lion quotas on best available science. As stated previously, the 2006 Action Plan cites that "lion quotas have *never* been set scientifically" (emphasis added) (Action Plan 2006, p. 70).

The Ministry's submission to FWS explains that the Tanzanian government launched a national large carnivore survey in 2014, predominantly focused on spoor count methodology (ESA Comment 2015, p. 25-26). The Wildlife Division and TAWIRI are carrying out the survey. The findings of this survey are not discoverable online. Regardless, experts suggest that "consistent, rigorous large-scale surveys" must be conducted by independent agencies – neither the Wildlife Division or TAWIRI constitute independent agencies and the findings of this survey may be unreliable (Bauer *et al.* 2015).

Hunting quotas exceed estimated sustainable offtake levels

Hunting quotas are determined by "the Quota Allocation Advisory Committee comprised of wildlife conservation experts from TAWIRI, the University of Dar es Salaam, Sokoine University of Agriculture, University of Dodoma, the College of African Wildlife Management and the Wildlife Division (which is the CITES Management Authority)." (ESA Comment 2015, p. 7) However, it is not clear what role anecdotal population details and input from informants plays in the determinations made by this Committee and whether this determination is available for scrutiny by conservation experts.

Historically, a large percentage of the hunting blocks received quotas that far exceeded estimated sustainable offtake. For example, Caro *et al.* (2009) estimated that a sustainable hunting quota for Tanzania lions is 5.1% of a hunting block's population, or 4.6% if one accounts for incidental take of juvenile males. (Caro *et al.* 2009, p. 919) The same study further concluded that 20, or nearly half, of the 43 Selous Game Reserve hunting blocks leased to hunting safari companies between 1988 and 1997 received quotas that *by far* exceeded the 4.6% offtake (at times representing as much as 10% or 20.5% of block's population). (Caro *et al.* 2009, p. 926-928) Although the actual offtake in that period seldom met the full quota, this demonstrated that some hunting blocks received excessively generous quotas that were not scientifically sound. Note that the Tanzanian government has since designated an additional 14 hunting blocks since 2002. (Brink *et al.* 2016, p. 4)

Further, subsequent recommended sustainable offtakes for lion trophy hunting were .5 lions per 1000 km^2 (Packer *et al.* 2011, p. 142) and $\leq$ .92 lions per 1000 km^2 (Brink *et al.* 2016, p. 7). If the more precautionary .5 lion limit is used, then the total quota would amount to only 152 lions annually for the 304,399.95 km^2 of hunting blocks. With the more generous .92 limit, the total would be 280 lions annually. Both estimates are far below the excessively high 500 lion hunting permits sold by Tanzania each year (ESA Comment 2015, p. 7).

Quotas serve as a target, not a limit, thus incentivizing unsustainable offtake

Dr. Craig Packer is one of the world's foremost lion experts who studied the species in Tanzania since 1978 before the government suddenly withdrew his research permit in 2014, in response to his comments raising concerns about the sustainability of lion trophy hunting and Tanzania's corruption (Packer 2015). In August of 2016, Dr. Packer spoke at the World Lion Day event hosted by National Geographic and commented thus on the issue of lion quotas:

> "You and I might think of quotas as a limit of how many you are allowed to shoot – but to them [in Tanzania] it was a production target. You got to maintain your quotas, and if you didn't shoot enough lions, the government would take away your hunting block and give it to somebody else who promised to shoot more lions. So the only way they could maintain those high quotas, those production targets, was to keep shooting and shooting and shooting all the way down to those younger age classes." (Trophy Hunting and Big Cat Conservation Forum 2016)

In fact, as of 2004, outfitters were obligated to "utilise the wildlife on quota to generate revenue not less than 40% of the value of the total quota allocated" and if the outfitter failed he or she was "required to make a top-up payment to the Wildlife Division to meet the 40% minimum." (Baldus and Cauldwell 2004, p. 6). This is still the case (Brink *et al.* 2016, p. 10) Therefore, even if hunting companies make the management decision that meeting 40% of the quota is not the best approach for their property or the property does not have a sufficient number of lions that fit the age requirements, there is a contrary incentive to overhunt and kill below the age limit.

Further, according to Brink *et al.* (2016), because higher lion offtake leads to higher income for the government, this also creates an incentive to grow the quota beyond sustainable levels, which ultimately lead to declines in lion populations (as evidenced by decreasing offtakes). The study explains:

> [T]he trophy fees for lion are higher than for other animals ($4900/lion in 2009) and this creates pressure for setting higher quotas, as increasing the number of lion on quota greatly increases government income. This leads to higher lion hunting offtakes and then declines in offtake. Thus, the blocks with the greatest declines in lion trophy hunting from 1996–2008 were the same blocks that provided the government with the most income per km^2 from 1996–2003. (Brink *et al.* 2016, p. 10)

Tanzania has not Taken All Necessary Steps to Eliminate Corruption in the Implementation of Trophy-hunting

According to the 2016 Corruption Perception Index (CPI) ranking from Transparency International, Tanzania ranks as 116 out of 176, placing it in the lower 32% of all countries assessed.[15] As detailed in Dr. Craig Packer's attached declaration, corruption is rampant in the

[15] https://www.transparency.org/news/feature/corruption_perceptions_index_2016

trophy hunting industry in Tanzania, and the country has suppressed and expelled independent scientists who publish data that contradicts the country's claims that trophy hunting is sustainable.

According to the Ministry of Natural Resources and Tourism "Hunting companies are allocated hunting blocks for tenure of five (5) years subject to annual review of company's performance. The process of allocating hunting blocks for the 2013 to 2018 [sic] was concluded in 2011" (ESA Comment 2015, p. 7) Described as a "closed-tender system" or a "process of selling a product by inviting a specific group of potential buyers to provide a written offer by a specified date" (80 Fed. Reg. at 80022), allocation of Tanzania's hunting blocks is fraught with corruption. At the 2016 World Lion Day event hosted by the National Geographic, Dr. Packer made the following statement about hunting block allocation:

> "Well in Tanzania, they have about 300,000 km^2 of hunting blocks – that's a huge huge estate for hunting – but it only generates about $15 million a year in hunting revenues, which is $50 per kilometer squared per year. And you need to have about $2,000 per square kilometer, so that's how far the shortfall is from sport hunting. So then you can ask, well wait a minute, you got all this land, you're making such a big deal about it, how come the revenues are so incredibly low? Well they're low because who gets the hunting blocks are the result of a patronage system. *So it's current and recent elected officials who get the blocks.* They are getting the money themselves, its not going to the government and hence it's not back into anti-poaching. It's corrupt insiders - and these are really corrupt people who have these hunting blocks - and because they're corrupt, they don't really care about conservation for the most part; there is no re-investment. And this has shown up very dramatically in Tanzania because in the last dozen years or so, one-third of the hunting blocks have been de-gazetted because they didn't raise any money; there is no wildlife left. So there is nothing. So they've failed to conserve a vast portion of the land that is in their domain" (emphasis added) (Trophy Hunting and Big Cat Conservation Forum).

In 2012, then Minister of Natural Resources and Tourism, Ambassador Khamis Kagasheki, issued a warning to trophy hunters against paying off elected officials to side step hunting rules and procedures (Kimati 2012).[16] Ambassador Kagasheki made the following comments before the Tanzania Safari Outfitters Association (TASOA):

> "You have a lot of cash, that much I know. Some of you have become sources of bad influence to government officials. Please stop bribing them and let them perform their duties professionally. As a result, some of you have their requests attended quickly while others have to wait for so long. This is not proper. It is my duty to prove to President Jakaya Kikwete and the people of Tanzania that I deserve the trust they have put on me. How come an individual is found in possession of more than eight hunting blocks under different names? This is unacceptable and the legislation on hunting blocks allocation is bad and must be revisited." (Kimati 2012)

[16] Kimati, B. (2012). Tanzania: Kagasheki Warns Corrupt Hunters. Tanzania Daily News (Dar es Salaam). Available at: http://allafrica.com/stories/201209060195.html.

The distribution of power and decision-making has also come under harsh criticism, as expressed in the following commentary from "Breakthrough Attorneys"[17], a Tanzanian law firm:

> The Law and its regulations have vested a lot of discretional powers on the Minister and the Director of Wildlife. These powers open a *leeway for abuse of power and corrupt practices*. The Minister personally, has wide powers which include; declaring blocks, granting and cancelling allocations, approve transfers and so forth. The Director on the other hand has powers on issuing licenses, permits, hunting block certificate of grant, setting standards of trophies for each hunting company etc. Breakthrough Attorneys' lawyers having been in the forefront during the 2013 – 2018 tenure grants and its aftermath, opines that most of the existing hunting blocks' disputes (which are more than 20) could have been avoided if the discretional powers of these key executives were thinned. A lot of failed bidders claimed foul play and that the allocation decision were uninformed and one sided. A number of cases are still pending in the High Court of Tanzania and most with injunctive writs invoked to completely.

There is no evidence that the issue of corruption in the trophy hunting industry in Tanzania has abated. For example, as recent as June 2016, The Humane Society of the United States and Humane Society International strongly urged the Tanzanian government to rescind its decision to grant a hunting concession to Green Mile Company Limited, an operator expelled from Tanzania in 2014 for appalling and abusive trophy hunting of wildlife. (Green Mile Press Release, 2016; Fernholz, 2016). Green Mile was inexplicably awarded exclusive hunting rights in the Lake Natron Game Control Area even though in 2014 they were clearly in contempt of the norms of proper wildlife management in Tanzania, as well as civil conduct.

Notably, one of the top elephant conservationists in Tanzania - Wayne Lotter - was recently murdered.[18] He was a key figure fighting international ivory-trafficking networks and his death demonstrates that criminal networks and corruption in Tanzania are at odds with species conservation.

Conclusion

As the home to potentially 39-42 percent of the remaining African lions, it is critical that lions thrive in Tanzania (Bauer et al. 2016). The lion population in four well-studied Tanzanian areas (Ngorongoro Crater, Katavi, Matambwe (Selous GR), Serengeti, and Tarangire) decreased by 66%, from 1,787 in 1993 to only 608 in 2014 (Bauer et al. 2016, supplementary material, Table 3), during which time American trophy hunters imported hundreds of lion trophies from Tanzania.

[17] Breakthrough Attorneys. 28 New Hunting Block in Tanzania Available to Foreign and Domestic Investors, Analysis and Clarifications by Breakthrough Attorneys. July 10, 2015, http://www.tanzaniainvest.com/law/28-new-hunting-block-in-tanzania-available-to-foreign-and-domestic-investors-analysis-and-clarifications

[18] Tremblay, Sophie. Leading elephant conservationist shot dead in Tanzania. The Guardian. Aug. 17, 2017. Available at: https://www.theguardian.com/environment/2017/aug/17/leading-elephant-conservationist-ivory-shot-dead-in-tanzania.

Lions face significant threats including human-lion conflict, habitat destruction, and unsustainable trophy hunting. The presence of one of the strongest trophy hunting sectors in Africa has not prevented and, in fact, is demonstrated to have contributed to the falling lion numbers.

There are significant issues in Tanzania's lion management system, including: a) excessively high and unsustainable lion hunting quotas that are far beyond recommended levels; b) issues with implementation of the six-year lion age-limit requirement; c) lack of recognition that trophy hunting has and continues to contribute to long-term lion population declines; d) reliance on lion population data that does not represent the best available science; e) understating the value of photographic tourism, especially when contrasted with the limited contribution from trophy hunting; f) inconsistent information on distribution of revenue from trophy hunting to local communities; and g) general management and governance issues, including documented corruption in the hunting block allocation process and more.

Therefore, trophy hunting of lions in Tanzania cannot be said to enhance the survival of the species, and issuing an import permit for lion trophies from Tanzania would therefore violate the Endangered Species Act and FWS regulations. Indeed, the Service has already found that Tanzania is not sustainably managing elephant trophy hunting, and we encourage the Service to apply the same level of scrutiny to Tanzania's mismanagement of lion trophy hunting. If FWS issues any lion trophy import permits from Tanzania, HSUS, HSI, and CBD will consider seeking judicial review of that decision. Further, this letter serves as formal opposition to any application for an import permit for a lion trophy from Tanzania and HSUS, HSI, and CBD request that FWS provide ten days advance notification (via email, afrostic@humanesociety.org) prior to the issuance of any such permits. *See* 50 C.F.R. §§ 17.22(e), 17.32.[19]

Sincerely,

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[19] HSUS has previously called on FWS to publish notice in the Federal Register of threatened species permit applications, and we reassert that such action is essential to create transparency in FWS' enhancement analysis for African lion activities, consistent with the intent of ESA Section 10. Similarly, it is arbitrary for the Service to explicitly apply the notification requirements of 50 C.F.R. § 17.22(e) to certain types of threatened species permits (i.e., those for Safe Harbor Agreements and Candidate Conservation Agreements with Assurances) but not to other threatened species permits (i.e., for incidental take and import).

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Primary References Attached:

Baldus, R.D. and Cauldwell, A. E. Tourist Hunting and Its Role in Development of Wildlife Management Areas in Tanzania. July 2004. Available at: http://www.wildlife-baldus.com/download/hunting_wma.pdf.

Bauer, H., Chapron, G., Nowell, K., Henschel, P., Funston, P., Hunter, L. T., Macdonald, D.W. & Packer, C. 2015. Lion (*Panthera leo*) populations are declining rapidly across Africa, except in intensively managed areas. Proceedings of the National Academy of Sciences, 112(48), 14894-14899.

Bauer, H., Chapron G., Nowell K., Henschel P., Funston P., Hunter L., Macdonald D., Dloniak S., Packer C. Reply to Riggio et al.: Ongoing lion declines across most of Africa warrant urgent action. 2016a. PNAS 113 (2) E109; published ahead of print December 30, 2015, doi:10.1073/pnas.1522741113. Available at: http://www.pnas.org/content/113/2/E109.short.

Bauer, H. Response to rebuttal of the 2015 Lion assessment on The IUCN Red List of Threatened Species (Ref No HA. 143/151/01/51). May 10, 2016b. [submitted to Tanzania's then Acting Director of Wildlife, Mr. C.J. Mulokozi]

Bauer, H., Packer, C., Funston, P.F., Henschel, P. & Nowell, K. 2016c. *Panthera leo*. The IUCN Red List of Threatened Species 2016. e.T15951A107265605. http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T15951A107265605.en.

Benyr, G., Czirak, Z., Littlewood, A. A Report to the EU CITES Scientific Review Group on the EU Expert Mission to Assess the Sustainability and Management of Lion and Elephant Trophy Hunting in Tanzania. Part 1 & 2: General Introduction and Elephant Trophy Hunting. August 2016. Available at: http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=33601&no=49.

Benyr, G., Czirak, Z., Littlewood, A. Sustainability of Lion Trophy Hunting in Tanzania. May 2017. Available at: http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=33600&no=48.

Brink, H. 2010. Hunting for Sustainability: Lion Conservation in Selous Game Reserve, Tanzania. (A thesis submitted to the University of Kent for the degree of Doctor of Philosophy in

Biodiversity Management.) Available at: http://www.wildlife-baldus.com/download/Brink_Selous%20Hunting%20and%20LionThesis_2010.pdf

Brink, H., Smith, RJ, Skinner, K., Leader-Williams, N. (2016) Sustainability and Long Term-Tenure: Lion Trophy Hunting in Tanzania. PLoS ONE 11(9): e0162610. https://doi.org/10.1371/journal.pone.0162610

Buckley, R., Frontiers in Ecology and the Environment, Mixed Signals from Hunting Rare Wildlife. Vol. 12, No. 6. August 2014. pp. 321-322.

Campbell, R. 2012. Mane Assumptions: A review of Lindsey et al (2012) – The Significance of African Lions for the Financial Viability of Trophy Hunting and the Maintenance of Wild Land, a report for the African Lion Coalition, prepared by Economists at Large, Melbourne, Australia.

Caro T, Young C, Cauldwell A, Brown D. Animal breeding systems and big game hunting: Models and application. Biol Conserv. 2009; 142: 909–929. www.cryoung.org/www/pdfs/Caro_BiolCon_2009.pdf

CITES, CMS. African Lion Range State Meeting Communiqué. May 30-31, 2016. Entebbe, Uganda. Available at: http://www.cms.int/sites/default/files/african_lions_meeting_outcome_document_e.pdf. [Entebbe 2016]

Dolrenry S, Stenglein J, Hazzah L, Lutz RS, Frank L (2014) A Metapopulation Approach to African Lion (Panthera leo) Conservation. PLoS ONE 9(2): e88081. doi:10.1371/journal.pone.0088081

Environmental Investigation Agency. The Lion's Share: South Africa's Trade Exacerbates Demand for Tiger Parts and Derivatives. July 2017. Available at: https://eia-international.org/wp-content/uploads/The-Lions-Share-FINAL.pdf.

IUCN- Conservation Strategy for the Lion in Eastern and Southern Africa. 2006. IUCN/SSC Cat Specialist Group. http://www.cms.int/sites/default/files/document/IUCN_CatSG_2006_East_and_South_Africa_Lion_Conservation_Strategy.pdf

Kasiki, S., and Hamunyela E. CITES Periodic Review of the Status of African Lion across its Range. AC27 Doc. 24.3.3. (2014). https://cites.org/sites/default/files/eng/com/ac/27/E-AC27-24-03-03.pdf

Kiffner C, Meyer B, Muhlenberg M,Waltert M. Plenty of prey, few predators: what limits lions Panthera leo in Katavi National Park, western Tanzania? Oryx. 2009; 43: 52–59. doi: 10.1017/S0030605307002335

Loveridge A, Searle A, Murindagomo F, Macdonald D. The impact of sport-hunting on the population dynamics of an African lion population in a protected area. Biol Conserv. 2006; 134: 548–558. doi: 10.1016/j.biocon.2006.09.010

Mésochina et al. (2010) Conservation Status of the Lion (*Panthera leo* Linnaeus, 1758) In Tanzania. http://www.rocal-lion.org/documents/Tanzania%20lion%20Conservation%20Status.pdf

Ministry of Natural Resources and Tourism. Policy and Management Plan for Tourist Hunting. MNRT; Government Printer, Dar es Salaam, Tanzania; 1995. Available at: http://www.wildlife-baldus.com/download/Tanzani1.pdf.

Ministry of Natural Resources and Tourism. Comment on ESA Status Review of African Lion. January 27, 2015. (Ref. No. CHA.7/533/01/). (ESA Comment)

Mtui, D., Owen-Smith, N., Lepczyk, C., 2016. Assessment of wildlife population trends in three protected areas in Tanzania from 1991 to 2012. African J. of Ecology 55(3). DOI: 10.1111/aje.12354.

Murray, C. K. The lion's share? On the economic benefits of trophy hunting. A report for the Humane Society International, prepared by Economists at Large, Melbourne, Australia. 2017. Available at: http://www.hsi.org/assets/pdfs/economists-at-large-trophy-hunting.pdf.

Packer, C., Kosmala, M,. Cooley, HS, Brink, H., Pintea, L., et al. (2009) Sport Hunting, Predator Control and Conservation of Large Carnivores. PLoS ONE 4(6): e5941. doi:10.1371/journal.pone.0005941

Packer, C., Brink, H., Kissui, B., Maliti, H., Kushnir, H., & Caro, T. (2011). Effects of trophy hunting on lion and leopard populations in Tanzania. Conservation Biology: DOI: 10.1111/j.1523-1739.2010.01576.x.

Sachedina, H.T. 2008. Wildlife is Our Oil: Conservation, Livelihoods and NGOs in the Tarangire Ecosystem, Tanzania. PhD Thesis. School of Geography and the Environment, University of Oxford. Available at: http://i2.cdn.turner.com/cnn/2015/images/05/19/oxfordstudy.pdf.

The Tanzania Lion and Leopard Conservation Action Plan. February 20-22nd 2006. Tanzania Wildlife Research Institute (TAWIRI).

United States Department of the Interior, Fish and Wildlife Service. General Advice on Importation of Sport-hunted Trophies of African Elephants taken in Tanzania in the Calendar Year 2015. July 01, 2015. (FWS 2015 NDF)

October 6, 2017

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Chief, Branch of Permits
U.S. Fish and Wildlife Service
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Rosemarie Gnam, Ph.D.
Chief, Division of Scientific Authority
U.S. Fish and Wildlife Service
5275 Leesburg Pike
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Re: Imports of African Elephant Trophies from Zimbabwe Should Not Be Permitted

Dear Chief Van Norman and Chief Gnam:

The Humane Society of the United States (HSUS), Humane Society International (HSI), and the Center for Biological Diversity (CBD) strongly urge the U.S. Fish and Wildlife Service (FWS or "the Service") to continue prohibiting the import of African elephant trophies from Zimbabwe. As detailed herein, recent evidence demonstrates that elephants in Zimbabwe are threatened with extinction from poaching and habitat loss and Zimbabwe cannot ensure that recreational offtake of elephants is sustainable. Therefore, the Service cannot lawfully make an enhancement finding under the Endangered Species Act (ESA) for imports of elephant trophies from Zimbabwe.

ESA Requirements for Elephant Trophy Imports

Since the African elephant special rule amendment (50 C.F.R. § 17.40(e)) went into effect in June 2016, every import of an African elephant trophy is required to comply with ESA permitting requirements. Pursuant to the ESA (16 U.S.C. § 1538) and implementing regulations (50 C.F.R. § 17.40(e)), before the Service can authorize the import of an African elephant trophy it must be able to make a finding that the take of the animal enhances the survival of the species. According to the plain language of this statutory term (16 U.S.C. § 1539(a)(1)), "enhancement" permits may only be issued for activities that *positively benefit* the species in the wild. *See also* FWS, *Ensuring the Future of the Black Rhino* (Nov. 25, 2014), *at* http://www.fws.gov/news/blog/index.cfm/2014/11/25/Ensuring-the-Future-of-the-Black-Rhino (acknowledging that the ESA enhancement standard is more stringent than the CITES non-detriment standard); U.S. Fish and Wildlife Service Handbook for Endangered and Threatened

Species Permits (1996) (making clear that an enhancement activity "must go beyond having a neutral effect and actually have a positive effect").

HSUS, HSI, and CBD agree with FWS that the IUCN provides relevant standards for determining whether elephant trophy hunting meets this conservation goal. *See* 81 Fed. Reg. 36388, 36394 (June 6, 2016). We strongly encourage FWS to conduct this enhancement analysis consistent with how the Service conducts its analysis for determining whether African lion hunting meets the enhancement standard. 80 Fed. Reg. 79999, 80045 (Dec. 23, 2015). Specifically,

> "when making a determination of whether an otherwise prohibited activity enhances the propagation or survival[], the Service will examine the overall conservation and management of the subspecies in the country where the specimen originated and whether that management of the subspecies addresses the threats to the subspecies (i.e., that it is based on sound scientific principles and that the management program is actively addressing the current and longer term threats to the subspecies). In that review, we will evaluate whether the import contributes to the overall conservation of the species by considering whether the biological, social, and economic aspects of a program from which the specimen was obtained provide a net benefit to the subspecies and its ecosystem" (emphasis added).

HSUS, HSI, and CBD also agree that FWS must consider the following factors when making an enhancement finding for importation of sport-hunted trophies of African elephants, as it does for African lions:

> "(a) Biological Sustainability: The hunting program cannot contribute to the long-term decline of the hunted species. It should not alter natural selection and ecological function of the hunted species or any other species that share the habitat. The program should not inadvertently facilitate poaching or illegal trade in wildlife by acting as a cover for such illegal activities. The hunting program should also not manipulate the ecosystem or its component elements in a way that alters the native biodiversity.
>
> (b) Net Conservation Benefit: The biologically sustainable hunting program should be based on laws, regulations, and scientifically based quotas, established with local input, that are transparent and periodically reviewed. The program should produce income, employment, and other benefits to create incentives for reducing the pressure on the target species. The program should create benefits for local residents to co-exist with the target species and other species. It is also imperative that the program is part of a legally recognized governance system that supports conservation.
>
> (c) Socio-Economic-Cultural Benefit: A well-managed hunting program can serve as a conservation tool when it respects the local cultural values and practices. It should be accepted by most members of the community, involving and benefiting local residents in an equitable manner. The program should also adopt business practices that promote long-term economic sustainability.
>
> (d) Adaptive Management: Planning, Monitoring, and Reporting: Hunting can enhance the species when it is based on appropriate resource assessments and monitoring (e.g., population counts, trend data), upon which specific science-based quotas and hunting

programs can be established. Resource assessments should be objective, well documented, and use the best science available. Adaptive management of quotas and programs based on the results of resource assessments and monitoring is essential. The program should monitor hunting activities to ensure that quotas and sex/age restrictions of harvested animals are met. The program should also generate reliable documentation of its biological sustainability and conservation benefits.

(e) Accountable and Effective Governance: A biologically sustainable trophy-hunting program should be subject to a governance structure that clearly allocates management responsibilities. The program should account for revenues in a transparent manner and distribute net revenues to conservation and community beneficiaries according to properly agreed decisions. All necessary steps to eliminate corruption should be taken and to ensure compliance with all relevant national and international requirements and regulations by relevant bodies such as administrators, regulators and hunters."

Further, FWS regulations provide that "No more than two African elephant sport-hunted trophies [can be] imported by any hunter in a calendar year." 50 C.F.R. § 17.40(e)(6)(E).

Strict scrutiny of elephant trophy imports is especially imperative, given that the Service has found that uplisting the species to endangered may be warranted. 81 Fed. Reg. 14058 (March 16, 2016).

There Is No Evidence that Elephant Trophy Hunting in Zimbabwe Enhances the Survival of the Subspecies

Since 2014, the Service has been unable to make the requisite finding that hunting African elephants in Zimbabwe enhances the survival of the species. *See* 79 Fed. Reg. 44,459 (July 31, 2014); 80 Fed. Reg. 42524 (July 17, 2015). Numerous problems with Zimbabwe's elephant management remain unresolved to date: the lack of an elephant management plan; lack of sufficient data on population numbers and trends on which to base management decisions; weak implementation and enforcement; lack of evidence that legal offtake is biologically sustainable, taking into account illegal offtake; lack of information about how money from trophy hunting by U.S. hunters is distributed within Zimbabwe; and lack of a national mechanism, such as government support, to sustain elephant conservation efforts in the country. (USFWS 2014 Enhancement Finding; USFWS 2015 Enhancement Finding). Thus, the Service cannot lawfully make an enhancement finding (or non-detriment finding) for trophy imports from this population for calendar year 2016 or beyond, as detailed herein.

Lack of an elephant management plan

In the 2015 finding, the Service stated, "Zimbabwe's current elephant management plan consists of two primary documents drafted in 1996 and 1997. Although the documents provide a well-developed list of goals and objectives, there is no information on whether these goals and objectives have been met or could be met. This is supported by statements from ZPWMA that the plans are outdated and need to be revised." (USFWS 2015 Enhancement Finding, p. 17)

Subsequent to the 2015 finding, in January 2016, a new Zimbabwe Elephant Management Plan (2015–2020)[1] (hereinafter, the Plan) was signed by relevant Zimbabwean authorities. In addition to a long-term vision and targets at the national level, the Plan includes five key components (protection and law enforcement; biological monitoring and management; social, economic and cultural framework; building conservation capacity; and coordination, collaboration and program management), each with a strategic objective and outputs, as well as key activities, key performance indicators, means of verification, time frames, and responsibility. The Plan includes terms of reference for key committees and staff required to implement the Plan (National Elephant Management Committee, Regional Elephant Management Committees, and the National Elephant Manager). In addition, an Elephant Action Plan was developed for each of the four main regional populations (Northwest Matabeleland (a.k.a. Hwange area), Sebungwe, mid-Zambezi Valley, and South East Lowveld (a.k.a. Gonarezhou area). Finally, and importantly, the Plan notes that the cost of implementing the Plan will be at least $12 million per annum in operational budget alone.

While the highly ambitious new Plan is an improvement over the old plans, there is no publicly available evidence that the Plan is being substantially implemented. Certainly, as noted in the plan itself, without the required $12 million per annum in funding, it is unlikely to be implemented. As the Plan indicates: "Implementing the action plan will also require more human and financial resources than are currently available for the conservation and management of elephant in Zimbabwe" (Plan, p. 32).

The mere presence of a new elephant management plan, in and of itself, surely was not the Service's intended goal. Lack of implementation of the Plan, and lack of funding to undertake the actions in the Plan, means that the Service's conclusion about the previous old Plans (that "although the documents provide a well-developed list of goals and objectives, there is no information on whether these goals and objectives have been met or could be met") remains valid.

Lack of sufficient data on population numbers and trends on which to base management decisions

The Service's 2015 finding noted that preliminary findings from the Pan African Elephant Arial Survey, a.k.a. the Great Elephant Census, indicated that Zimbabwe's elephant population had declined by 6% since 2001, and that poaching had significantly increased. The Service noted the need for evidence that this information has been incorporated into management activities in a scientifically sound manner.

[1] http://www.zamsoc.org/wp-content/uploads/2016/04/ZIMBABWE-ELEPHANT-MANAGEMENT-PLAN-APPROVED-FINAL-1.pdf

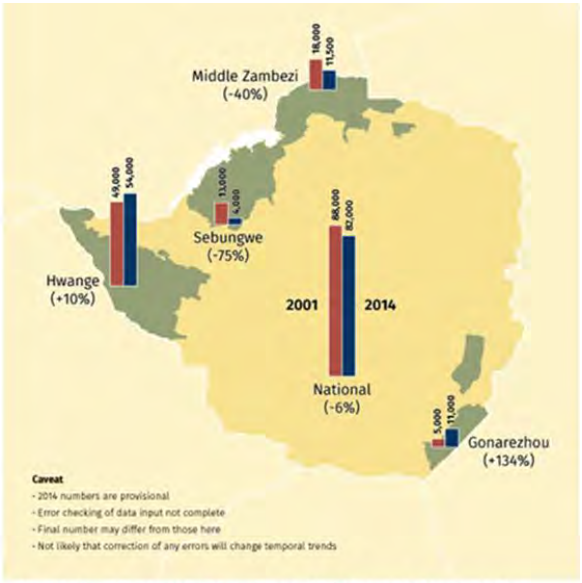


Figure 1. Zimbabwe's national elephant statistics, 2014. From The Zambezi Society Bulletin, February 2015 (http://us10.campaign-archive2.com/?u=f4943277ce971cb1c9028d068&id=50589e3c06).

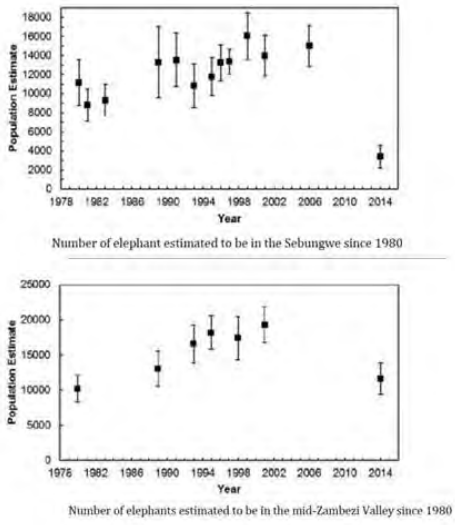


Figure 2. Number of elephants estimated to be in the Sebungwe and mid-Zambezi populations from 1980 to 2014. Source: Zimbabwe Elephant Management Plan (2015–2020), Figures 4 and 5.

Indeed, the Great Elephant Census[2] estimated that Zimbabwe's elephant population was 82,304 ±4,382 with a "carcass ratio" of 8%, meaning the survey recorded one dead elephant for every eight live elephants. The Census found that Zimbabwe's elephant population had declined by 6% overall since 2001, and that there were serious population declines in two of the four main Zimbabwe elephant populations (Figure 1). In Sebungwe, the elephant population decreased by 75%, from about 11,000 to 4,000. And in Middle Zambezi, the population decreased by 40%, from about 18,000 to 11,500. Regarding the other two Zimbabwe elephant populations, the Census found that Hwange's population had increased by 10% from about 49,000 to 54,000, and the population of Gonarezhou had increased by 134% from about 5,000 to 11,000.

While the new Zimbabwe Elephant Management Plan (2015–2020) does not reference the 6% overall elephant population decline in Zimbabwe, it does acknowledge the recent and dramatic elephant population decreases in Sebungwe (Plan, p. 7) and mid-Zambezi (Plan, p. 8) (see Figure 2).

Nevertheless, elephant trophy hunting is still occurring in both Sebungwe and mid-Zambezi,[3] calling into question whether or not the scientific evidence of significant elephant population declines in these areas have been taken into account in setting hunting quotas.

[2] Chase MJ, Schlossberg S, Griffin CR, Bouché PJC, Djene SW, Elkan PW, Ferreira S, Grossman F, Kohi EM, Landen K, Omondi P, Peltier A, Selier SAJ, Sutcliffe R. (2016) Continent-wide survey reveals massive decline in African savannah elephants. PeerJ 4:e2354 https://doi.org/10.7717/peerj.2354; https://static1.squarespace.com/static/5304f39be4b0c1e749b456be/t/57c71f5fcd0f68b39c3f4bfa/1472667487326/GEC+Results+Country+by+Country+Findings+Fact+Sheet_FINAL_8+26+2016.pdf; http://www.greatelephantcensus.com/final-report.

[3] ZPWMA, *Sebungwe Elephant Management Workshop* (2015), http://www.zamsoc.org/wp-content/uploads/2016/04/Sebungwe_Elephant_Mgmt_Proceedings_29May_Compressed.pdf; https://www.bookyourhunt.com/elephant-hunting-in-zimbabwe

In Sebungwe, hunting blocks in both Chirisa and Chete Safari Areas, were auctioned in 2015 (ZPWMA 2015a, ZPWMA 2015b), with four male elephants on offer in each Area, plus two tuskless elephants in Chirisa. Hunting company Sitatunga Zimbabwe currently offers elephant hunts in Chirisa stating, "Average bull size being in the region of 40 – 45 pounds a side, occasionally 50 lbs can be achieved."[4] Elephant hunting is also curently offered in the Gokwe rural area in Sebungwe: "Elephant hunts in these areas for trophy bulls will produce ivory from around 30-35 pounds per side upwards; tuskless elephant hunting is very good in this area."[5]

There are five Safari Areas in the mid-Zambezi area: Sapi, Chewore, Hurungwe, Dande, and Doma.[6] Together, Mana Pools National Park, and Sapi and Chewore Safari Areas are a World Heritage Site. The 40th meeting of the World Heritage Committee, held 24-26 October 2016, adopted Decision 40 COM 7B.84,[7] which included:

> "4. Notes with significant concern that the 2014 national aerial survey of key wildlife species has revealed a decline in the Zambezi Valley populations of elephants and other mammals which are key attributes of the Outstanding Universal Value (OUV) of the property, and that the threat of poaching is currently too high to consider a feasibility study for a possible reintroduction programme of black rhinoceros;
>
> 5. Notes the development of an anti-poaching strategy for the property and a broader elephant management plan for the Zambezi Valley, and also requests the State Party to ensure that they are fully resourced and effectively implemented so as to restore and maintain the property's OUV;
>
> 6. ***Regrets that the State Party has not been able to complete the new management plan for the property due to lack of funds*** and encourages it to apply for International Assistance to support this work;" **(emphasis added)**

The 2016 Report on the Monitoring of Illegal Killing of Elephants (MIKE) to CITES COP17 noted that the percentage of illegal killing of elephants or "PIKE also increased substantially in . . . Chewore (Zimbabwe; by 69%, from 0.17 to 0.29)."[8] Therefore, it is clear that Zimbabwe has not completed the new management plan for the mid-Zambezi area. Given the lack of funding to complete a new management plan, it seems unlikely that even if such a plan were prepared, it would be fully resourced and effectively implemented.

Nonetheless, elephant trophy hunting is continuing in the Safari Areas in the mid-Zambezi, calling into question whether or not the significant elephant population decline in this area has been taken into account in setting hunting quotas. Charlton McCallum Safaris took numerous

[4] https://www.bookyourhunt.com/Tour/8709
[5] http://www.zingelasafaris.com/zimbabwe/area/
[6] http://whc.unesco.org/en/list/302/
[7] World Heritage Convention, Decision 40 COM 7B.84, *Mana Pools National Park, Sapi and Chewore Safari Areas (Zimbabwe)* (2016), http://whc.unesco.org/en/decisions/6749
[8] https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-57-05.pdf

clients on elephant hunts in the Dande Safari Area of the mid-Zambezi in 2017.[9] In March 2016, the Zimbabwe Parks and Wildlife Management Authority auctioned off hunting blocks that included elephants in Sapi, that included four male elephants and one tuskless elephant.[10] In April 2015, a professional hunter was killed while guiding a client on an elephant hunt in Chewore.[11]

Furthermore, despite the significant elephant population declines in the Sebungwe and mid-Zambezi areas, and the 6% population decline overall, all of which have been publicly known since 2014, Zimbabwe has made no change since 2004 to its voluntary African elephant export quota established under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This export quota stands at 1000 tusks from 500 animals,[12] exported as trophies (as export for commercial purposes is not allowed).

Therefore, the Service's concern, as stated in the 2015 finding, that information from the Great Elephant Census of 2014 has been incorporated into management activities in a scientifically sound manner, remains valid.

Weak implementation and enforcement

The Service's 2015 finding notes that, while strong laws and regulatory mechanisms for the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) and its programs have been established, lack of funding for ZPWMA from the government means they are inadequately implemented and enforced. According to a letter received by the Service from ZPWMA in December 2014, the annual operating budget for ZPWMA is "in excess of US$28 million," yet, with the exception of a few projects, ZPWMA is "funded solely from trophy hunting conducted on state and private lands" (USFWS 2015 Enhancement Finding, p. 9). In the 2015 finding, the Service laments that they lack information about the amount of money generated by elephant trophy hunting specifically, how these funds are distributed, and how these funds enable ZPWMA to enforce and implement laws and regulations.

According to the 2016 report on the Elephant Trade Information System (ETIS) at CITES CoP17 Doc. 57.6 (Rev. 1),[13] "Zimbabwe is the country that pulls the rule of law score down, indicating far greater governance challenges exist in that country" (*id.,* p. 16). The World Justice Project (WJP) Rule of Law Index 2016 ranked Zimbabwe at 108 out of 113 countries and jurisdictions, meaning that Zimbabwe has the sixth worst rule of law.[14] According to WJP, "Effective rule of law reduces corruption, combats poverty and disease, and protects people from injustices large

[9] http://www.cmsafaris.com/zimbabwe-dande-hunt-trophy-gallery/gallery.htm
[10] http://www.desiredauctioneers.co.zw/downloads/ParksSapi.pdf
[11] https://africageographic.com/blog/hunter-killed-bull-elephant-musth/
[12] https://cites.org/eng/resources/quotas/export_quotas?field_party_quotas_tid=&field_full_name_tid=&field_export_quotas_year_value%5Bvalue%5D%5Byear%5D=2017&items_per_page=50
[13] CITES, Report on the Elephant Trade Information System (ETIS), CoP17 Doc. 57.6 (Rev. 1) (2016), https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-57-06-R1.pdf
[14] https://worldjusticeproject.org/sites/default/files/documents/ROLIndex_2016_Zimbabwe_en.pdf

and small. It is the foundation for communities of peace, opportunity, and equity—underpinning development, accountable government, and respect for fundamental rights."[15]

The ETIS report also found that Zimbabwe had the tenth largest ivory market of any country in the analysis, and stated that there is "increasing evidence of direct Chinese involvement in Africa-based ivory processing operations" in Zimbabwe "with production (primarily bangles, name seals and chopsticks) being shipped to Asia using courier companies as well as individuals who sometimes carry contraband on their bodies using purposefully built clothing" (ETIS p. 20).

Indeed, instead of effectively implementing and enforcing wildlife laws and regulations, ZPWMA personnel have been implicated in the illegal ivory trade. In 2015, three ZPWMA staff members were arrested for involvement in the theft of ivory from a government stockpile held at Hwange National Park.[16] The arrests came after a shipment of 62 tusks on its way to China was seized at the international airport in Harare. Serial numbers on the tusks were traced to the Hwange government stockpile. An alleged Chinese smuggler, who claimed he represented the Chinese government, had obtained export permit signed by the most senior of the three ZPWMA people arrested. All three were released from custody, the senior ZPWMA person after paying a $600 bail; none appeared in court again. Allegedly, the investigation was stopped after senior ZPWMA officials in Harare intervened in order to cover the involvement of other ZPWMA officials in the smuggling. The investigation seems to implicate senior parks and Ministry of Environment, Water and Climate officials. Allegedly, the ZPWMA trio had been exporting ivory from the stockpile since 2012. They had the assistance of ZPWMA security personnel and police units who guarded the trucks carrying the ivory over the 880 km from Hwange to the airport.

Corrupt government officials allegedly have been involved in both poaching of elephants and illegal export of ivory tusks, and involvement in a transnational syndicate.[17] Edson Chidziya, the former Director General, Zimbabwe Parks and Wildlife Management Authority, and one-time regional representative for Africa on the Animals Committee of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES),[18] was fired in May 2017 for his alleged involvement in the disappearance of rhino horns worth $3 million two years before.[19]

Of further concern is that the ZPWMA operates without a board which, as noted by Mupfiga and Chirimumimba (2015),[20] creates "a leadership vacuum and also legal constraints for the validation of policy decisions and approval or authorization of programmes" and it is "worrying for State entities to operate without boards for long periods because management are then left to

[15] *Id.*
[16] https://oxpeckers.org/2016/04/how-to-steal-an-ivory-stockpile/
[17] http://globaljournalist.org/2017/02/zimbabwe-journalist-fights-charges-poaching-report/
[18] https://cites.org/sites/default/files/eng/com/ac/22/E22-05-01.pdf
[19] http://www.thezimbabwean.co/2017/05/zim-wildlife-boss-fired-3m-rhino-horn-goes-missing-report/
[20] Mupfiga, P. and Chirimumimba, M., 2015. Challenges to the implementation of IT Governace in Zimbabwean Parastatals. The International Journal of Engineering and Science 14(12): 1-6. ISSN (e): 2319 – 1813. https://www.researchgate.net/profile/Paul_Mupfiga/publication/286871326_Challenges_to_the_Implementation_of_IT_Governance_in_Zimbabwean_Parastatals/links/566eb41108aea0892c52a40d/Challenges-to-the-Implementation-of-IT-Governance-in-Zimbabwean-Parastatals.pdf

operate without accountability, a situation which may compromise the efficiency and effectiveness of an entity due mainly to the absence of an effective oversight function" (p. 4).

The report on Monitoring the Illegal Killing of Elephants (MIKE) to CITES COP17 further flagged several Zimbabwe monitoring sites for capacity building indicating the need for support to improve patrolling, managing, and monitoring at Mana Pools, Sapi and Chewore World Heritage Site.[21]

Thus, the concern stated in the Service's 2015 finding, that Zimbabwe's wildlife laws and regulatory mechanisms are inadequately implemented and enforced, remains valid.

Furthermore, on the subject of law enforcement, the 2015 finding states that the Service has been told by safari outfitters and hunting guides that the presence of U.S. trophy hunters, and their outfitters and guides, are the major deterrent to poaching in Zimbabwe and that, therefore, such hunting enhances the survival of the species. However, recent data demonstrates that this claim is invalid. For example, between 2006 and 2014, elephant poaching increased substantially in both the Chirisa and Chete Safari Areas where elephant hunting occurs, while elephant densities decreased (Figure 3). Moreover, we agree with the Service's 2015 finding that, even if true, this assertion would do nothing to reduce poaching in places where hunting does not occur, such as National Parks, which have experienced substantial elephant poaching.

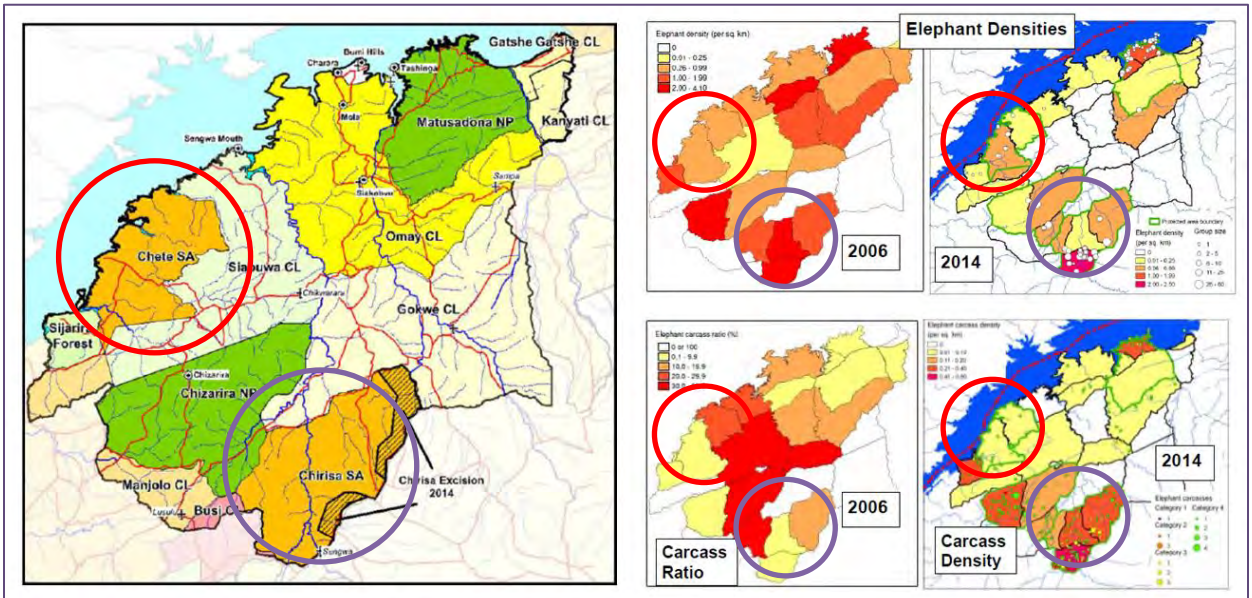


Figure 3: Current land classification of the Sebungwe and survey data. From: Sebungwe Elephant Management Proceedings, p. 10 and 11.

Lack of evidence that legal offtake and quotas are biologically sustainable

The Service's 2015 finding expressed the concern that there is no way to know if legal offtakes are biologically sustainable given that, at that time, there were no up-to-date population

[21] https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-57-05.pdf

estimates, no information on the number of elephants legally taken each year, and no credible information on other sources of elephant mortality (such as legal "cropping", natural mortality, accidents, poaching, problem animal control and "management offtake").

The scientific basis for the establishment of elephant hunting and export quotas in Zimbabwe, in light of the recent and significant declines noted above, remains unknown.

Supposedly, quota setting for wildlife in Zimbabwe is a consultative process involving workshops with wildlife farmers, hunters, local authorities, tour operators and photographers and a scientific review that looks at poaching, trophy quality and size, natural mortality, and problem animal control in surrounding communities.[22] However, the reality is something quite different.

A 2016 paper by Muposhi et al.[23] presented the results of a study on the impact of trophy hunting on large herbivores, including elephants, in the Matetsi Safari Area near Hwange National Park. They found that trophy tusk sizes of hunted African elephants declined significantly from 2004-2015 possibly indicating, according the researchers, that elephant trophy hunting in the area is not sustainable. Furthermore, the authors found that, despite the existence since 2014 of data on elephant populations generated from the Great Elephant Census, quotas "may have been based on previous experiences and individual opinions and not based on scientific principles" (Muposhi p. 15). On the general topic of quota-setting in the area, the authors stated, "There seems to be over-reliance on questionable and subjective personal opinions in the quota setting process which in actual sense is supposed to be based on scientific evidence and ecological principles" (Muposhi p. 12). Finally, the authors note the obvious conflict of interest that exists when the ZPWMA, which relies on trophy hunting as income for its operations, is also in charge of setting quotas, posing the question "who will police the regulator" (Muposhi p. 15), noting that it may cause problems when "economic benefits to take precedence over regulatory policy framework" (Muposhi p. 15). In other words, the scientific component of quota setting is lacking.

Selier et al. (2014)[24] found that elephant hunting in the Greater Mapungubwe Transfrontier Conservation Area, which includes Botswana, South Africa and Zimbabwe, was unsustainable and predicted that "trophy bulls will disappear from the population in less than 10 years."

Politics and corruption also play roles in trophy hunting in Zimbabwe. A 2012 news article explained how officials from Zimbabwe's ruling party since 1980 sought to cash in on trophy

[22] http://www.chronicle.co.zw/elephants-hunting-quota-set-at-500/

[23] Muposhi, V. et al., 2016. Trophy Hunting and Sustainability: Temporal Dynamics in Trophy Quality and Harvesting Patterns of Wild Herbivores in a Tropical Semi-Arid Savanna Ecosystem. PLoS One 11(10). http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0164429&type=printable

[24] Selier, S.A.J., Page, B.R., Vanak, A.T. and Slotow, R., 2014. Sustainability of elephant hunting across international borders in southern Africa: A case study of the greater Mapungubwe Transfrontier Conservation Area. The Journal of Wildlife Management, 78(1), pp.122-132. https://www.researchgate.net/publication/259539652_Sustainability_of_Elephant_Hunting_Across_International_Borders_in_Southern_Africa_A_Case_Study_of_the_Greater_Mapungubwe_Transfrontier_Conservation_Area.

hunting by taking over hunting concessions.[25] A 2015 news article quoted Mary-Jane Ncube of a Zimbabwe NGO that monitors corruption, Transparency in Zimbabwe, as stating "In the area of conservation, I think it [the government] has behaved like a predatory state, going after big investments, giving them to cronies, family, and really not having any concern for communities that are dependent on that land …"[26] Furthermore, she was quoted as saying, "National Parks was the authority in charge of concessions and licensing, but because of the corruption … concessions and licenses are now given according to who you are and who you can pay the highest dollar to." A June 2017 news article described how the Tsholotsho Rural District Council sold permits to a safari hunting company, Lodzi Hunters, to hunt 50 elephants in order to get money to fund the construction of a football stadium. This reportedly came about after Higher and Tertiary Education, Science and Technology Development Minister Professor Jonathan Moyo, who is the MP for the area, made a deal with then Minister of Water, Climate and Environment, Saviour Kasukuwere, who then issued the hunting quota of 50 to the Council. Of relevance, according to Transparency International, in 2016 Zimbabwe was the 22nd most corrupt country, ranking 154 of 176.[27]

Regarding poaching, as noted earlier, it is evident from the Great Elephant Census of 2014 that Sebungwe lost at least 7,000 elephants between 2001 and 2014, and mid-Zambezi lost 6,500 over the same period. (Chase et al. 2016). And the MIKE report to COP17 documented a 69% increase in PIKE (from 0.17 to 0.29) in Chewore.[28] This is roughly equivalent to 13,500 elephants over a 13-year period or 1,350 per year just in these two populations alone. Yet, according to information provided to the Service by ZPWMA, as cited in the 2015 finding, poaching on a national basis averaged only 190 per year from 2009 to 2013; and according to information provided to the Service by safari operators, as noted in the 2015 finding, about 160 elephants are killed by trophy hunters annually. Clearly, there is a large and unexplained discrepancy between these figures that underscores the lack of credible information on all sources and quantity of elephant mortality, without which there is no way to ascertain if legal offtakes are biologically sustainable.

Elephant poaching has continued in Zimbabwe in the three years following the Great Elephant Census of 2014. In October 2015, 22 and possibly as many as 78 elephants were poisoned with cyanide in Hwange National Park, and their tusks removed.[29] Reportedly, 159 elephants were poached in Zimbabwe in 2016.[30] In June 2017 it was reported that ten elephants, including a mother and her young calf, were poisoned and tusks removed in Hwange National Park and in the state forestry land outside the northern part of the Park.[31]

[25] https://mg.co.za/article/2012-09-07-00-big-bucks-trigger-zimbabwe-scramble
[26] https://mg.co.za/article/2015-10-22-hunters-feed-corrupt-zim-officials
[27] https://www.transparency.org/news/feature/corruption_perceptions_index_2016#table
[28] https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-57-05.pdf
[29] http://www.cnn.com/2015/10/27/africa/zimbabwe-elephant-poaching/
[30] http://www.zbc.co.zw/2017/06/15/elephant-poaching-cases-on-the-decline/
[31] https://www.theguardian.com/environment/2017/jun/20/ten-more-elephants-poisoned-by-poachers-in-zimbabwe

Therefore, the Service's concern, as expressed in the 2015 finding, that there is no way to know if legal offtakes are biologically sustainable, given no credible information on other sources of elephant mortality, remains valid.

Lack of information about how money from trophy hunting by U.S. hunters is distributed within Zimbabwe

The Service's 2015 finding stated: "While CAMPFIRE [Communal Areas Management Programme for Indigenous Resources, a Zimbabwe community-based natural resource management program] has provided conservation benefits in the past and improved tolerance of wildlife in rural communities, the program has more recently come under criticism relating to excessive retention of generated funds by district councils, resulting in diminished benefits to communities. Sport-hunting may be an important tool that gives these communities a stake in sustainable management of the elephant as a natural and economic resource and offsets the costs of conflict with wildlife. However, without current information on how funds are utilized and the basis for hunting off-takes, the Service is unable to confirm whether revenue generated through sport-hunting actually provides an incentive to local communities to conserve elephants." (USFWS 2015 Enhancement Finding)

Indeed, Harrison et al. (2014)[32] provided a recent analysis of the CAMPFIRE program. The theory behind CAMPFIRE is to empower community members at a village level to control wildlife and its revenue, and to thus create an economic incentive for communities to conserve wildlife. But, according to Harrison et al., this is not actually happening. According to Harrison et al., although CAMPFIRE had a reputation of success in its early days, over time this perception eroded and by the late 1990s it was criticized for lack of participation, lack of empowerment and lack of participation of local communities in management of natural resources. The main problem with the way that CAMPFIRE was designed is that it established the rural district council, which represents numerous local communities, as the 'local' body in charge of natural resource management, rather than the local communities themselves. Harrison et al. state, "Failure to provide benefits to the local communities and to successfully devolve management are just two of the many common criticisms" (p. 8). Among these criticisms is "insufficient action to tackling problems of elite-capture of resources and wildlife-based tourist revenues within RDCs" (Harrison et al. p. 9).

Harrison et al. (2014) studied the CAMPFIRE program in the Binga district, which is part of Sebungwe, and the Chiredzi district, which is part of Gonarhezou; as noted previously, the elephant populations of both Sebungwe and Gonarhezou have experienced dramatic elephant population declines in recent years. The authors found that CAMPFIRE failed as a governance system for community involvement and empowerment and that the "community-based" terminology is merely rhetoric. They warn that new "community-based" natural resource management projects need to "be aware of the disconnect between the local citizens (as their key stakeholders) and what the RDC may believe and be happy to approve" (Harrison et al. p. 30).

[32] Harrison, E., Stringer, L., and A. Dougill. 2014. The importance of the sub-district level for community-based natural resource management in rural Zimbabwe. Centre for Climate Change Economics and Policy Working Paper No. 183, Sustainability Research Institute Paper No. 69. https://pdfs.semanticscholar.org/1e0e/b71b4b6ce9429abca5ad41738f24978ba915.pdf

They conclude "The lack of understanding and attention paid to the sub-district governance system for natural resource management has meant that project implementation has negatively affected the system as a whole, including the people within it, as well as the project outcomes" (Harrison et al. p. 31). They said, "CAMPFIRE has continued to try and operate in a system it increasingly did not understand and thus its structures did not map appropriately onto those operating at the sub-district level. As a partial result of this, the programme has largely collapsed in many parts of the country" … "including in the four case study villages. The benefits experienced by the communities involved over the projects' lifespans have been negligible" (Harrison et al. p. 32).

Two news reports by Debra Patta looked at local perspectives in Zimbabwe on the claim that trophy hunting benefits local communities. One news report quoted Emmanual Fundira, who heads Safari Operators Association of Zimbabwe as saying that although part of the hunting fees paid by trophy hunters is supposed to go to conservation and community projects, in fact it rarely does.[33] In another article, Fundira stated, "If you talk to communities today and say 'Campfire' they don't want to hear [it]. They say Campfire is not benefitting them at all and that in itself is a disaster."[34] The article also quoted a CAMPFIRE rural district council CEO named Phindile Ncube as saying that his community earned $158,000 in a year for infrastructure and "feeding schemes." However, the article quoted a villager named Edward Ngwenya who said he hadn't received anything from the RDC. This was confirmed in another report which said that, while money from trophy hunting is promised to poor communities, they are only getting poorer.[35] Another news article quoted a local chief, Victor Nekatambe, commenting on the fact that local rural district councils manage CAMFIRE and that communities do not receive funding: "They are getting nothing, absolutely nothing."[36]

Therefore, the Service's concerns about CAMPFIRE and the lack of evidence to confirm that revenue generated through elephant sport-hunting actually provides an incentive to local communities to conserve elephants, remains valid.

Lack of a national mechanism, such as government support, to sustain elephant conservation efforts in the country

The Service's 2015 finding expressed concern that, without a national mechanism, such as government support, elephant conservation efforts in Zimbabwe could not be sustained.

As noted above, according to the ZPWMA, the annual operating budget for ZPWMA is in excess of US$28 million and the new Zimbabwe Elephant Management Plan (2015–2020) states that the cost of implementing the Plan will be at least US$12 million per annum in operational budget alone. Yet, the government of Zimbabwe provides no financial support to the ZPWMA, and indeed, according to ZPWMA itself "no amount is budgeted for conservation in the national

[33] http://www.cbsnews.com/news/zimbabwe-corruption-trophy-hunting-cecil-lion-conservation/
[34] https://zimbabwe-today.com/corrupt-government-officials-and-cabals-profit-from-trophy-hunting-riches-in-zimbabwe/
[35] https://zimbabwe-today.com/corrupt-government-officials-and-cabals-profit-from-trophy-hunting-riches-in-zimbabwe/
[36] *Id.*

budget,"[37] leading to inadequate enforcement and implementation of laws and regulatory mechanisms. Lack of government funding also leaves the ZPWMA to rely on trophy hunting, even when unsustainable, to pay its bills.

Lack of funding for ZPWMA has limited anti-poaching efforts and this has had negative effect on elephant conservation. Mana Pools National Park and neighboring safari areas, which are located in the mid-Zambezi area, is one of the areas hardest hit by poaching, as noted above. At a 2015 workshop held by ZPWMA to develop an anti-poaching strategy for the Park,[38] the Area Manager for the Park, Marvellous Mbikiyana, was quoted in a workshop report as having stated, "While the ideal staffing level for rangers is 110 for the Park, 75 have been approved, and only 38 are on site. Of the 38 on site, only 13 are deployable at any one time, due to a number of other commitments, such as driving duties, serving in the front office, and so on." The workshop report noted that the effectiveness of enforcement was negatively affected by low manpower.[39]

Therefore, the Service's concern that there is a lack of a national mechanism to sustain elephant conservation efforts in Zimbabwe, remains valid.

Conclusion

As the home to one of the largest remaining populations of African elephants, it is critical that elephants thrive in Zimbabwe; unfortunately, elephants in Zimbabwe face significant threats including human conflict, habitat destruction, and unsustainable trophy hunting. For the aforementioned reasons, concerns expressed about elephant management in Zimbabwe contained in the Service's 2015 finding remain valid today, and the Service's finding that the import of trophies from elephants hunted in Zimbabwe will not enhance the survival of the species, remains valid. The presence of one of the strongest trophy hunting sectors in Africa has not prevented and, in fact, is demonstrated to have contributed to decreases in the elephant population.

Therefore, trophy hunting of elephants in Zimbabwe cannot be said to enhance the survival of the species, and issuing an import permit for elephant trophies from Zimbabwe would therefore violate the Endangered Species Act and FWS regulations. If FWS issues any elephant trophy import permits from Zimbabwe, HSUS, HSI, and CBD will consider seeking judicial review of that decision. Further, this letter serves as formal opposition to any application for an import permit for a elephant trophy from Zimbabwe and HSUS, HSI, and CBD request that FWS

[37] http://www.zimparks.org/index.php/mc/279-zimbabwe-parks-and-widlife-management-authority-zimparks-successfully-exports-35-african-elephants-to-china

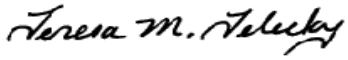
[38] ZPWMA, Workshop to Develop an Anti-Poaching Strategy for Mana Pools National Park and Neighbouring Safari Areas (2015), http://www.zamsoc.org/wp-content/uploads/2016/04/MPNP-Anti-Poaching-Workshop-Summary-Report-15-April-2015.pdf

[39] Similarly, the MIKE report to COP 17 noted a lack of data managers with the associated MIKE sites in Zimbabwe. Table 2 https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-57-05.pdf

provide ten days advance notification (via email, afrostic@humanesociety.org) prior to the issuance of any such permits. *See* 50 C.F.R. §§ 17.22(e), 17.32.[40]

Sincerely,

Anna Frostic
Senior Attorney, Wildlife Litigation
The Humane Society of the United States



Teresa M. Telecky, Ph.D.
Director, Wildlife Department
Humane Society International

Tanya Sanerib
Senior Attorney
Center for Biological Diversity

[40] HSUS has previously called on FWS to publish notice in the Federal Register of threatened species permit applications, and we reassert that such action is essential to create transparency in FWS' enhancement analysis for African elephant activities, consistent with the intent of ESA Section 10. Similarly, it is arbitrary for the Service to explicitly apply the notification requirements of 50 C.F.R. § 17.22(e) to certain types of threatened species permits (i.e., those for Safe Harbor Agreements and Candidate Conservation Agreements with Assurances) but not to other threatened species permits (i.e., for incidental take and import).

Primary References Attached

Chase MJ, Schlossberg S, Griffin CR, Bouché PJC, Djene SW, Elkan PW, Ferreira S, Grossman F, Kohi EM, Landen K, Omondi P, Peltier A, Selier SAJ, Sutcliffe R. (2016) Continent-wide survey reveals massive decline in African savannah elephants. PeerJ 4:e2354 https://doi.org/10.7717/peerj.2354

CITES, Animals Committee Regional Reports, Africa, AC22 Doc. 5.1 (2006)

CITES, Report on the Monitoring of Illegal Killing of Elephants (MIKE) (2016), https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-57-05.pdf

CITES, Report on the Elephant Trade Information System, CoP17 Doc. 57.6 (Rev. 1) (2016), https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-57-06-R1.pdf

Great Elephant Census, Country-by-Country Fact Sheet (2016)

Harrison, E., Stringer, L., and A. Dougill. 2014. The importance of the sub-district level for community-based natural resource management in rural Zimbabwe. Centre for Climate Change Economics and Policy Working Paper No. 183, Sustainability Research Institute Paper No. 69. https://pdfs.semanticscholar.org/1e0e/b71b4b6ce9429abca5ad41738f24978ba915.pdf

Mupfiga, P. and Chirimumimba, M., 2015. Challenges to the implementation of IT Governace in Zimbabwean Parastatals. The International Journal of Engineering and Science 14(12): 1-6. ISSN (e): 2319 – 1813. https://www.researchgate.net/profile/Paul_Mupfiga/publication/286871326_Challenges_to_the_Implementation_of_IT_Governance_in_Zimbabwean_Parastatals/links/566eb41108aea0892c52a40d/Challenges-to-the-Implementation-of-IT-Governance-in-Zimbabwean-Parastatals.pdf

Muposhi, V. et al., 2016. Trophy Hunting and Sustainability: Temporal Dynamics in Trophy Quality and Harvesting Patterns of Wild Herbivores in a Tropical Semi-Arid Savanna Ecosystem. PLoS One 11(10). http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0164429&type=printable

Selier, S.A.J., Page, B.R., Vanak, A.T. and Slotow, R., 2014. Sustainability of elephant hunting across international borders in southern Africa: A case study of the greater Mapungubwe Transfrontier Conservation Area. The Journal of Wildlife Management, 78(1), pp.122-132. https://www.researchgate.net/publication/259539652_Sustainability_of_Elephant_Hunting_Across_International_Borders_in_Southern_Africa_A_Case_Study_of_the_Greater_Mapungubwe_Transfrontier_Conservation_Area

USFWS 2014 Enhancement Finding for Elephants from Zimbabwe

USFWS 2015 Enhancement Finding for Elephants from Zimbabwe

World Heritage Convention, Decision 40 COM 7B.84, *Mana Pools National Park, Sapi and Chewore Safari Areas (Zimbabwe)* (2016), http://whc.unesco.org/en/decisions/6749

Zimbabwe Elephant Management Plan (2015–2020)

ZPWMA 2015a. The 2015 Chirisa Hunting Camps Auction.

ZPWMA 2015b. The 2015 Chete Hunting Camps Auction.

ZPWMA, *Sebungwe Elephant Management Workshop* (2015), http://www.zamsoc.org/wp-content/uploads/2016/04/Sebungwe_Elephant_Mgmt_Proceedings_29May_Compressed.pdf

ZPWMA, Workshop to Develop an Anti-Poaching Strategy for Mana Pools National Park and Neighbouring Safari Areas (2015), http://www.zamsoc.org/wp-content/uploads/2016/04/MPNP-Anti-Poaching-Workshop-Summary-Report-15-April-2015.pdf

From:	Keisha Sedlacek
To:	Vannorman, Tim
Cc:	Anna Frostic
Subject:	Elephant and Lion Imports
Date:	Tuesday, October 24, 2017 12:46:12 PM
Attachments:	Letter to FWS re Zimbabwe Elephant Management (10.6.17).pdf Letter re Tanzania Ele Trophy Imports (10.6.17).pdf Letter to FWS re Tanzania Lion Imports (10.6.17).pdf

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Hi Tim:

On October 6, 2017, we mailed the attached letters regarding (1) Tanzania elephant trophy imports, (2) Zimbabwe elephant trophy imports, and (3) Tanzania lion imports. We just wanted to make sure you had electronic copies of the letters as well (attached). Hopefully, you have had time to review the letters. Would you have time to meet next week to discuss the letters?

Hope all is well.

Best,

Keisha

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PLOS ONE

RESEARCH ARTICLE

Trophy Hunting and Sustainability: Temporal Dynamics in Trophy Quality and Harvesting Patterns of Wild Herbivores in a Tropical Semi-Arid Savanna Ecosystem

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Abstract

The selective nature of trophy hunting may cause changes in desirable phenotypic traits in harvested species. A decline in trophy size of preferred species may reduce hunting destination competitiveness thus compromising the sustainability of trophy hunting as a conservation tool. We explored the trophy quality and trends in harvesting patterns (i.e., 2004± 2015) of Cape buffalo (*Syncerus caffer)*, African elephant (*Loxodonta africana*), greater kudu (*Tragelaphus strepsiceros)* and sable (*Hippotragus niger*) in Matetsi Safari Area, northwest Zimbabwe. We used long-term data on horn and tusk size, age, quota size allocation and offtake levels of selected species. To analyse the effect of year, area and age on the trophy size, quota size and offtake levels, we used linear mixed models. One sample *t*-test was used to compare observed trophy size with Safari Club International (SCI) minimum score. Trophy sizes for Cape buffalo and African elephant were below the SCI minimum score. Greater kudu trophy sizes were within the minimum score threshold whereas sable trophy sizes were above the SCI minimum score between 2004 and 2015. Age at harvest for Cape buffalo, kudu and sable increased whilst that of elephant remained constant between 2004 and 2015. Quota size allocated for buffalo and the corresponding offtake levels declined over time. Offtake levels of African elephant and Greater kudu declined whilst the quota size did not change between 2004 and 2015. The quota size for sable increased whilst the offtake levels fluctuated without changing for the period 2004±2015. The trophy size and harvesting patterns in these species pose a conservation and management dilemma on the sustainability of trophy hunting in this area. We recommend: (1) temporal and spatial rotational resting of hunting areas to create refuge to improve trophy quality and maintenance of genetic diversity, and (2) introduction of variable trophy fee pricing system based on trophy size.

Competing Interests: The authors have declared that no competing interests exist.

Introduction

Wildlife conservation is characterised by proprietorship and pricing systems within the biological parameters that limit sustainable utilization [1, 2]. This is opposed to wildlife preservation approaches which promote restraint in the harvest and consumption of wildlife species and their products [3]. In sub-Saharan Africa, wildlife conservation in protected areas [4] is substantially supported by revenue generated through sustainable harvesting of wildlife species through trophy hunting in Category VI protected areas [5, 6]. Trophy hunting refers to hunting by paying tourists, typically with the objective of selecting individuals with exceptional phenotypic traits (e.g., large horns, tusks, body size, mane or skull length) and usually in the company of a professional hunting guide [7]. Though there has been perpetual debate and polarity on the sustainability of trophy hunting in most sub-Saharan African countries [8], it is still considered as one sustainable way of supporting conservation in African countries endowed with abundant wildlife species [9].

In this study, sustainability refers to the ability of trophy hunting to support, sustain and ensure persistence of wildlife populations without compromising their abundance and diversity over a long-term within the framework of intergenerational equity [10, 11]. In inaccessible, remote and marginalised areas lacking infrastructure, attractive scenery or high densities of charismatic and viewable wildlife species, trophy hunting is considered more suitable and feasible alternative for revenue generation over other forms of tourism (i.e., ecotourism, photographic tourism, enclave tourism [12]) [13, 14]. It is also becoming evident that trophy hunting may provide revenue generation for conservation opportunities in countries where other forms of tourism may not be suitable due political instability [15] and negative media framing [16].

Central to the controversy of trophy hunting is the continual decline and possible expiation of wildlife populations in most sub-Saharan countries [17–19]. Historically, unregulated hunting in some continents led to the extinction of some wildlife species through what has been referred to as the global blitzkrieg (overkill) hypothesis [20, 21], whilst the African continent was to some extent spared from this unprecedented loss of species due to over harvesting and illegal hunting activities [22]. In recent times, declines in wildlife populations globally (including Africa) have been associated with among others, illegal hunting [23–28], over harvesting [29–31], droughts [32–34] and fragmented and weak hunting policies that regulate harvesting of wildlife species [35]. However, trophy hunting uses a quota system approach that promotes sustainable off-takes by harvesting small portions of the natural population growth rates which arguably falls within the compensatory mortality range and has a negligible impact on overall ecology of wildlife species [36, 37].

A quota refers to the number of individuals of a particular animal species that is legally allocated or prescribed for harvesting per year for a particular area [38]. The quota system used is based on ecological theory, i.e., maximum sustainable yield (MSY), set in such a way that off-take levels are always below the growth rate of the target species at any given time [39, 40]. Accordingly, trophy hunting is meant to remove only a few individuals, mostly those that have passed their prime reproductive time and as such should not compromise viability of wildlife species [41–43].

The size of a quota allocated for trophy hunting is mostly influenced by several factors such as the population size [39], trophy size, hunting success [44], age at harvest [45], habitat management and whether or not the populations are shared by two or more management regimes (e.g. in the context of KAZA TFCA). The frequency at which these factors are monitored and analysed to inform the quota setting process as part of the adaptive management process is often low and not consistent [41, 46]. Fragmented monitoring programs of these parameters are mostly a result of the long-term costs associated with their monitoring over time, thus

compromising the effectiveness of the process [47]. Moreover, the use of MSY tends to be problematic as it has been developed and mostly utilised in aquatic ecosystems where severe declines in important fish catches have been witnessed [48, 49]. Though the MSY concept is theoretically sound, its applicability in reality is marred with several challenges such as politics, fixed quotas, shared populations which may ultimately cause declines in wildlife species [50, 51].

The sustainability of trophy hunting in Category VI protected areas in most southern African countries is increasingly subjected to scrutiny both from an ecological and ethical perspective [52]. It is becoming evident that there are some negative effects of trophy hunting on the phenotypic traits and population dynamic of hunted species. Some studies have shown that selective harvesting related to trophy hunting may result in the loss of the more desirable phenotypic traits (i.e., horn or tusk size) with increasing hunting pressure [53]. Despite these observations, there are few studies reporting on the decline of trophy size in hunting destinations in southern Africa, e.g., Zambia [54], northwest Zimbabwe [55], and South Africa [56, 57]. However, the declines in horn size cannot be attributed solely to selective hunting pressure let alone inbreeding depression but a combination of these with some environmental factors [58]. Nonetheless, little attention has been given to establish the relationship between observed trophy size and the standard trophy size of harvested species [44].

In Zimbabwe, trophy hunting mainly occurs in safari areas, communal areas and private areas [59]. The Zimbabwe Parks and Wildlife Management Authority administers a participatory quota setting system with the concerned stakeholders (i.e., private land owners, communal areas representatives and private concessionaires in state owned safari areas) as a way of controlling the offtake levels through trophy hunting. The north-western side of Zimbabwe is covered by Matetsi Safari Area, one of the prime hunting areas known to have conservative and considerably low quota allocations for some wildlife species [51]. These low quotas ($< 5\%$ of the target population size) are believed to have a considerable effect on the population size let alone the horn or tusk size of targeted species [60].

Conservationists argue that there is much uncertainty over the sustainability of offtake rates and their potential impacts on wildlife populations. For instance, the United States of America has taken bold steps in banning import of ivory and related products especially from Kenya and Zimbabwe since 2014. Coincidentally, some commercial passenger and cargo airlines have also put in place an embargo on the transportation of trophies of legally and sustainably hunted species [9]. These embargoes have been worsened by the negative and emotive media framing of trophy hunting in Zimbabwe following the controversial killing of 'Cecil' the lion (*Panthera leo*) by an American hunting tourist near Hwange National Park [8]. This negative media framing of a country may reduce its attractiveness as a destination, which result in low offtake levels of species thus reducing revenue generation from trophy hunting [16]. Furthermore, considering the negative media framing of Zimbabwe during the period of political instability and economic decline, 2000–2008 [16], as well as restrictive policy on trophy imports [9], international trophy hunters may avoid Zimbabwe as a hunting destination thus reducing the trophy hunting offtake levels in hunting areas compared to the period of political inclusiveness and economic recovery (2009–2015).

Although several studies have been done on trophy hunting of lions and leopards (*Panthera pandus*) [46, 61–64], few studies have explored on trophy size related issues on large wild herbivores in southern Africa [44, 55–57]. In this study, we explored the temporal dynamics in trophy quality and harvesting patterns of four selected wild herbivores, Cape buffalo (*Syncerus caffer)*, African elephant (*Loxodonta africana*) and mid-sized herbivores, greater kudu (*Tragelaphus strepsiceros)* and sable (*Hippotragus niger*) in a semi arid tropical ecosystem, Matetsi Safari Area, a hunting complex within the Kavango Zambezi Transfrontier Conservation Area

(KAZA TFCA), northwest of Zimbabwe. We tested three hypotheses, (1) selective harvesting through trophy hunting may result in reduced horn or tusk size and age at harvest of selected wild herbivores with the passage of time, (2) sustainable utilization management programs may reduce the quota size allocated for selected wild herbivores and their offtake levels over time commensurate with the population and trophy size trends in different hunting areas, and (3) economic status of the country between the period 2004–2015 would have an effect on quota size and offtake levels in Matetsi Safari Area, Zimbabwe.

Methods

Study Area

The study was conducted in an unfenced protected area network, Matetsi Safari Area that covers approximately 3,000 km^2, northwest of Zimbabwe (Fig 1). Matetsi Safari Area is part of the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) which is shared between Angola, Botswana, Namibia, Zambia and Zimbabwe established in 2011 [65, 66]. In Zimbabwe, Protected Areas Category VI is referred to as Safari Areas. These areas occur mainly surrounding National Parks and are managed mainly for the sustainable use of natural ecosystems and

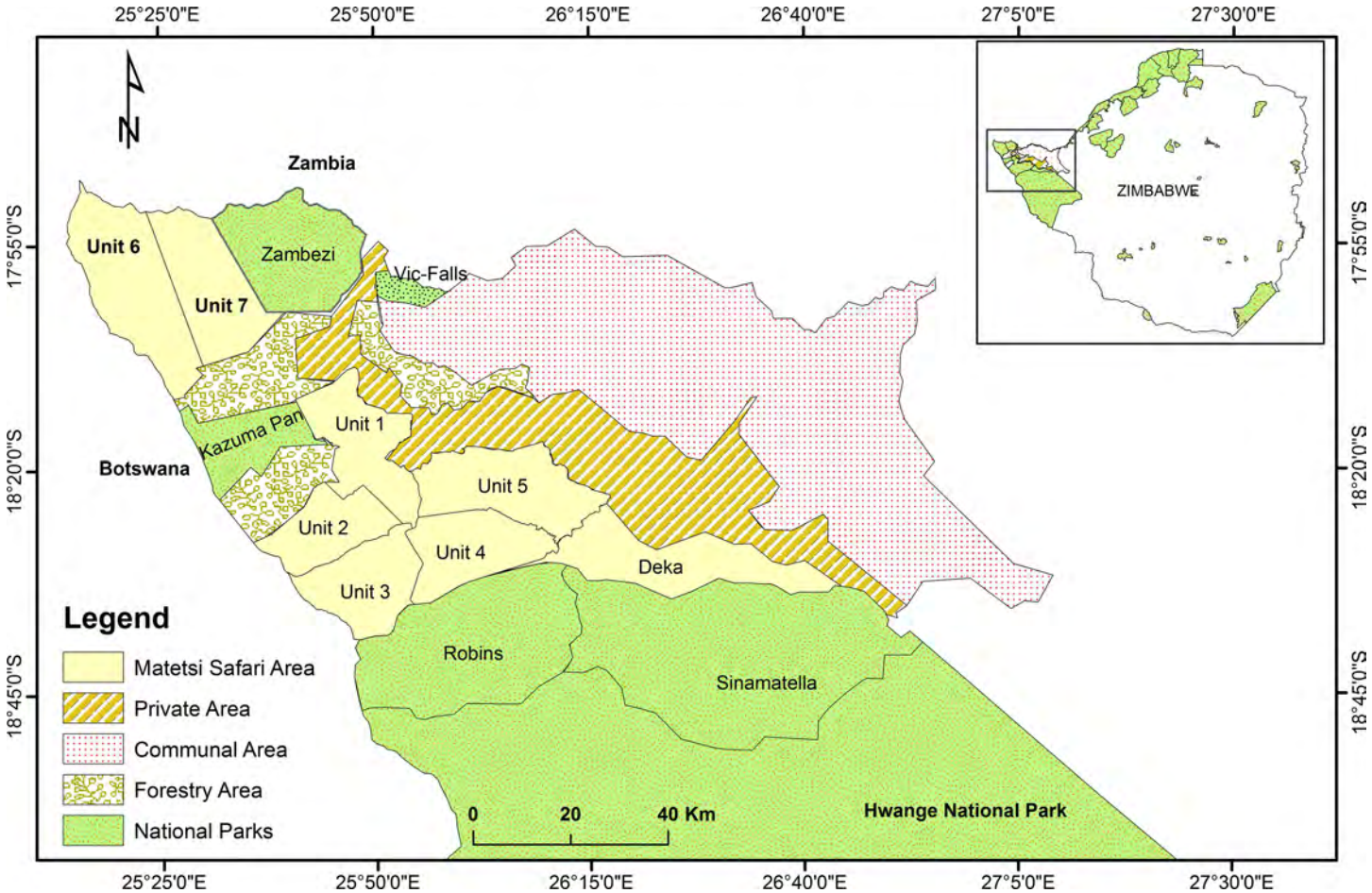

Fig 1. Map showing location of study area, Matetsi Safari Area and the surrounding areas (National Parks, Forestry Areas, Private Areas and Communal Areas in northwest Zimbabwe). Insert: Location of study area (solid rectangle) in Zimbabwe in relation to other protected areas Source: Muposhi, Gandiwa [70].

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as part of a buffer zone to cushion National Parks from human disturbances [4]. Matetsi Safari Area is divided into seven hunting management blocks called Units (Table 1).

The southern block (i.e., comprise of Unit 1–5) is boarded by Hwange National Park to the southern part, north-eastern side with private and communal areas whereas the western side is mostly Kazuma Pan National Park and Forestry Area Hunting block. However, the northern block (i.e. Unit 6 and 7), are sandwiched by protected areas, Zambezi National Park to the eastern side, and to the western side are Chobe National Park, Botswana and Forestry Area to the south. Trophy hunting has been the sole land use option for Matetsi Safari Area for more than 37 years [67]. The main soil types on sites are lithosols and regosols occurring on Karoo volcanic and Kalahari geological formations, respectively [68]. The lithosols are dominated by *Colophospermum mopane* and *Terminalia species*. [69] whilst *Baikiaea plurijuga*, which occurs in association with *Pterocarpus angolensis* and *Guibortia coleosperma* dominate on the regosols [68]. Some of the common wildlife species in the study area include: herbivores (African buffalo, Burchell's zebra (*Equus quagga*), elephant, giraffe (*Giraffa camelopardalis*), greater kudu, impala (*Aepyceros melampus*), reedbuck (*Redunca arundinum*), sable antelope, warthog (*Phacochoerus aethiopicus*) and waterbuck (*Kobus ellipsiprymnus*), wildebeest (*Connochaetes taurinus*)) and carnivores (leopard, Lion, Hyena (*Crocuta crocuta*)).

Study species. The following wild herbivores were used as study species for this study: mega herbivores, Cape buffalo, elephant and medium-sized herbivores, greater kudu *and* sable. These four species were selected on the basis that they are amongst the most commonly hunted herbivores in southern Africa [13, 44, 71]. In addition, complete records on trophy size, quota allocations and utilization levels for the species were readily available for the period 2004–2015 at Matetsi Safari Area headquarters. The densities of these species in this area have been documented by Crosmary, Côté [51] as: Cape buffalo (1.4 individuals per km^2), African elephant (0.7 individuals per km^2), greater kudu (1.4 individuals per km^2) and sable (0.7 individuals per km^2) for the period 1995–2010. During this same period, the average harvest rates (i.e., number of individuals harvested per year divided by the total population estimate for that year [51]) was 1.7 ± 1.2% for the four species.

Data Collection

We collected long-term data for the six hunting units (i.e. Unit 1–6, see Table 1), from Matetsi Safari Area headquarters on; (1) trophy size and age at harvest data for the period 2004–2015,

Table 1. Characteristics of the seven management Units, (i.e., hunting status and estimated area), of Matetsi Safari Area, Zimbabwe.

Unit	Concession holder	Hunting status	Area (km^2)
1	*Private concession	Since 1973	398
2	[22]ZimP arks	Since 2013	475
3	Private concession	Since 1973	293
4	ZimParks	Since 2012	358
5	ZimParks	Since 2005	364
6	Private concession	Since 1973	592
7	Non-hunting concession	[#]Since 1973	447

Notes:

[22]ZimP arks stands for Zimbabwe Parks and Wildlife Management Authority.

*Private concession here refers to a medium to long-term lease given to a private out®tterby the Zimbabwe Parks and Wildlife Management Authority to conduct hunts in a Safari Area within the Parks and Wildlife Estate.

[#]A non-hunting private concession, mostly photographic tourism and ecotourism.

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and (2) annual quotas allocation and offtake levels for African elephant, Cape buffalo, greater kudu and sable for the period 2004–2015 for Unit 1–6 (S1 and S2 Files). All trophy size measurements for the four species were done by parks rangers following the Safari Club International (SCI) scoring system (http://www.scirecordbook.org/docs/methods). The associated data on age at harvest for the four wild herbivores was estimated by parks rangers using dentition and jaws [72–74] as part of their monitoring routine at Matetsi Safari Area. We considered the number of animals harvested off an allocated quota for each year as the offtake level. We further determined offtake growth rate per species, i.e., mean annual change in offtake size, which was calculated using the following formulae after Rist, Milner-Gulland [75]:

$$Log\ (h_{t+1}) - Log\ (h_t);\ \textit{where } h_t \textit{is the size of the total offtake in year } t.$$

We expected that the offtake rates would be analogous to population size and happens to be positively correlated [76], thus can be used as proxy or index for population estimates of harvested species. Accordingly, we used data of annual utilization of the quota allocation for each hunting unit for the period 2004–2015 except for the African elephant with an incomplete data set so we used data for 2005–2015.

Data analysis. Data on trophy size, age at harvest, quota size and offtake levels were tested for normality and equality of variance to using Shapiro Wilk test and Levene's test respectively to ascertain if the normality assumptions were being satisfied. All data on explanatory variables, i.e., trophy size, age at harvest, quota size and offtake level were found to conform to the normality assumptions. We grouped data on quota size and offtake levels into two time intervals based on the temporal economic status: (a) period of land reform, hyper inflation and policy changes, 2004–2009, and (b) period of political stability, deflation and economic recovery, 2009–2015, in Zimbabwe. All the data were analysed separately for each species.

First, we computed a simple linear regression to assess the temporal trends in the trophy size and age at harvest for the four herbivores. A linear mixed model (LMM) was used to analyze the variation in trophy size, age at harvest and offtake levels trends for the six hunting units for the period 2004–2015. The model parameters included the trophy size as the dependant variable whilst year and area were fixed variables and the age at harvest being the covariate. We further conducted a one-sample *t*-test to ascertain if the observed trophy size differed from the SCI minimum score for greater kudu (121 inches), sable (96 inches), Cape buffalo (101 inches) and African elephant (90 pounds) (http://www.scirecordbook.org). Second, we used Analysis of Variance (ANOVA) to assess the spatial variation in quota size and trophy size of the selected herbivores across the six hunting units. Significant effects were followed by pair-wise contrasts using sequential Bonferroni *post hoc* adjusted significance ($p < 0.05$). Third, to establish the effect of temporal economic status on harvesting patterns, we computed an independent *t*-test to compare the overall quota size and offtake levels for the two time periods, i.e., 2004–2008 and 2009–2015. We conducted all statistical analyses in IBM SPSS 20 software package (IMB, New York, USA) at 5% level of significance.

Results

Trophy Size and Age at Harvest Patterns

The total number of harvested individuals for the four selected wild herbivores was: Cape buffalo: 807, greater kudu: 565 and sable: 369, for the period 2004–2015 and African elephant: 258, for 2005–2015. During the period 2004–2015, the observed mean Cape buffalo trophy size (95.39 ± 8.66 inches) were below 101 inches, the SCI minimum score ($t_{(806)}$ = -18.41, $p < 0.001$). Similarly, the mean African elephant trophy size (81.40 ± 21.35 pounds) was below the SCI minimum score of 90 pounds for the period 2005–2015 ($t_{(257)}$ = -6.47,

$p < 0.001$). On the contrary, the mean trophy size for greater kudu (120.47 ± 7.54 inches) for the period 2004–2015 was similar to the SCI minimum score levels ($t_{(564)} = -1.68$, $p = 0.094$) of 121 inches. Of the four herbivores, only sable had a mean trophy size (98.89 ± 6.34 inches) higher than the SCI minimum score (96 inches) during the period 2004–2015 ($t_{(369)} = 8.76$, $p < 0.001$).

We found no significant trends in the trophy size of Cape buffalo, Greater kudu and sable ($p > 0.05$) for the period 2004–2015 (Fig 2A, 2C and 2D). However, the trophy size of African elephant declined significantly (β ± SE: -1.03 ± 0.45, t = -2.29, p = 0.023) for the period 2004–2015 (Fig 2B). The effect of area was not significant though its interaction with year and age at harvest was significant for the four species during the same period (Table 2). The temporal patterns on age at harvest for Cape buffalo, greater kudu and sable recorded for the period 2004–2015 were significant (Table 3). On the contrary, African elephant age at harvest did not change over time for the period 2005–2015 ($R^2 = 0.01$, β ± SE: -0.26 ± 0.17, t = -1.58, p = 0.115; Table 3, Fig 3).

There was a positive relationship between the age at harvest and the trophy size for all the harvested herbivore species for the period 2004–2015, i.e. cape buffalo ($R^2 = 0.15$, β(SE): 2.32 (0.20), t = 11.71, $p < 0.001$, Fig 4A), African elephant ($R^2 = 0.80$, β(SE): 2.45(0.08), t = 32.00, $p < 0.001$, Fig 4B), greater kudu ($R^2 = 0.33$, β(SE): 2.15(0.13), t = 16.80, $p < 0.001$, Fig 4C) and sable ($R^2 = 0.28$, β(SE): 1.41(0.12), t = 11.87, $p < 0.001$, Fig 4D).

For the period 2004–2015, only greater kudu mean age at harvest and trophy size did not vary with the hunting Unit, i.e., age at harvest ($F_{(5, 560)} = 1.35$, p = 0.385) and trophy size ($F_{(5, 560)} = 0.24$, p = 0.859) (Table 4). Bonferroni *post hoc* test however showed that the trophy size and age at harvest for individuals in Unit 6 were higher than the other Units except for Cape buffalo (Table 4).

Temporal and Spatial Harvesting Patterns

The annual quota allocated for Cape buffalo for the period 2004–2015 declined (β ± SE: -0.36 ± 0.14, t = -2.52, p = 0.014) which corresponded to a decline in the offtake levels (-0.55 ± 0.21, t –2.63, $p < 0.000$, Fig 5A) in Matetsi Safari Area. However, no significant changes were recorded in the allocated African elephant quota (-0.07 ± 0.05, t = -1.51, p = 0.137) whilst the offtake levels declined (-0.18 ± 0.08, t = -2.37, p = 0.021) for the period 2004–2015 (Fig 5B). Similarly, significant declines in the Greater kudu offtake (-0.67 ± 0.14, t = -4.91, $p < 0.000$) were recorded whereas the quota size did not change (-0.12 ± 0.09, t = -1.13, 0.224, Fig 5C) for the period 2004–2015. On the contrary, the period 2004–2015 in Matetsi Safari Area was characterized with an increase in the annual quota allocation for sable antelope (0.23 ± 0.04, t = 6.27, $p < 0.000$) whilst the fluctuations on the offtake levels over time were non-significant (-0.04 ± 0.10, t = -0.39, p = 0.697, Fig 5D).

Effect of Temporal Economic Status Harvesting Regime Patterns

The period 2004–2015 was characterized by significant changes in the offtake growth rate for Cape buffalo ($F_{(11, 60)} = 2.01$, p = 0.043). However, we recorded no difference in the quota size ($t_{(70)} = 1.47$, p = 0.145) of Cape buffalo between the period 2004 and 2008 and 2009–2015 as well as the offtake levels ($t_{(70)} = 1.71$, p = 0.091, Fig 6A). Similarly, there were no differences in the quota size ($t_{(70)} = 0.84$, p = 0.404) and offtake levels ($t_{(70)} = 1.25$, p = 0.217) for African elephant between the two contrasting periods, 2004–2008 and 2009–2015 (Fig 6B). During the period 2004–2015, the recorded elephant offtake growth rate did not change ($F_{(11, 60)} = 1.15$, p = 0.340). Although there were no differences in the quota levels for greater kudu between the period 2004–2008 and 2009–2015 ($t_{(70)} = 0.415$, p = 0.679), the offtake levels recorded for the

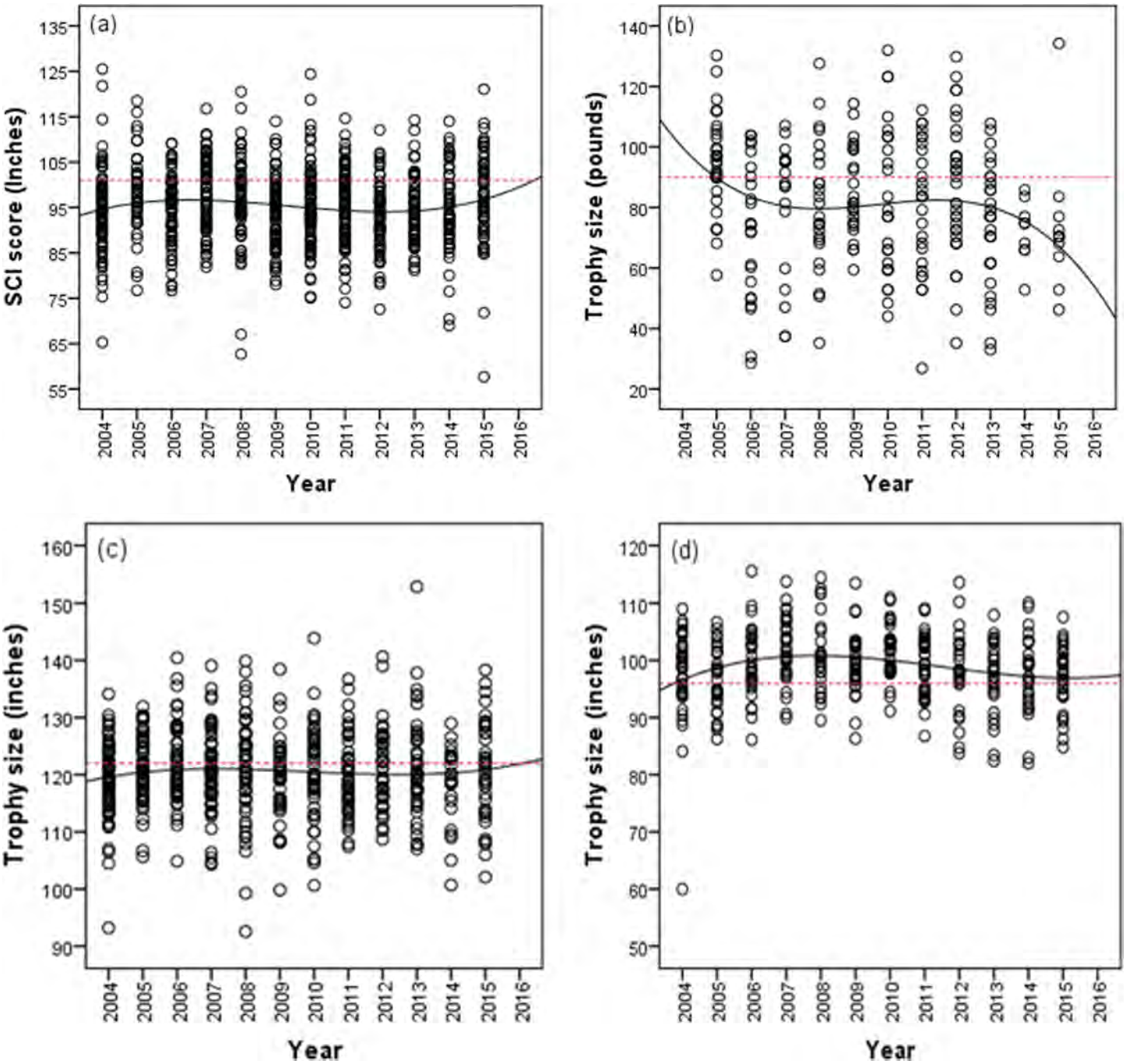

Fig 2. Temporal trend in mean trophy size for the harvested wild herbivores, (a) Cape buffalo, (b) African elephant, (c) greater kudu, and (d) sable for the period 2004±2015 in Matetsi Safari Area, Zimbabwe. *Notes: Solid circles indicate mean trophy size, solid line represents trend in trophy size, hollow circle indicate mean age at harvest, dotted broken line represent trend in age at harvest.*

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two periods differed significantly ($t_{(70)} = 4.05$, $p < 0.000$, Fig 6C). The quota size allocated for sable for the period 2004–2008 were lower than those for the 2009–2015 period ($t_{(70)} = -4.77$, $p < 0.000$). However, we did not record any difference in the offtake levels of sable between the same two periods ($t_{(70)} = 0.52$, $p = 0.602$, Fig 6D).

Table 2. Linear mixed model results showing the fixed effects of year, hunting area and age at harvest on the trophy size for the period 2004±2015 in Matetsi Safari Area, Zimbabwe.

Variable	df	F-statistic	p-value
Cape buffalo			
Year	11	5.33	0.000
Area	5	1.09	0.363
Age	1	111.08	0.000
Year * Area	53	2.02	0.000
Year * Area * Age	69	3.64	0.000
African elephant			
[22] Year	10	1.19	0.305
Area	5	1.21	0.306
Age	1	103.73	0.000
Year * Area	42	1.43	0.064
Year * Area * Age	57	1.98	0.001
Greater kudu			
Year	11	8.46	0.000
Area	5	2.00	0.078
Age	1	157.17	0.000
Year * Area	50	1.57	0.010
Year * Area * Age	66	2.60	0.000
Sable			
Year	11	5.84	0.000
Area	5	1.41	0.222
Age	1	97.67	0.000
Year * Area	51	1.67	0.006
Year * Area * Age	67	2.78	0.000

[22] Data for the year 2004 was missing; only data for the period 2005±2015 was presented

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Discussion

Trophy Size and Age at Harvest Patterns

We hypothesized that trophy size for the four wild herbivores would decline over time due to continued selective harvesting pressure in Matetsi Safari Area. We recorded significant temporal declines in the trophy size of African elephant for the period 2004–2015 whilst that of Cape buffalo, greater kudu and sable did not change in Matetsi Safari Area. Our findings corroborate those by Crosmary, Loveridge [55] who reported similar trends in greater kudu and sable trophy size for the period 1979–2005 in Matetsi Safari Area. However, temporal declines in trophy

Table 3. Model parameters (β ± SE) of temporal trends in the age at harvest for Cape buffalo, African elephant, greater kudu and sable for the period 2004±2015 in Matetsi Safari Area, Zimbabwe.

Species	β ± SE	t-value	p-value
Cape buffalo	0.03 ± 0.02	2.22	0.028
African elephant	-0.26 ± 0.17	-1.58	0.115
Greater kudu	0.16 ± 0.03	2.58	0.000
Sable	0.11 ± 0.04	3.51	< 0.001

Notes: Beta coef®cient(β) shows the slope of the trend line.

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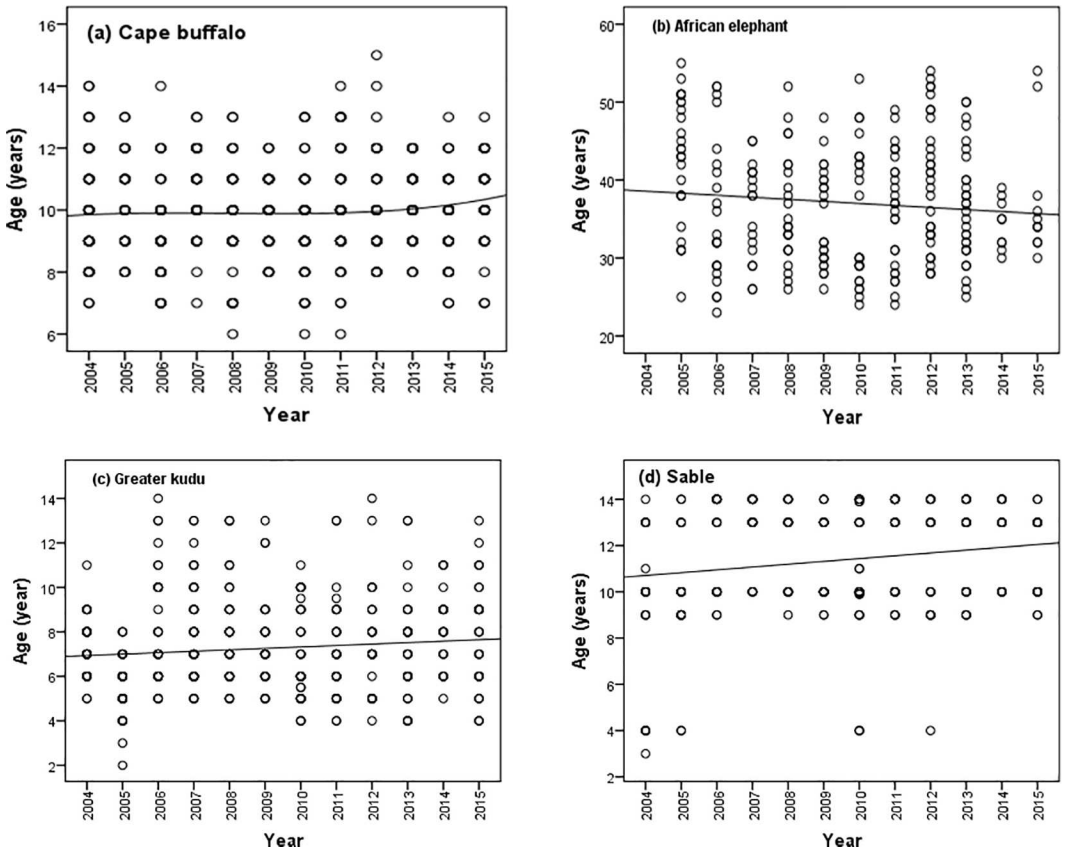

Fig 3. Temporal trend in mean age at harvest of the four selected wild herbivores, (a) Cape buffalo, (b) African elephant, (c) greater kudu, and (d) sable for the period 2004±2015 in Matetsi Safari Area, Zimbabwe.

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size of wild herbivores over time have been reported in South Africa [56, 57] and Tanzania [44]. Declines in trophy size over time due to selective harvesting could be attributed to phenotypic plasticity [77] that may result due to a decline in abundance of big tuskers and individuals with big horns or tusks as these are mostly selected by hunters. However, our study examines data for a fairly short period (i.e., 11 years) and as such we may not attribute the observed changes to a possible genetic effect of selective pressures that favour expression of small horns or tusks [78–80].

Our results showed that African elephants' age at harvest did not change over time though their trophy size declined. However, in this study for the period 2004–2015 we found sable age at harvest to have increased significantly contrary to the observations for the period 1979–2005 in the same area [55]. On the contrary, the trophy sizes for Cape buffalo and greater kudu have not changed for the period 2004–2015 in Matetsi Safari Area as reported in some countries, e.g., Tanzania [44] and South Africa [56, 57]. Most of the documented studies done on African elephant relates to illegal hunting effects on the tusk size instead of trophy hunting related issues and as such there were no comparative studies[81]. However, we note that most illegal hunting of elephants target the large tuskers and as such could have the same effect of trophy hunting.

Variations in trophy size and age at harvest could be as a result of several factors including (1) use of the fixed quota system that reduces the density or availability of old trophy individuals with the requisite trophy sizes, (2) lack of consistent age based trophy harvesting policy that

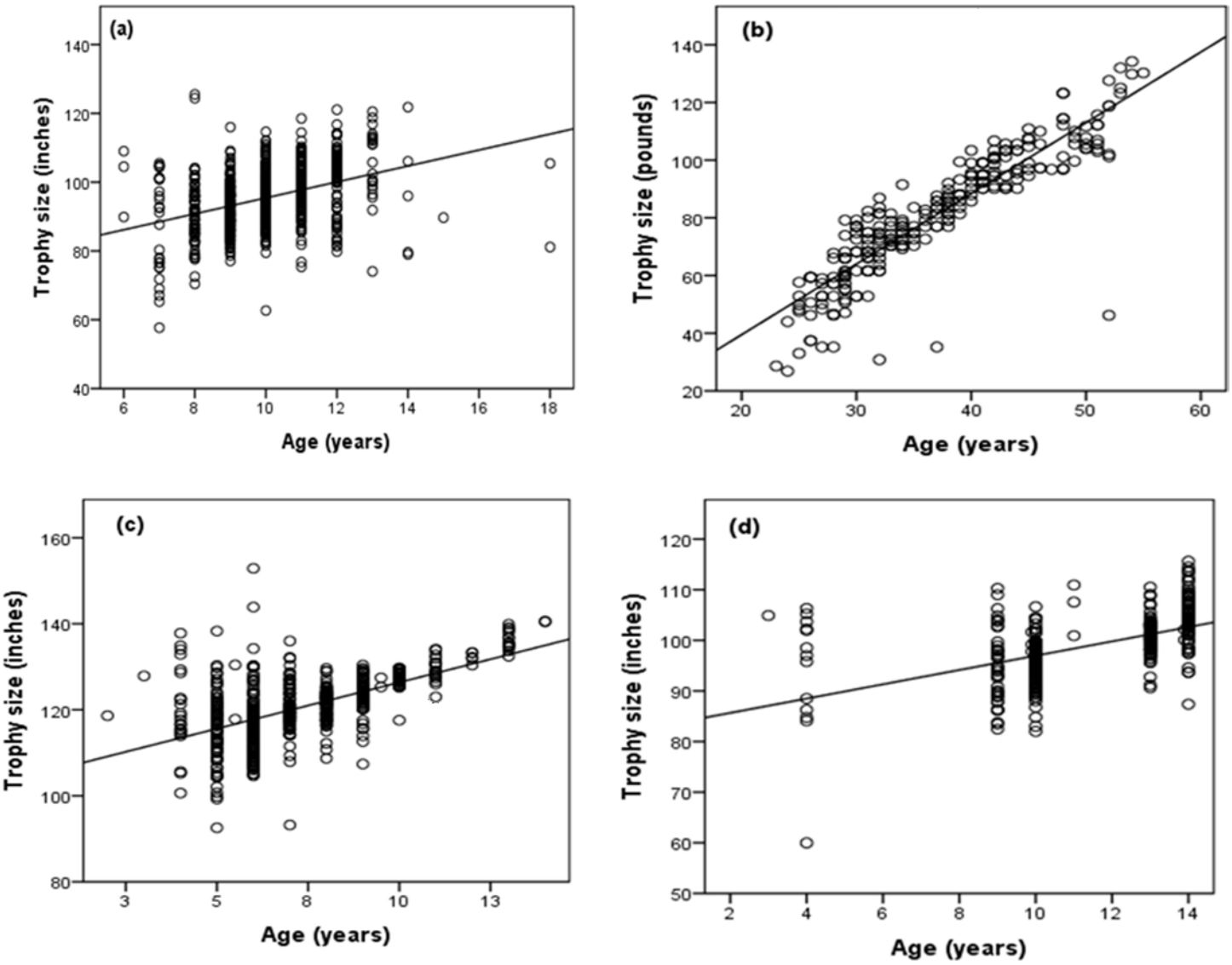

Fig 4. Relationship between the trophy size and age at harvest of the four selected wild herbivores, (a) Cape buffalo, (b) African elephant, (c) greater kudu, and (d) sable for the period 2004±2015 in Matetsi Safari Area, Zimbabwe.

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penalises the harvesting of young individuals [46, 62, 64], (3) habitat quality heterogeneity that affect horn development and growth of trophy species [82, 83], and (4) possible effects of illegal harvesting that may vary with area and degree of protection [81]. However, there is uncertainty on the contribution of illegal harvesting activities on the trophy size of these herbivores as in some instances some poachers tend to select horn size for their kills in the same manner as regulated trophy hunting [24]. Most illegal hunters (i.e., subsistence hunters) who target plains game, e.g., greater kudu and sable tend to kill indiscriminately and do not select for trophy size [26, 27]. However, there has been worrying trends on illegal activities in Hwange region where illegal trophy hunting targeting African elephants has resorted to indiscriminate poisoning of large herds [23, 28].

The recorded Cape buffalo trophy size in Matetsi Safari Area might not necessarily indicate trophy quality, but rather a possible limitation of the SCI scoring system [84]. Though a decline

Table 4. Estimated marginal means (±SD) of age at harvest and the trophy size for Cape buffalo, African elephant, greater kudu and sable observed for the period 2004±2015 for the six hunting units in Matetsi Safari Area, Zimbabwe.

Unit	Cape buffalo		African elephant		Greater kudu		Sable	
	Age (years)	Trophy size (inches)	Age (years)	Trophy size (pounds)	Age (years)	Trophy size (inches)	Age (years)	Trophy size (inches)
1	9.96 ± 1.35	95.94 ± 8.15	32.95 ± 6.42	68.53 ± 20.03	7.34 ± 2.11	121.27 ± 7.34	10.98 ± 2.44	98.46 ± 6.44
2	9.90 ± 1.36	93.56 ± 9.35	38.21 ± 7.27	86.35 ± 17.04	7.26 ± 1.99	119.56 ± 7.29	11.81 ± 2.39	99.90 ± 6.56
3	10.04 ± 1.53	97.39 ± 9.14	38.84 ± 7.16	85.81 ± 19.08	7.40 ± 1.89	120.13 ± 7.13	11.08 ± 2.18	99.11 ± 5.63
4	10.15 ± 1.51	95.77 ± 7.78	34.66 ± 7.53	75.30 ± 21.15	7.24 ± 2.27	120.23 ± 7.83	11.23 ± 2.63	97.08 ±7.99
5	10.25 ± 1.50	95.42 ± 8.86	36.15 ± 8.23	78.67 ± 22.16	7.06 ± 1.83	119.67 ± 8.02	11.00 ± 2.00	97.04 ± 5.50
6	9.61 ± 1.26	93.73 ± 8.26	41.37 ± 7.24	93.15 ± 19.33	7.14 ± 2.15	121.85 ± 7.70	12.33 ± 2.32	101.6 ± 4.93
F-statistic	3.18	3.758	7.24	8.22	1.35	0.242	3.27	4.35
p-value	0.008	0.002	< 0.001	< 0.001	0.385	0.859	0.007	0.001

Notes: Safari Club International minimum scores, Cape buffalo: 101 inches, African elephant: 90 pounds, greater kudu 121 inches and sable: 96 inches.

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in trophy size might suggest tendencies of unsustainable harvesting, a mature Cape buffalo bull has worn out horns that may produce low SCI tip to tip score [56, 84]. The SCI scoring system in Cape buffalo mostly results in high scores for green bulls or soft bossed bulls (immature bulls) which are still in their breeding prime thus undermining the best practices in Cape buffalo hunting where only mature bulls, past their breeding prime and has broomed horns [84, 85]. This maybe however different in the case of sable as there were declines in sable trophy size but with constant age at harvest in this study as also reported by Crosmary, Loveridge [55]. These variations may be due to habitat quality as a function of environmental heterogeneity that may influence resource allocation towards horn development and body growth over time [86–88]. Fluctuations in ecosystem productivity and habitat quality may result in cyclical trends in horn growth patterns observed in these species in Matetsi Safari Area as has been observed elsewhere [77].

Temporal and Spatial Harvesting Patterns

The basis for an increase in sable quota size in Matetsi Safari Area for the period 2004–2015 is problematic given reports on a possible decline of sable in its usual range within the Hwange Conservation Area [50]. Our findings cast doubt on the sustainability of how the quota setting processes in this area as there are indications that the quota allocations are not based on real scientific data. There seems to be over-reliance on questionable and subjective personal opinions in the quota setting process which in actual sense is supposed to be based on scientific evidence and ecological principles [46, 47, 89]. The trends observed in this study seem to reflect on the persistent use of the 'fixed quota' approach that tends to encourage harvesting of young or prime breeding individuals as an attempt by concessionaires to utilize the entire fixed portion of the quota regardless of its sustainability [46]. We argue that viability of trophy hunting in this area over time may be compromised unless solemn trophy hunting policy changes are adopted and implemented. Failure to utilize the allocated quota may reflect on (1) loss of hunting destination competiveness due to a waning preference by trophy hunting clients to patronise a hunting destination or species to hunt, (2) possible decline in the abundance of suitable trophy individuals thus affecting the hunting success of hunted species over time. It is argued that the viability of trophy hunting in this area over time may be compromised unless a review on the current trophy hunting policy is done to ensure that a dynamic framework is adopted and implemented commensurate with the global trends in modern day conservation.

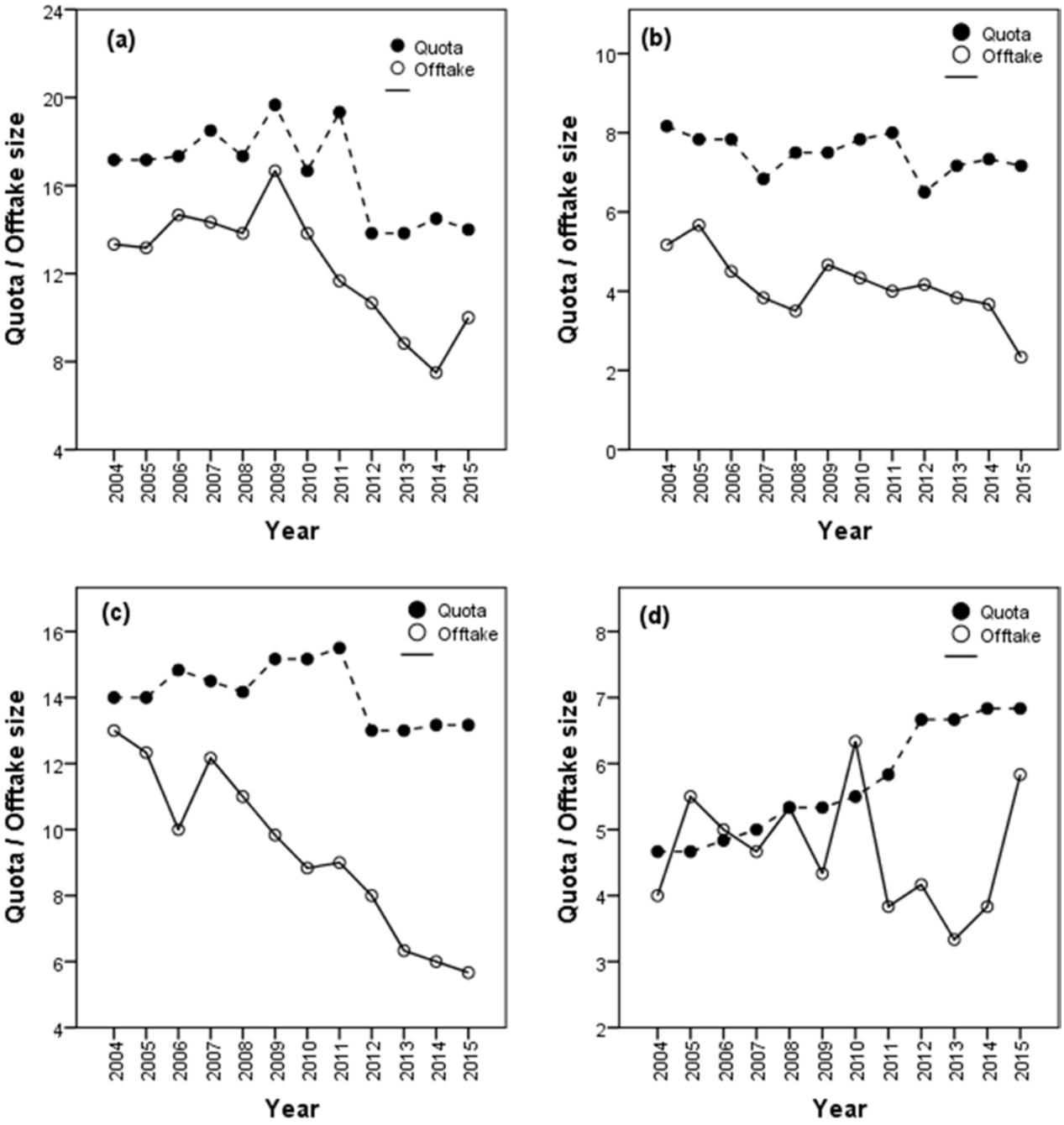

Fig 5. Temporal patterns in quota size and offtake level for (a) Cape buffalo, (b) African elephant, (c) greater kudu, and (d) sable for the period 2004±2015 in Matetsi Safari Area, Zimbabwe. Notes: solid line with solid circles show the quota size trend; dotted line with hollow circle show trend in offtake levels.

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In this study, we report a spatial variation in trophy size attributes (i.e., age at harvest and trophy size) where Unit 6 had higher values for each of the attributes compared to Unit 1–5 except for Cape buffalo. Similar spatial variation in trophy size has been observed in the different provinces of South Africa [57]. However, as opposed to von Brandis and Reilly [56], our study was done in a more connected conservation area in the same region, where trophy hunting in Matetsi Area tends to utilize a shared, one source population given that there are no

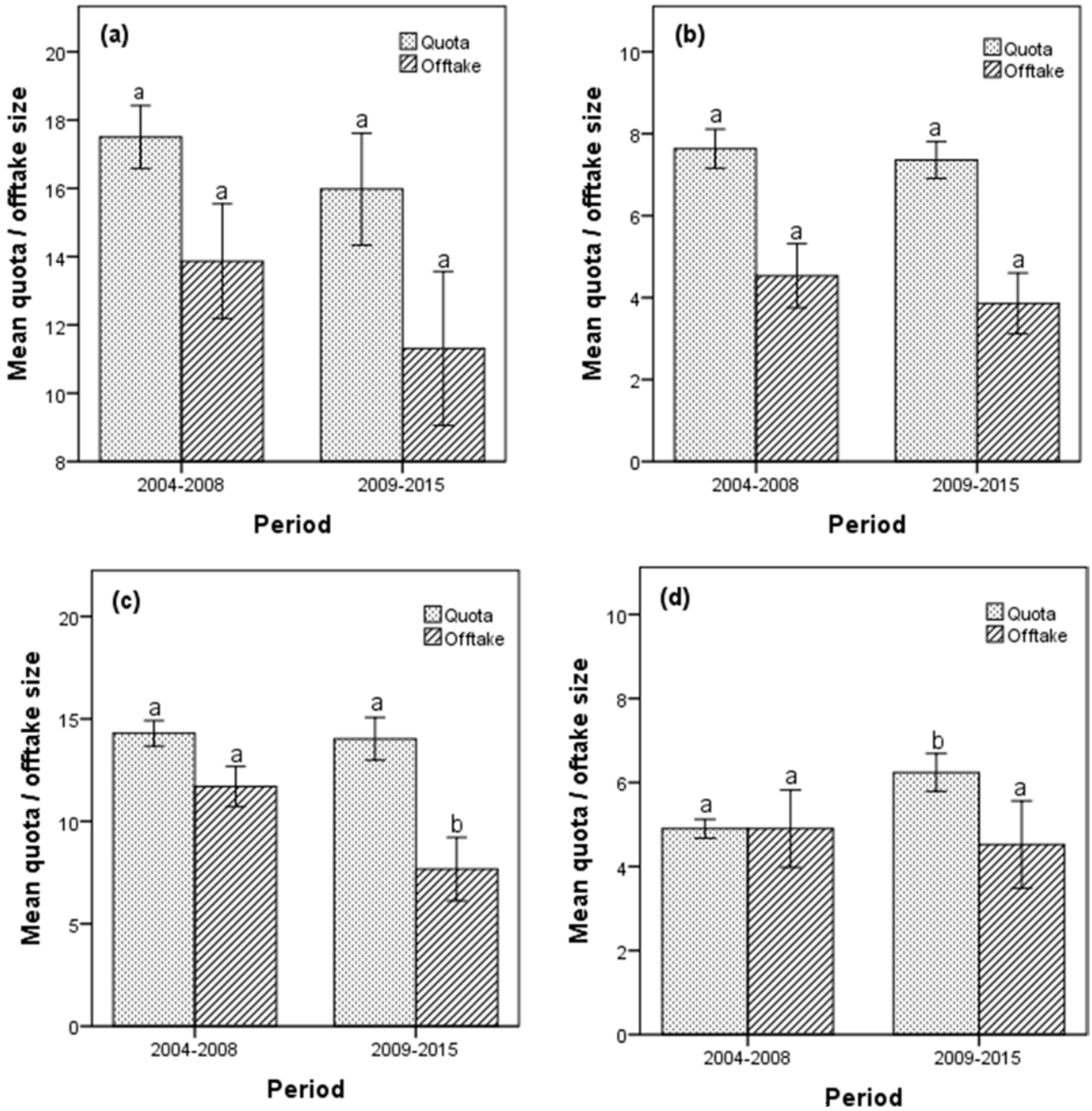

Fig 6. Observed mean quota and offtake size for (a) Cape buffalo, (b) African elephant, (c) greater kudu and, (d) sable antelope for the two periods, 2004±2009 and 2009±2015 in Matetsi Safari Area, Zimbabwe. Notes: error bars show the 95% confidence intervals; different superscript (a, b) in the same category denotes significant differences, $p < 0.05$.

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fences in this area. We argue that Unit 6 may be having different attributes compared to other Units because could be benefiting from a source and sink dynamics associated with the movement of the selected species from Zambezi National Park and Unit 7 where there is no hunting. Moreover, Unit 6 could be benefiting from individuals migrating from Chobe National Park within the KAZA TFCA network. On the contrary, in areas where hunting has been persistent, animals have been observed to evolve avoidance mechanisms to evade disturbances and

hunting [42, 90]. Our observations in this study affirm the significance of sink and source dynamics of wildlife species between hunting and non-hunting areas within the KAZA TFCA network.

The historical and current trophy hunting activities in Matetsi might have shaped the anti-predator strategies of these herbivores thereby avoiding the hunting areas in favour of the neighbouring National Parks within the KAZA TFCA where there is no hunting as was observed in Tanzania [91]. African elephant and Cape buffalo have a tendency of migrating within large landscapes in search of water and feed resources and this may result in the variation of trophy sizes observed in these units [92–94]. Within the KAZA TFCA landscape, we argue that though these harvesting rates may be considered low in relation to the population estimates of these species: they may not be sustainable from a trophy size perspective if age restrictions and trophy size limits were to be imposed.

Effect of Temporal Economic Status on Harvesting Patterns

In this study, there was no difference in the quota size allocation of Cape buffalo, African elephant, greater kudu and sable. Our results show that economic decline [95], may not affect the size of quota allocation levels in some hunting areas. However, it was evident that the economic decline also seriously incapacitated the Zimbabwe Parks and Wildlife Management Authority to do periodic surveys and monitoring programs which are critical in the quota setting process. Critical scientific data mostly obtained from aerial surveys in extensive and large protected areas were conducted in 2001 [96] and then recently in 2014 (*http://www.greatelephantcensus.com*). The quota sizes allocated during this period may have been based on previous experiences and individual opinions and not based on scientific principles as the MSY approach [39, 40].

Although Zimbabwe had an economic crisis, the Zimbabwe Parks and Wildlife Management Authority did not substantially increase the trophy quota size to increase revenue for the Parks and Wildlife Estate to cushion itself from the bad economy. Instead, the Zimbabwe Parks and Wildlife Management Authority adapted by re-assigning Unit 2 and 4 to fall under its hunting concessions in 2013 and 2012 respectively as was the case with Unit 5. Similar management interventions have been observed in Sengwa Wildlife Research Area, which also falls under the Zimbabwe Parks and Wildlife Management Authority, where hunting was also recently introduced. In an attempt to increase its revenue base, the Zimbabwe Parks and Wildlife Management Authority over and above its regulatory role as an Authority is also responsible for hunting in Unit 2, 4 and 5 of Matetsi Safari Area.

We hereby argue that to some extent, the Zimbabwe Parks and Wildlife Management Authority relied on trophy hunting as a possible source of income for its operations as has been argued elsewhere [5, 13, 62]. The Zimbabwe Parks and Wildlife Management Authority is confronted with the dual task of generating revenue and yet at the same time plays the regulatory role in trophy hunting and wildlife conservation issues in Zimbabwe. Self-regulating is always a problem as there is often questions on 'who will police the regulator' and may cause problems if the regulator looses focus and allows the economic benefits to take precedence over regulatory policy framework [97]. As Zimbabwe recovers from the economic doldrums, there is need to seriously consider re-looking at the model which is being used in Matetsi Safari Area Unit 2, 4, and 5. This would promote transparency and accountability in the sustainable use of wildlife resources through trophy hunting.

In this study, there was no difference in the offtake levels between 2004–2008 and 2009–2015 time periods confirming the suggestions by Leader-Williams and Hutton [15] that political instability or economic decline may not reduce the trophy hunters' patronage to a hunting

destination [95, 98]. However, with the restrictive policy on import bans of elephant trophy from Zimbabwe into USA [9] and other restrictions by some European countries [99, 100], it is clear that there will be a change in the proportion of hunters patronizing Zimbabwe for big game trophy hunting as the African elephant is one of the most sought for trophy species by most hunters. How this ban on the import of elephant trophies from Zimbabwe into USA as well as moratoriums by airlines in transporting such trophies would affect the trophy hunting in Zimbabwe and other southern African countries still need to be ascertained.

Conclusions and Recommendations

We concluded that: (1) the effect of trophy hunting on size of horn or tusk size and age at harvest is species specific as it does not necessarily affect trophy size and the age at harvest of harvested herbivores, (2) quota size allocation may not reflect the trophy size and offtake levels over the time, and (3) political and economic performance may not necessarily affect the harvesting regime patterns though external influences though moratoriums may possibly reduce the offtake levels over time. Accordingly, trophy hunting may not necessarily lead to irreversible trophy size over time but requires systematic monitoring and sound management interventions for sustainability [101].

We recommend that conservationists and protected area managers may consider to: (1) emphasise the need for ecological principles in the quota setting process and in some cases reduce or temporarily stopping hunting (i.e., introducing fallow or resting hunting years on a rotational basis) of some species, (2) create temporal and spatial refuges to facilitate 'trophy hunting rest' for some species promote reproductive to the desirable phenotypic sizes such as trophy size[102], (3) introduce and firmly implement age based harvesting policies across all trophy hunted species instead of lions only, through enforcing penalties for harvesting below threshold age individuals [46, 89], and (4) introduce a variable trophy fee pricing system based on trophy size where the fees are determined on the trophy size [71, 101]. These measures could then be replicated at micro-scale and national level in other areas where trophy hunting is being practiced to ensure sustainability.

Supporting Information

S1 File. Trophy size and age at harvest of selected herbivores in Matetsi Safari Area, Zimbabwe.
(XLSX)

S2 File. Harvesting patterns of selected herbivores in Matetsi Safari Area, Zimbabwe.
(XLSX)

Acknowledgments

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References

1. Prins H, Grootenhuis JG, Dolan TT, editors. Wildlife conservation by sustainable use. Netherlands: Springer Science & Business Media; 2012.
2. Child B, editor. Parks in Transition:" Biodiversity, Rural Development and the Bottom Line": Routledge; 2013.
3. Robinson JG. Ethical pluralism, pragmatism, and sustainability in conservation practice. Biological Conservation. 2011; 144(3):958±65.
4. Locke H, Dearden P. Rethinking protected area categories and the new paradigm. Environmental conservation. 2005; 32(1):1±10.
5. Lindsey PA, Alexander R, Frank LG, Mathieson A, Romanach SS. Potential of trophy hunting to create incentives for wildlife conservation in Africa where alternative wildlife-based land uses may not be viable. Animal Conservation. 2006; 9(3):283±91. doi: 10.1111/j.1469-1795.2006.00034.x
6. Naidoo R, Weaver LC, Diggle RW, Matongo G, Stuart-Hill G, Thouless C. Complementary benefits of tourism and hunting to communal conservancies in Namibia. Conservation Biology, In-press. 2016. doi: 10.1111/cobi.12643 PMID: 26537845
7. Lindsey PA, Frank LG, Alexander R, Mathieson A, Romanach SS. Trophy hunting and conservation in Africa: problems and one potential solution. Conservation Biology. 2007; 21(3):880±3. Epub 2007/05/29. doi: 10.1111/j.1523-1739.2006.00594.x PMID: 17531065.
8. Lindsey P, Balme G, Funston P, Henschel P, Hunter LT. Life after Cecil: Channelling global outrage into funding for conservation in Africa. Conservation Letters. 2016.
9. Di Minin E, Leader-Williams N, Bradshaw CJ. Banning Trophy Hunting Will Exacerbate Biodiversity Loss. Trends in Ecology & Evolution. 2016; 31(2):99±102.
10. Costanza R. Ecosystem health and ecological engineering. Ecological Engineering. 2012; 45:24±9.
11. Padilla E. Intergenerational equity and sustainability. Ecological Economics. 2002; 41(1):69±83.
12. Sharma A. Ecotourism in J&K: vehicle to sustainable development. Review of Research Journal. 2014; 3(8):ROR±741.
13. Lindsey P, Roulet P, Romanach S. Economic and conservation significance of the trophy hunting industry in sub-Saharan Africa. Biological Conservation. 2007; 134(4):455±69. doi: 10.1016/j.biocon.2006.09.005
14. Wilkie DS, Caprpenter JF. The potential role of safari hunting as a source of revenue for protected areas in the Congo Basin. Oryx. 1999; 33:339±45.

15. Leader-Williams N, Hutton JM, editors. Does extractive use provide opportunities to offset conflicts between people and wildlife? Cambridge: Cambridge University Press; 2005.
16. Gandiwa E, Sprangers S, van Bommel S, Heitkönig IM, Leeuwis C, Prins HH. Spill-over effect in media framing: Representations of wildlife conservation in Zimbabwean and international media, 1989±2010. Journal for Nature Conservation. 2014; 22(5):413±23.
17. Craigie ID, Baillie JE, Balmford A, Carbone C, Collen B, Green RE, et al. Large mammal population declines in Africa's protected areas. Biological Conservation. 2010; 143(9):2221±8.
18. Ogutu J, Owen-Smith N, Piepho HP, Said M. Continuing wildlife population declines and range contraction in the Mara region of Kenya during 1977±2009. Journal of Zoology. 2011; 285(2):99±109.
19. Whitman K, Starfield M, Quadling S, Packer C. Sustainable trophy hunting of African lions. Nature. 2004; 428:175±8. doi: 10.1038/nature02395 PMID: 14990967
20. Wroe S, Field J, Fullagar R, Jermin LS. Megafaunal extinction in the late Quaternary and the global overkill hypothesis. Alcheringa. 2004; 28(1):291±331.
21. Martin PS. African and Pleistocene overkill. Nature 1966; 212:339±42.
22. Gandiwa E. Top-down and bottom-up control of large herbivore populations: a review of natural and human-induced influences. Tropical Conservation Science. 2013; 6(4):493±505.
23. Muboko N, Gandiwa E, Muposhi VK, Tarakini T. Illegal hunting and protected areas: Tourist perceptions on wild animal poisoning in Hwange National Park, Zimbabwe. Tourism Management. 2016; 52:170±2.
24. Martin A, Caro T. Illegal hunting in the Katavi-Rukwa ecosystem. African Journal of Ecology. 2013; 51(1):172±5.
25. Marealle WN, Fossøy F, Holmern T, Stokke BG, Røskaft E. Does illegal hunting skew Serengeti wildlife sex ratios? Wildlife Biology. 2010; 16(4):419±29.
26. Gandiwa E, Zisadza-Gandiwa P, Mango L, Jakarasi J. Law enforcement staff perceptions of illegal hunting and wildlife conservation in the Gonarezhou National Park, southeast Zimbabwe. Tropical Ecology. 2014; 55:119±27.
27. Gandiwa E. Preliminary assessment of illegal hunting by communities adjacent to the northern Gonarezhou National Park, Zimbabwe. Tropical Conservation Science. 2011; 4(4):445±67.
28. Muboko N, Muposhi V, Tarakini T, Gandiwa E, Vengesayi S, Makuwe E. Cyanide poisoning and African elephant mortality in Hwange National Park, Zimbabwe: a preliminary assessment. Pachyderm. 2014;(55):92±4.
29. Whitman K, Starfield AM, Quadling HS, Packer C. Sustainable trophy hunting of African lions. Nature. 2004; 428(6979):175±8. doi: 10.1038/nature02395 PMID: 14990967
30. Wilson EO. Threats to biodiversity. Scientific American. 1989; 261(3):108±16.
31. Riggio J, Jacobson A, Dollar L, Bauer H, Becker M, Dickman A, et al. The size of savannah Africa: a lion's (*Panthera leo*) view. Biodiversity and Conservation. 2013; 22(1):17±35.
32. Seabrook L, McAlpine C, Baxter G, Rhodes J, Bradley A, Lunney D. Drought-driven change in wildlife distribution and numbers: a case study of koalas in south west Queensland. Wildlife Research. 2011; 38(6):509±24.
33. Dudley J, Criag G, Gibson D, Haynes G, Klimowicz J. Drought mortality of bush elephants in Hwange National Park, Zimbabwe. African Journal of Ecology. 2001; 39(2):187±94.
34. Chamaillé-Jammes S, Fritz H, Murindagomo F. Detecting climate changes of concern in highly variable environments: Quantile regressions reveal that droughts worsen in Hwange National Park, Zimbabwe. Journal of Arid Environments. 2007; 71(3):321±6.
35. Fryxell JM, Packer C, McCann K, Solberg EJ, Sñther B-E. Resource management cycles and the sustainability of harvested wildlife populations. Science. 2010; 328(5980):903±6. doi: 10.1126/science.1185802 PMID: 20466934
36. Morrill WI. The tourist safari hunter's role in conservation. Paper prepared for Safari Club International, Herndon, VA. 1993.
37. Cooley HS, Wielgus RB, Koehler GM, Robinson HS, Maletzke BT. Does hunting regulate cougar populations? A test of the compensatory mortality hypothesis. Ecology. 2009; 90(10):2913±21. PMID: 19886499
38. Songorwa AN. Community-based wildlife management (CWM) in Tanzania: Are the communities interested? World development. 1999; 27(12):2061±79.
39. Milner-Gulland EJ, Bunnefeld N, Proaktor G. The science of sustainable hunting. In: Dickson B, Hutton J, Adams B, editors. Recreational hunting, conservation and rural livelihoods. Oxford: John Wiley & Sons; 2009. p. 75±93.

40. Sutherland WJ. Sustainable exploitation: a review of principles and methods. Wildlife Biology. 2001; 7(3):131±40.
41. Crosmary WG, CÕtÊS, Fritz H. The assessment of the role of trophy hunting in wildlife conservation. Animal Conservation. 2015; 18(2):136±7.
42. Muposhi VK, Gandiwa E, Makuza SM, Bartels P. Trophy hunting and perceived risk in closed ecosystems: flight behaviour of three gregarious African ungulates in a semi-arid tropical savanna. Austral Ecology. In press.
43. Damm GR. Recreational trophy hunting: "What do we know and what should we do?". In: Baldus RD, Damm GR, Wollscheid K, editors. Best practices in sustainable hunting-A guide to bes practices from around the world. Hungary: International Council for Game and Wildlife Conservation; 2008. p. 5± 11.
44. Wilfred P. Trophy hunting and trophy size in Ugulla Game Reserve, Western Tanzania. Tanzanian Journal Science. 2012; 38(2):111±22.
45. Selier SAJ, Page BR, Vanak AT, Slotow R. Sustainability of elephant hunting across international borders in southern Africa: A case study of the greater Mapungubwe Transfrontier Conservation Area. The Journal of Wildlife Management. 2014; 78(1):122±32.
46. Lindsey PA, Balme GA, Funston P, Henschel P, Hunter L, Madzikanda H, et al. The trophy hunting of African lions: Scale, current management practices and factors undermining sustainability. Plos One. 2013; 8(9):e73808. doi: 10.1371/journal.pone.0073808 PMID: 24058491
47. Loveridge AJ, Reynolds JC, Milner-Gulland E. Does sport hunting benefit conservation. In: Macdonald D, Service K, editors. Key topics in conservation biology. UK: Blackwell Publishing Ltd; 2007. p. 222.
48. Burkhardt-Holm P, Giger W, GUttinger H, Ochsenbein U, Peter A, Scheurer K, et al. Where have all the fish gone? Environmental Science & Technology. 2005; 39(21):441A±7A.
49. Sarvala J, Langenberg V, Salonen K, Chitamwebwa D, Coulter G, Huttula T, et al. Fish catches from Lake Tanganyika mainly reflect changes in fishery practices, not climate. Verhandlungen Internationale Vereinigung fÜr theoretische und angewandte Limnologie. 2006; 29:1182±8.
50. Crosmary W-G, ChamaillÉ-Jammes S, Mtare G, Fritz H, CÕtÊSD. Decline of sable antelope in one of its key conservation areas: the greater Hwange ecosystem, Zimbabwe. African Journal of Ecology. 2015; 53(2):194±205. doi: 10.1111/aje.12207
51. Crosmary WG, CÕtÊSD, Fritz H. Does trophy hunting matter to long-term population trends in African herbivores of different dietary guilds? Animal Conservation. 2015; 18(2):117±30. doi: 10.1111/acv.12144
52. Nelson MP, Bruskotter JT, Vucetich JA, Chapron G. Emotions and the ethics of consequence in conservation decisions: Lessons from Cecil the Lion. Conservation Letters. 2016. doi: 10.1111/conl.12232
53. PÉrez JM, Serrano E, GonzÁlez-Candela M, LeÓn-Vizcaino L, BarberÁGG, SimÓn MAd, et al. Reduced horn size in two wild trophy-hunted species of Caprinae. Wildlife Biology. 2011; 17(1):102± 12. doi: 10.2981/09-102
54. Chomba C, Senzota R, Chabwela H, Nyirenda V. Lion Hunting and Trophy Quality Records in Zambia for the Period 1967±2000: Will the Trends in Trophy Size Drop as Lion Population Declines? Open Journal of Ecology. 2014; 4(04):182±95.
55. Crosmary WG, Loveridge AJ, Ndaimani H, Lebel S, Booth V, CÕtÊSD, et al. Trophy hunting in Africa: long-term trends in antelope horn size. Animal Conservation. 2013; 16(6):648±60. doi: 10.1111/acv.12043
56. von Brandis RG, Reilly BK. A temporal analysis of trophy quality in South Africa: has trophy quality changed over time. South African Journal of Wildlife Research. 2007; 37(2):153±8.
57. von Brandis RG, Reilly BK. Spatial variation in trophy quality of popular hunted ungulate species in South Africa. South African Journal of Wildlife Research. 2008; 38(1):17±21. doi: 10.3957/0379-4369-38.1.17
58. Hedrick PW. Rapid decrease in horn size of bighorn sheep: environmental decline, inbreeding depression, or evolutionary response to trophy hunting? Journal of Heredity. 2011:esr082.
59. Barnett R, Patterson C. Sport Hunting in the Southern African Development Community (SADC) Region: An overview. Johannesburg, South Africa: TRAFFIC East/Southern Africa; 2005.
60. Buckley R, Mossaz A. Hunting tourism and animal conservation. Animal Conservation. 2015; 18 (2):133±5.
61. Lindsey P, Alexander R, Balme G, Midlane N, Craig J. Possible Relationships between the South African Captive-Bred Lion Hunting Industry and the Hunting and Conservation of Lions Elsewhere in Africa. South African Journal of Wildlife Research. 2012; 42(1):11±22. doi: 10.3957/056.042.0103

62. Lindsey PA, Balme GA, Booth VR, Midlane N. The significance of African lions for the financial viability of trophy hunting and the maintenance of wild land. PloS one. 2012; 7(1):e29332. doi: 10.1371/journal.pone.0029332 PMID: 22247772

63. Balme GA, Hunter LT, Goodman P, Ferguson H, Craigie J, Slotow R. An adaptive management approach to trophy hunting of leopards Panthera pardus: a case study from KwaZulu-Natal, South Africa. Biology and conservation of wild felids. Oxford, United Kingdom: Oxford University Press; 2010. p. 341±52.

64. Balme GA, Hunter L, Braczkowski AR. Applicability of age-based hunting regulations for African leopards. PloS One. 2012; 7(4):e35209. doi: 10.1371/journal.pone.0035209 PMID: 22493739

65. de Garine-Wichatitsky M, Miguel E, Mukamuri B, Garine-Wichatitsky E, Wencelius J, Pfukenyi DM, et al. Coexisting with wildlife in transfrontier conservation areas in Zimbabwe: Cattle owners' awareness of disease risks and perceptions of the role played by wildlife. Comparative Immunology, Microbiology and Infectious Diseases. 2013; 36(3):321±32. doi: 10.1016/j.cimid.2012.10.007 PMID: 23219685

66. Cumming D. Constraints to conservation and development success at the wildlife±livestock±human interface in Southern African transfrontier conservation areas: a preliminary review. Report to the Wildlife Conservation Society (WCS). 2011. Available: http://www.wcs.ahead.org/kaza/constraints_to_cons_&_dev_success_082311.pdf. Accessed 3 March 2013.

67. Ndaimani H, Murwira A, Kativu S. Comparing terrain and vegetation- based visibility for explaining sable flight behaviour in a Southern African savanna. Geocarto International. 2013; 28(2):130±43. doi: 10.1080/10106049.2012.677481

68. Chenje M, Sola L, Pateczny D, editors. The state of Zimbabwe's environment. Harare, Zimbabwe: Ministry of Mines, Environment and Tourism; 1998.

69. Chamaille-Jammes S, Fritz H, Murindagomo F. Spatial patterns of the NDVI±rainfall relationship at the seasonal and interannual time scales in an African savanna. International Journal of Remote Sensing. 2006; 27(23):5185±200.

70. Muposhi VK, Gandiwa E, Chemura A, Bartels P, Makuza SM, Madiri TH. Habitat heterogeneity variably influences habitat selection by wild berbivores in a semi-arid tropical savanna ecosystem. PLoS ONE, 11(9): e0163084. 2016. doi: 10.1371/journal.pone.0163084 PMID: 27680673

71. Johnson PJ, Kansky R, Loveridge AJ, Macdonald DW. Size, rarity and charisma: valuing African wildlife trophies. PloS one. 2010; 5(9):e12866. doi: 10.1371/journal.pone.0012866 PMID: 20877564

72. Laws R. Age criteria for the African elephant. African Journal of Ecology. 1966; 4(1):1±37.

73. Grimsdell J. Age determination of the African buffalo, Syncerus caffer Sparrman. African Journal of Ecology. 1973; 11(1):31±53.

74. Spinage C. A review of the age determination of mammals by means of teeth, with especial reference to Africa. African Journal of Ecology. 1973; 11(2):165±87.

75. Rist J, Milner-Gulland EJ, Cowlishaw G, Rowcliffe M. Hunter Reporting of Catch Per Unit Effort as a Monitoring Tool in a Bushmeat-Harvesting System. Conservation Biology. 2010; 24(2):489±99. doi: 10.1111/j.1523-1739.2010.01470.x PMID: 20491849

76. Milner JM, Bonenfant C, Mysterud A, Gaillard JM, Csanyi S, Stenseth NC. Temporal and spatial development of red deer harvesting in Europe: biological and cultural factors. Journal of Applied Ecology. 2006; 43(4):721±34.

77. Loehr J, Carey J, O'HARA R, Hik D. The role of phenotypic plasticity in responses of hunted thinhorn sheep ram horn growth to changing climate conditions. Journal of Evolutionary Biology. 2010; 23 (4):783±90. doi: 10.1111/j.1420-9101.2010.01948.x PMID: 20163506

78. Fenberg PB, Kaustuv R. Ecological and evolutionary consequences of size-selective harvesting: how much do we know? Molecular ecology. 2008; 17:209±20. doi: 10.1111/j.1365-294X.2007.03522.x PMID: 17868288

79. Mysterud A. Selective harvesting of large mammals: how often does it result in directional selection? Journal of Applied Ecology. 2011; 48(4):827±34. doi: 10.1111/j.1365-2664.2011.02006.x

80. Coltman DW, O'Donoghue P, Jorgenson JT, Hogg JT, Strobeck C, Festa-Bianchet M. Undesirable evolutionary consequences of trophy hunting. Nature. 2003; 426:655±7.

81. Chiyo PI, Obanda V, Korir DK. Illegal tusk harvest and the decline of tusk size in the African elephant. Ecology and Evolution. 2015; 5(22):5216±29.

82. VanpÊAC, Morellet N, Kjellander P, Goulard M, Liberg O, Hewison A. Access to mates in a territorial ungulate is determined by the size of a male's territory, but not by its habitat quality. Journal of Animal Ecology. 2009; 78(1):42±51. doi: 10.1111/j.1365-2656.2008.01467.x PMID: 18752539

83. Landete-Castillejos T, Estevez J, MartÂnez A, Ceacero F, Garcia A, Gallego L. Does chemical composition of antler bone reflect the physiological effort made to grow it? Bone. 2007; 40(4):1095±102. doi: 10.1016/j.bone.2006.11.022 PMID: 17239669

84. Gandy SE, Reilly BK. Alternative trophy measuring techniques for African buffalo. Koedoe. 2004; 47 (1):119±24.

85. Taylor W. The Influence of trophy measurement in Cape Buffalo. African Indaba. 2007; 5(3).

86. Ramanzin M, Sturaro E. Habitat quality influences relative antler size and hunters' selectivity in roe deer. European Journal of Wildlife Ressearch. 2013; 60(1):1±10. doi: 10.1007/s10344-013-0744-5

87. Festa-Bianchet M, Coltman DW, Turelli L., Jorgenson TT. Relative allocation to horn and body growth in bighorn rams varies with resource availability. Behavioral Ecology. 2004; 15:305±12.

88. Schmidt JI, Ver Hoef JM, Terry Bowyer R. Antler size of Alaskan moose Alces alces gigas: effects of population density, hunter harvest and use of guides. Wildlife Biology. 2007; 13(1):53±65.

89. Loveridge AJ, Searle AW, Murindagomo F., Macdonald DW. The impact of sport-hunting on the population dynamics of an African lion population in a protected area. Biological Conservation 2007; 134:548±58. doi: 10.1016/j.biocon.2006.09.010

90. Malo JE, Acebes P, Traba J. Measuring ungulate tolerance to human with flight distance: a reliable visitor management tool? Biodiversity and Conservation. 2011; 20(14):3477±88.

91. Nyahongo JW. Flight initiation distances of five herbivores to approaches by vehicles in the Serengeti National Park, Tanzania. African Journal of Ecology. 2008; 46(2):227±9.

92. Douglas-Hamilton I, Krink T, Vollrath F. Movements and corridors of African elephants in relation to protected areas. Naturwissenschaften. 2005; 92(4):158±63. doi: 10.1007/s00114-004-0606-9 PMID: 15770465

93. Georgiadis N, Bischof L, Templeton A, Patton J, Karesh W, Western D. Structure and history of African elephant populations: I. Eastern and southern Africa. Journal of Heredity. 1994; 85(2):100±4. PMID: 7910176

94. Naidoo R, Du Preez P, Stuart-Hill G, Jago M, Wegmann M. Home on the range: factors explaining partial migration of African buffalo in a tropical environment. PLoS One. 2012; 7(5):e36527. doi: 10.1371/journal.pone.0036527 PMID: 22570722

95. Gandiwa E, Heitkönig IMA, Lokhorst AM, Prins HHT, Leeuwis C. Illegal hunting and law enforcement during a period of economic decline in Zimbabwe: A case study of northern Gonarezhou National Park and adjacent areas. Journal for Nature Conservation. 2013; 21: 133±42.

96. Dunham KM. Aerial census of elephants and other large herbivores in the north-west Matebeleland, Zimbabwe: 2001. Occassional Paper 6 ed. Harare: WWF-SARPO; 2002. p. 77.

97. Short JL, Toffel MW. Coerced confessions: Self-policing in the shadow of the regulator. Journal of Law, Economics, and Organization. 2008; 24(1):45±71.

98. Lindsey PA, Romanach S, Tambling CJ, Chartier K, Groom R. Ecological and financial impacts of illegal bushmeat trade in Zimbabwe. Oryx. 2011; 45(01):96±111.

99. Knapp A. A review of the European Union's import policies for hunting trophies. A TRAFFIC Europe Report for the European Commission. Brussels, Belgium. 2007. p. 81.

100. UNEP-WCMC. Assessing potential impacts of trade in trophies imported for hunting purposes to the EU-27 on conservation status of Annex B species. Part 2: Discussion and case studies. UNEP-WCMC. Cambridge: UK; 2013. p. 34.

101. Rivrud IM, Sonkoly K, Lehoczki R, CsÂnyi S, Storvik GO, Mysterud A, et al. Hunter selection and long-term trend (1881±2008) of red deer trophy sizes in Hungary. Journal of Applied Ecology. 2013; 50(1):168±80. doi: 10.1111/1365-2664.12004.

102. Hengeveld PE, Festa-Bianchet M. Harvest regulations and artificial selection on horn size in male bighorn sheep. The Journal of Wildlife Management. 2011; 75(1):189±97.

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Date: Wednesday, November 02, 2016 12:57:55 PM
Attachments: Muposhi et al. 2016 Trophy hunting and sustainability_PLoS one.PDF

Hi Tim,

The attached may interest.

All best,

Kate

--
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Ref: G/21

08 November 2016

Chief Branch of Permits
U.S. Fish and Wildlife Service
Division of Management Authority
Washington D.C 20240
USA
Attention: *Mr Timothy J. Van Norman*

ZIMBABWE'S ELEPHANT MANAGEMENT PLAN PRIORITIES (2015 - 2020)

We would like to thank you for granting us an opportunity to meet at the recent CITES CoP17 and we hope that you travelled safely to your home country.

Further to previous correspondence regarding prioritising implementation of our Elephant Management Plan and to our discussion during CITES COP 17, which meeting also included Hon Minister and Mr B Arroyo and Mr D Arshe, we hereby wish to submit our supplementary Elephant Management Plan.

This plan prioritises activities identified in the National Elephant Management Plan to fully utilise the budget allocated to elephant management in Zimbabwe. These priorities listed herewith constitute those activities and actions that we believe, given the limited budgets, we are able to curtail poaching and illegal trade of elephants and ivory.

We hope that the information provided will suffice in responding to your enquiry. We welcome your commitment to lift the suspension on imports of hunted trophies of elephants from Zimbabwe. For any further clarifications do not hesitate to contact the undersigned.

MIN. OF ENVIRONMENT, WATER & CLIMATE
0 8 NOV 2016
11th Floor, Kaguvi Bld, Harare
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PERM. SECRETARY

P. Mupazviriho
SECRETARY FOR ENVIRONMENT, WATER AND CLIMATE

THE ZIMBABWE NATIONAL ELEPHANT SUPPLEMENTARY MANAGEMENT PLAN (2015 – 2020)

Introduction and Background

The supplementary Elephant Management Plan (EMP) is a supplement that has been developed from the Zimbabwe National Elephant Management Plan (2015 – 2020). This supplementary plan looks at all the deliverables from this plan and highlights the priorities for the successful implementation of the plan. The supplement also highlights the progress that has been made towards the successful implementation of the EMP from the time it was adopted in 2015.

It was noted that the EMP was an ambitious plan and it required the cooperation of all internal and external stakeholders in order to achieve its obligations. The urgency that was placed upon well-equipped men on the ground to combat illegal killing of elephants, improved monitoring and research, and the provision of incentives to maintain and if possible increase the elephant range, requires huge resources.

This supplementary EMP recognises that the implementation of the Zimbabwe Elephant Management Plan (2015 – 2020) requires adequate and sustainable funding and provision of other resources to effectively protect the elephant and to curb illegal trade in elephant products. Thus there is need to fully resource all the components of this plan in order to successfully manage Zimbabwe's elephant population.

Resources are being mobilized from within ZPWMA, from its own business ventures, by the private sector, and by intergovernmental and nongovernmental organizations. Partnerships between ZPWMA and other stakeholders are also in place to secure some of the resources for elephant conservation. There is a need for the Government to provide additional support to the conservation of elephants given the present poaching crisis affecting the species continentally.

This supplementary elephant management plan recognises the work and the resource allocation that has made towards full implementation of the plan, and provides detail of the milestones achieved and work covered. It also prioritises the major areas of the EMP into immediate areas that are meant to arrest poaching and illegal trade in elephants. However, it details the impressive extent to which most of the structures have been set up and some of the innovations that have been put in place to attempt to bridge the funding gap.

Resources Available

An audit has been conducted of the implementation of the EMP to date and resources have thus far been channelled into the following areas.

Table 1: Financial resources deployed up to August 2016

BUDGET (USD)					
Item	**North West Matabeleland**	**Sebungwe**	**Mid Zambezi Valley**	**South East Lowveld**	**Total Current**
Law Enforcement	158,948	113,920	244,650	318,000	835,518
Monitoring	31,000	-	8,155	15,500	54,655

Investigations	-	-	16,500	8,000	24,500
Training	12,548	-	30,124	23,000	65,672
Community Relations	4,854	-	9,770	15,000	29,624
Total (USD)	205,350	113,920	309,199	379,500	1,009,969

Table 2: Other Non-Financial Resources

Item	**North West Matabeleland**	**Sebungwe**	**Mid Zambezi Valley**	**South East Lowveld**	**Total Current**
Summary Stats					
Area (Km^2)	24,989	15,529	16,014	8,835	**65,367**
Rangers	212	90	160	77	
Rangers/Km^2	0,01	0,01	0,01	0,01	**0,01**
Total Staff	271	123	181	142	**717**
NGO/Private Sector Anti-Poaching	Painted Dog Conservation, Bhejane Trust	Matusadonha Anti Poaching P	Zambezi Society, The Tashinga Initiative	-	
Vehicles					
4 WD Parks	12	4	8	10	**34**
4 WD Other	-	2	-	-	**2**
2 WD Parks	4	-	-	-	**4**
2 WD Other	1	-	-	-	**1**
5 Ton Trucks	1	6	2	2	**11**
Tractors	9	3	3	5	**20**
Graders	5	-	2	1	**8**
Boats	2	3	1	2	**8**
Motor Cycles	-	4	-	4	**8**
Micro light			1		**1**
2 Seater Helicopter	1		1		**2**
4 Seater Helicopter	1				**1**
Communications					
Repeater station	7	2	2	3	**14**
Mobile handsets	118	53	82	60	**313**
GPS	46	-	36	60	**142**
Operating Database	10	-	1	1	**12**

Progress towards Implementation of the Elephant Management Plan (2015 – 2020)

Several milestones stated in the Elephant Management Plan have already been achieved which include the following:

a. Appointment of the Elephant Manager as in section 4.5 of the Zimbabwe Elephant Management Plan (2015 – 2020).

b. Getting a basic agreement of implementation in the 4 relevant regions.
c. Some work towards Law Enforcement, Monitoring, Investigations, Training and Community Relations. As of August 2016, more than USD 1million had been spent on these activities. Table 1 above. More detailed breakdown of how this was spent see Annexes 1.0, 2.0, 3.0 and 4.0.

Constraints and Challenges

One of the major challenges regarding implementation of the EMP is with regards to the adoption of stricter domestic measures by the United States of America. This has had the net effect of further reducing the revenue from hunting into the Authority, which therefore affects the budget allocated to resource protection, in particular the elephant in this case.

One of the key impediments towards the full and comprehensive implementation of the Elephant Management Plan is the limited resources. However, Zimbabwe is at an advanced stage in the development of resource mobilisation strategies. These strategies include partnering with both local and international institutions in resourcing and financing aspects of the programme.

Priorities

Due to the fact that Zimbabwe is experiencing some funding constraints with respect to the full implementation of the Elephant Management Plan, which means therefore that it will not be possible to fully implement every aspect of the plan at the same time, we have developed a set of priorities (all drawn from the plan), that we feel are implementable and enable the work of conservation to proceed smoothly.

1. Law Enforcement
   Law enforcement continues to be one of the most critical aspects of this strategy. From the perspective of the EMP, it has also to date been allocated the biggest budget (Table 1). While strategic gaps still exist with respect to the law enforcement capacity (the numbers of rangers on the ground are still in need of improving to effectively cover that Parks Estate, more patrol kits and equipment are still required to improve enforcement capacity). In order to effectively combat poaching and illegal trade the Law enforcement capabilities are top priority.
2. Monitoring
   Biological monitoring and management, with respect to the priorities for this plan would come in as a second priority. This enables monitoring programmes and research to support science based adaptive management of elephants in this action plan. The resource allocation to this activity needs to be dramatically improved, although innovations have had to be put in place to manage that insufficient resource allocation. Rangers on patrol also carry out significant monitoring activities which feed into the biological monitoring and management of the elephants.
3. Investigations/Intelligence
   The investigations capacity (together with training) are critical components of this action plan. To date of the available resources, allocations to investigations have been minimal. Innovations have also been developed in this area, for support from various private players, institutions and state institutions in the investigative processes.

Assistance with areas like crime scene attendance have been improved through the assistance of the Zimbabwe Republic Police involvement.

4. Appointment of Elephant Manager

   While the appointment of the National Elephant Manager has been concluded (April 2016) to enhance implementation, monitoring and evaluation of the Action Plan, funding constraints still exists. Some funding for the activities of the Elephant Manager have been unlocked through cooperation with stakeholders in the monitoring and evaluation activities of the office. This includes setting up of the Regional Elephant Management Committees and funding their activities.

ANNEX 1.0 Northwest Matabeleland Action Plan – *Status and progress report Aug - 2016*

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants documented	- Collaborations with other stakeholders (e.g. WWF, Government of the People's republic of China) in law enforcement efforts was done were equipment such as camping tents, GPSs, vehicles, road maintenance equipment (graders, tipper trucks, lorries) were sourced - Training was done in Spatial Monitoring and Reporting Tool (SMART). 4 Officers and 40 Ranger were trained - New recruitment and recruitment drive for rangers initiated - Database on elephant illegally killed is maintained and updated
1.2 Informer network, investigation and intelligence system strengthened / established and operating	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	- 5 cases based on information from intelligence were attended to. No recruitment of investigators and training done 6 calls to whistle blowing systems resulted in effective follow up 10 incursions reported on by local communities and reacted to by ZPWMA/ZRP under the joint operations initiative

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines in collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	- The SOP for Joint Operations with ZRP and other law enforcement agencies not available - 100 % proportion of arrests leading to prosecution - 95 % proportion of successful prosecutions
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	- Database is available at station levels feeding into the Regional and National levels. - Reporting protocols in place
1.5 Joint law enforcement operations within the NWM region	- Conduct joint operations - Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing)	- Number of joint operations leading to arrests and successful prosecutions - Number of meetings held per year - Number of successes from shared wildlife crime information	5 joint operations leading to arrests and successful prosecution were done 16 meetings have been done to date Have been successful on all shared information wildlife crime
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the NWM	Enhanced data collection and collation of returns for quota setting implemented
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the NWM that are settled has not increased, or has declined, from 2015 levels	There are no increases or decreases in settlements within protected areas. It should be noted however, that there is illegal grazing in Hwange National Park from the communities in the Tsholotsho area.

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	There are no agreed SOP for cross border law enforcement operations 5 cases of joint operations leading to arrests and successful prosecution

9.4.2. Biological Monitoring and Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations, forest areas, and RDCs in NWM - Introduce ranger-based monitoring across all stations in NWM - Analyze the data and report on trends - Annual water hole count continued	- Information on trends in elephant numbers, structure and mortality analysed and available	Analysis data is based on the national survey of elephants and large herbivore done in 2014, road count data and from waterhole counts which are done yearly.
2.2 Impacts of elephants on selected habitats, selected indicator plant and animal species, and water use and supplies monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands - Measure and assess water use and its sustainability	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported Sustainability of water use completed	Permanent vegetation plots are monitored regularly for the effects of elephants and the data analysed. The effect of elephants on indicator plants species is monitored. Research is ongoing on their effects on major herbivores. A study on the effects of drawing on underground water to water elephants is about to be initiated
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, and HWC in the region - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research reports completed - PCP consultation results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	A study looking at changes in vegetation has recently been completed in collaboration with WWF, data is yet to be analysed Adaptive management is exercised through adopting results from research work within the park

9.4.2. Biological Monitoring and Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	More boreholes have been drilled to ensure there is enough water for other animals and to relieve pressure on some areas.
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Age, sex and tusk sizes for all elephant killed recorded Elephant trophy quality is maintained or improved in relation to the stipulated desired age and trophy size.	A database with information on elephants killed is maintained Trophy quality is maintained through the policing of the hunting industry and record keeping and adaptive management of quotas.
2.6 Elephant range defined and managed to maintain (and/or recover) habitats and elephant populations, and connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	13% of land in Zimbabwe is maintained for wildlife Corridors are being resuscitated such as the Hwange Sanyati Biological corridor which is being maintained in collaboration with WWF.
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Done at National level. However through our normal reporting system we feed in with the related information

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in NWM adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	HSBS, KAZA, CAMPFIRE, save Australia are some of the joint venture operations adopted and being implemented in NWM
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	There is need to review the benefit-sharing frameworks of CAMPFIRE and other schemes. There is little involvement of traditional leadership in revenue sharing There are no audits and accountability is minimum for revenue from wildlife
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	There are distinct land use regimes governed through government statutes and policies. Decline on human-wildlife conflicts is evident. For example data shows that lion conflicts have reduced by 50%
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	100%

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for NWM - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in NWM - Proportion of schools within or neighbouring elephant areas receiving and using information provided	There is little information distributed on elephants to communities. Distribution is largely done by private organisations such as painted dogs The proportion is low

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- Value of funding and support in kind for conservation of elephants in NWM realised each year	There is high value in funding of elephant conservation (WWF HSBC, WEZ, Friends of Hwange and Other Stakeholders)…funding coming in in terms of drilling of boreholes, vehicles, camping equipment, solar panels, fuels radio communication, roads and fire guards
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	Was done and is being implemented through HSBC
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the NWM - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify and provide needed equipment - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for NWM developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	Research strategy is under development 1 done by University of Zimbabwe Under review n/a 3 No publications have been done

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
			None
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. of communities trained and implementing elephant management programmes d) No. of elephant management campaigns conducted	No modules developed as yet - - - About 10 elephant management campaigns were conducted.
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the NWM developed	- Rebuild / refurbish all main access and internal roads within NWM wildlife areas - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the NWM - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	- Roads, bridges, airstrips refurbished and maintained as planned - Feasibility study of required field stations completed by June 2016 - Identified infrastructure requirements prioritised and required developments undertaken and completed by 2018	2 airstrips were refurbished and 1650km of roads were graded The list has been produced and is included in the Hwange Management Plan

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the NWM (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational secure communications system in place and being maintained	The communication system has been improved, however more is required in relation to the repeater links

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	- Timely minutes of each bi-annual meeting produced and circulated - Number of committee resolutions and actionable points initiated and acted upon	N/A N/A
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA & FC	- Functional team established - Technical support provided in keeping with TORs and planned activities implemented	N/A N/A
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA and FC - Establish terms of reference and recognition as a formal entity - Establish effective engagement with RDCs, and Traditional Leaders in NWM and neighbouring communities	- Formal recognition by ZPWMA / FC achieved - Meetings held - Effective engagement with neighbours	Quarterly stakeholder meetings There is effective engagement with neighbours…working with RDCs, KAZA, communities in law enforcement, human wildlife conflicts
5.4 Links with neighbouring Botswana, Namibia and Zambia to confer on the management of shared elephant populations established / strengthened	- Establish links with Botswana, Namibia and Zambia to confer on cross border elephant management issues	- Links established and operating	The KAZA forum allows for the mentioned countries to tackle cross border management issues

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	- At least one awareness campaign conducted each year - Annual progress reports produced - Number of briefs / news releases on major developments or progress released - Funds raised to support elephant conservation	This is yet to be done

ANNEX 2.0 **Sebungwe Action Plan** - *Status and progress report Aug - 2016*

9.5.1 Protection and Law Enforcement (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1. Joint operation reaction team established and existing base renovated at Bumi Hills old ZRP Camp as primary base. Followed by 3 others (Binga, Siabuwa, Old Chizarira Lodge/ Sengwa Wildlife Research Institute) *Manpower* *Vehicles* *Aircrafts* *Communication – eg radios* *Equipment eg firearms, boats* *Training* *Central database* *Intelligence networks*	**Manpower** – Draw up 20 man reaction team from law enforcement agencies and other stakeholders from the whole Sebungwe sub-region. (Prioritise Bumi, Sengwa) **Refurbish main base** **Training** – Initial database training Refresher course **Transport and Equipment** Procurement of 3 vehicles (land cruisers) Procurement of 3 boats (speedboats – 1 mothership and 2 patrol boats) **Communications** – establish an independent inter-agency communication network	- Number of arrests - Number of cases detected - Number of recoveries made (eg ivory, firearms etc) - Number of patrols conducted - Number cases finalized (convictions) - Number of carcasses detected - Number of joint operations carried out - Number of refresher courses carried out - Number of failed cases	The Sebungwe Region whose greater part is under the jurisdiction of Central has stations which include Sengwa Wildlife Research Area, Chirisa Safari Area, Chizarira National Park, Chete Safari Area and Matusadona National Park. During the reporting period of August 2016 we had a total of 22 incursions with the highest incursions happening in Chirisa Safari Area while the least was in Chete Safari Area. We had a total of 5 visual contacts with poachers but all were unarmed contacts. No ivory was recovered, no fire arms were recovered. 203 wire snares were removed. 8 people were arrested however all the arrests were not ivory cantered. No refresher course was conducted in the Region. Joint operations were conducted by our investigations section with MBCU, the police and MAPP. A total of 6 elephant carcasses were discovered of which 2 were natural mortalities in Matusadona, 1 was poached in Matusadona, 2 were poached in Chete and 1 was poached in Chizarira.
1.2 Informer network, Investigation and intelligence system strengthened	- Recruit informers and contacts - Maintain hotline for whistle-blowers - Procurement of 2 vehicles and 2 motorbikes - Recruit investigators (6) and deploy strategically - Train investigators - Constant liaison with informers - Rewards to informers standardized	- Number arrests and successful convictions based on information from intelligence system - Number of incursions reported on/reacted to by local communities - Number of informer reports per informer leading to arrests and convictions	From the month of August to date 2016,based on information given through informer network assisted in arresting two persons found in possession of a pangolin in Sengwa,Gokwe Davison Goredema and Batau Murambiwa Both were sentenced to 9 years effective each.On the 14th of September 2016 One suspect was arrested for possessing approximately 5kgs of ivory.The case is still pending in court.Approximately 8 ivory deals have been reported through informer network and are still being worked on for reaction.10 deposit fine tickets were also issued for separate offences .

9.5.1 Protection and Law Enforcement (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.3 Zambezi Valley deployment tactics revisited and implemented	- ZV deployment tactics revised - Identification of OP sites, crossing points etc - Identification and procurement of specialized equipment (eg night vision) - Provision of dry rations for operations - Introduction of aerial surveillance flights	- Resource books - Number of successes on detections - Number of contacts - Number of recoveries - Patrol effort (surveillance)	MAPP assisted in deployments for Matusadona both in the Lake with a boat and in the land with a vehicle. MAPP also assisted in joint operations and following up information from informers within the Gokwe and Nyaminyami districts. Recoveries and surveillances were made by our Investigations team together with the informers, MBCU and sometimes with the duty uniform ZRP
1.4 Ranger patrols strengthened	- Establish effective patrolling force of deployable rangers - Establish (or review) standard operating procedures (SOP) - Establish well-equipped reaction teams - Honorary Officer system re-established to support ranger patrols - Increase support for establishing/ improving dedicated APU for every concession.	- Number of deployable rangers at any one time - Total man-days spent on patrol - SOPs in place - Area patrolled each month - Reaction time to incidents - Number of APUs established	A total of 90 rangers were deployable and a total of 1099 man-days were spent on patrol during the month of August 2016
1.5 Training of staff enhanced	• Establish regular training and retraining schedule (includes training on weaponry, bushcraft, tracking, information gathering, crime scene management, Judiciary procedures etc • Training on standard operation procedures (harmonization)	• Number of training and retraining sessions carried out	8 rangers went for a refresher course at Head Office with the Army training them in drilling movements during the month.
1.6 Conviction rates improved	• Judiciary sensitization (incl. workshops) • Formulation of proper charges, indictment and summons • Gathering all evidence available using legal means • Completion of dockets timeously, submission and concluding cases in a reasonable time • Creation of a district sub-committee on elephant and wildlife issues • Hold workshops to share information on wildlife issues	• Number of successful prosecutions • Decrease in number of crimes committed • Number of workshops or meetings held	From August 2016 to date one case of ivory possession was successfully finalized and one for ivory is still pending trial.Generally poaching seem to have decreased as compared to the other years due to deterrent sentences being given by the courts,Conviction of ring leaders,changing of area of operation and current economic challenges which are also hitting the market on acquiring the us dollar.One workshop was held at Midlands black Rhino Concervancy with the judiciary to address challenges being faced .

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Viable population, geographical distribution, and habitat connectivity targets established.	- Establish TPC for all areas to set viable population target. - Collect spatial data (livestock densities, human population densities, forest cover, and agricultural cover) to map potential geographic distribution of elephants - Identify potential connectivity areas and promote wildlife-based land uses in those areas.	- Viable population target of minimum 5,000 for the region with minimum and maximum thresholds in different land categories - Updated geographical distribution map and spatial datasets - Number of conservancies approved/ green-lighted by communities	There are no private conservancies in the Sebungwe Region, however the 4 Rural District Councils within the Region are very active in conservation and also CAMPFIRE is active. The 4 RDCs are Gokwe North, Gokwe South, Nyaminyami and Binga RDC.
2.2 Monitoring system for population trends, habitat, and impacts designed and implemented.	- Establish regional database for data on population, habitat, HEC, patrolling, poaching, and trophies (for trophies, see also Output 5). - Design and adopt standardized reporting formats. (i.e. MOMS) - Report to the regional management committee to review data and decide on management actions. - Conduct annual aerial surveys for the "core area" (to be defined).	- Regional database operational - Number of reporting formats designed and distributed - Number of persons, patrols, and sectors submitting data - Quarterly reports - Quarterly reviews	We have formats for different reports which start from Incidental reports, Daily reports, Weekly reports, Monthly reports, Quarterly reports and Annual reports. The reports come from the stations and are consolidated at the Regional Office before they are sent to HQ.
2.3 Direct and indirect causes of decline (2006-2014) researched.	- Causes of mortality quantified using the regional database. - Gather information from local communities and experts. - Examine potential socio-economic factors related to decline - Research habitat changes. - Publish research in scientific publication.	Data and analyses	For the month of August 2016, the Sebungwe Region lost a total of 6 elephants, 2 of them died of natural causes in Matusadona National Park, 1 was poached in Matusadona, 2 were poached in Chete Safari Area and 1 was poached in Chizarira National Park. A long term elephant research programme to be launched in Matusadona National Park in conjunction with a private partner

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.4 Viable population, geographical distribution, and habitat connectivity achieved and maintained.	- Establish wildlife-based land-use system (not a land use plan) with community conservancies acting as corridors between protected areas - Reduce human-elephant conflict to acceptable levels. - Implement responsible habitat management (with regard to fires, REDD+, mining, illegal and legal settlement) - Conduct integrated land-use planning. - Support extension of REDD initiative	- Number of operational conservancies/ corridors - Elephant Population data - Number of elephants and people involved in "serious HEC incidents" - Effective, non-lethal elephant deterrents in place - Regional land-use plan - Number of stakeholders, meetings in planning process - Utilization of corridors by elephants	The Authority is supporting efforts to establish conservancies in the Region and we have approved the setting up of a conservancy in the Gatshe Gatshe Area. The Chirisa-Sengwa excision area is also planned to be established as a community conservancy
2.5 Sustainable offtakes established through participatory quota setting and monitored through adaptive management.	- Establish a database of offtakes, trophy qualities, and age classes (See Output 2, Activity 1). - Using participatory quota setting following best practices, set optional quotas based on scientific survey data, with no more than 0.5% of the estimate as the elephant quota for the region. - Revisit quota system and establish optional quotas as opposed to fixed quotas - Set minimum trophy size and a variable trophy fee with large increments based on size - Identify and enforce best hunting practices through a code of conduct incorporated in lease agreements and hunting permits.	- Trophy quality improving - Record of hunting practice transgressions	Quotas for the Nyaminyami District and the Sebungwe Region as a whole have been greatly reduced and all elephant hunts are now being monitored by Parks

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.6 Robust and comprehensive research program enhanced and maintained.	- Research the impact of decline on population dynamics. - Investigate migration hypothesis. - Develop applied research projects, especially interdisciplinary and multidisciplinary research. - Establish research oversight body, building on existing approval processes.	Publications, particularly with management guidance	A long term elephant research programme to be launched in Matusadona National Park in conjunction with a private partner

9.5.3 Social, Economic and Cultural Framework (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Transparent and equitable distribution of benefits established	- Develop an instrument to increase elephant revenues at the ward level. - Instrument to provide for traditional leaders to be involved in management and distribution of elephant related benefits. - Revise CAMPFIRE guide lines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodic auditing of the revenue sharing system.	- Instrument approved. - CAMPFIRE guidelines revised and approved - Revenue accountability system established - Number of audits	The Zimbabwe Elephant Nursery to establish a community outreach program that will provide community educational and developmental projects and activities in the region
3.2 Economic management of consumptive and non-consumptive tourism of elephants in Sebungwe improved.	- Preventing human settlement in protected areas - Review length of concession leases to encourage greater investment. - Rehabilitate the depleted Safari areas - Promote PPCPs	- Number of eviction notices issued. - Number of reviewed leases - Number of safari areas under proper management/concessions - Record of PPCPs established.	Mokore safaris is currently operating in Sengwa Wildlife Research Area and the lease is under proper management, Statunga Safaris has also got the Chirisa hunting lease and will start operating in the year 2017. Chete Safri Area is currently still open however there are applicants who may take it at anytime.
3.3 Land use strategies to mitigate human elephant conflicts (HEC) established	- Review of human elephant conflict measures (consultancy) - Increase sense of ownership of wildlife as a mitigation measure to HEC (review) - Traditional leaders to set up a compensation scheme for land holders directly affected by HEC. - Support review and development of land –use plans to optimize agricultural livestock and farming activities	- Reports - Link with activity 1 and 2 output1(benefits) - Compensation scheme functioning and record of HEC in place. - Land use plans supported	Established a Problem Animal Control Committee in Nyaminyami and Gokwe that includes all stakeholders to assist in the effective coordination of all PAC issues

9.5.3 Social, Economic and Cultural Framework (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.4 Investment of wildlife revenue in income generating community products established	- Revitalize technical support services to communities/ community initiatives - Participatory business plan at community level. - Explore micro financing opportunities - Explore markets for community projects related to elephant conservation	- Technical support services established through proper instrument. - Participatory business plan adopted.	There is a strong move to promote the development of aquaculture projects to enhance food security
3.5 Relationship and communication mechanism established	- Sebungwe WG to include Traditional leaders and RDCs - Methodologies for regular communication with communities and their leaders established	- Traditional leaders and RDC included in the WG - Communication strategy developed	
3.6 Education on elephant conservation in the community increased	- Information campaign explaining reasons for quota decrease (see Biological Component for cross check) - Explain what trophy hunting means and how it links to benefits - Share census results and explain implications - Extend conservation education to Sebungwe wards (NGOs?)	- Number of Outreach meetings with Traditional leaders / Wards/ RDC including the 4 key activities	The Zimbabwe Elephant Nursery to establish a community outreach program that will provide educational and developmental projects and activities in the region

9.5.4 Building Conservation Capacity Component (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Capacity needs for elephant management in Parks and CAMPFIRE areas analysed and identified	- Draw up TOR - Appoint consultant	Report produced	Still outstanding
4.2 Training provided	- Analyse training needs - Prioritise and develop training curricula if not already available - Implement in-service training and re-training	Numbers of people trained and certified	Still outstanding
4.3 Best practice standards for elephant management in place	- Standards defined by and through National Elephant Policy and CAMPFIRE Principles and Guidelines - Define clear objectives for elephant management in the Sebungwe - Support CITES MIKES site(s) and application of SMART and RBM	- MIKES PIKE database - SMART database	Nyaminyami RDC is a MIKE site and efforts are needed to adopt the SMART database system in th region
4.4 Research and monitoring capacity strengthened	- Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring systems - Identify equipment needs, source and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- 2 persons trained per annum - 5+ people in mentoring system each year - Equipment procured and in place - Active community research programme underway - Event Book System functional and operationalised	Still outstanding
4.5 Funding secured	- Complete Sebungwe Elephant Management Plan and disseminate for funding purposes - Development of funding proposals for each of the components, if necessary - Identify donors (e.g. bilateral, WB GEF, NGO, other) - Submit proposals - Develop Sebungwe branding and marketing campaign	Number of successfully funded proposals	Still outstanding
4.6 Infrastructure refurbished and functioning	- Roads rehabilitation: Parks and CL - Karoi-Binga road - Airstrips	- 2,000 km repaired to standard - Airstrips registered and functioning	Still outstanding

9.5.4 Building Conservation Capacity Component (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.7 Communications	- Procure and install radio communications systems	System installed and operational	Still outstanding

9.5.5 Coordination and Programme Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1. Sebungwe Management Committee with an Elephant Working Task Force and Project Coordinator established	-Identify committee members, select WTF and appoint Coordinator -ToR for each institution (from national plan)	Committee meeting twice yearly; WTF meets quarterly, identifies priority activities and oversees implementation by Coordinator	Still outstanding
5.2. Coordination and communication between Traditional Authorities, their communities and the elephant management programme and plan strengthened	-Address the community through CAMPFIRE and traditional leadership -Introduce elephant management plan in easily understandable format – maps and graphs – and disseminate through all levels/actors in Sebungwe	• Management plan documents for dissemination	Still outstanding
5.3. Coordination between Sebungwe safari operators and implementation of the elephant management plan strengthened	-SOAZ, ZPHGA appoint liaison officer for Sebungwe elephant management plan -Encourage non-members of associations to participate in plan implementation	Liaison officer appointed and operating and non-members of associating participating in implementation of the action plan	Still outstanding
5.4. Links with neighbouring states established – shared elephant management	-Establish relationship with KAZA Secretariat -Establish links and synergies with transboundary natural resource mgmt -Bilateral JOC to focus on illegal wildlife trade and trade routes -Establish links with TRAFFIC	• KAZA Secretariat aware of Sebungwe elephant management plan • TBNRM established and functional • Reduced illegal trade	Still outstanding

ANNEX 3.0 Lower Zambezi Valley Action Plan - *Status and progress report Aug - 2016*

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)			
Output	**Activities**	**KPIs**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants	-
1.2 Informer network, investigation and intelligence system established	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	5 informers were recruited, one more investigator was recruited. 10 calls were received indicating poachers coming in from the local community and 3 calls indicating foreign poachers coming in. Since January 2016, 4 foreigners have been arrested from tip offs and one local person. A total of 32 incursions were recorded whereby the majority of them were recorded during the first quarter of the year.
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines on collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering) - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	Of all the five arrested poachers, all were sent for prosecution and were all convicted and sentenced

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)			
Output	**Activities**	**KPIs**	**Narrative Report on Progress in Implementation**
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	The current data base in place is the MIKE data base system where one Senior Ranger and two rangers were trained to manage the input of information into that system. Recording starts from the time the callsign are deployed using patrol briefing form, patrol details will then record information of their findings onto the ground patrol data form whilst out on patrol; on return, a report is then reproduced which will be used together with the ground data form to then enter the information onto the MIKE system data base.
1.5 Joint law enforcement operations within the LZV	- Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) - Conduct joint operations	- Number of meetings held per year - Number of successes from shared wildlife crime information - Number of joint operations leading to arrests and successful prosecutions	One liaison meeting conducted with our Zambian counter parts, 3 community outreach programs with the Nyamakate and Chundu community. -
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the LZV	Implementation of the LZV Action plan is in progress with
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the LZV settled has not increased, or has declined, from 2015 levels	
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations and RDCs in LZV - Introduce ranger-based monitoring (SMART, MIKE, ETIS) across all stations in LZV - Analyze the data and report on trends	- Information on trends in elephant numbers, structure and mortality analysed and available	-According to the 2014 Aerial Survey report, Mana Pools has 2984 elephants. From 2009 to 2016, Mana Pools has lost 95 elephants to poaching of which 16 were recorded this year. The report states that there was 40% reduction in elephant populations from the 2001 survey. Causes of reduction include natural deaths, migration and poaching.
2.2 Impacts of elephants on selected habitats and selected indicator plant and animal species monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported	-Elephant damage has been observed and recorded on woody species on the flood plain where they are greatly concentrated. Impacts shown were ring barking and uprooting of woody species such as *Combretum spp* and, *Fidherbia albida.* The impacts have resulted in weakening of the tree species, making them susceptible to diseases and mistletoes. -These species also do not have recruitment due to impacts of elephants. -Introduction of enclosures are at initial stages to monitor the impacts and enhance recruitment.
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, HWC, in the LZV - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research report completed - Survey results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	-Recommendations have been submitted to release pressure on the Mana Pools national park through stopping hunting on the Sapi Safari Area flood plain.
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	-Sapi Safari Area turned hunting in the process of being stopped, and the area to promote photographic safaris instead of hunting.

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Elephant trophy quality is maintained or improved in relation to the stipulated desired trophy size.	Non-trophy hunting area. Mana Pools being a non-hunting areas, the sizes of trophies hunted from management quota and those picked from natural deaths, trophy sizes are more constant.
2.6 Current elephant range defined and management to recover habitats and elephant populations and maintain connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range and maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	Elephants aggregation on the flood plain during the dry season has resulted in a lot of pressure being exerted on the area. Changing of management system of Sapi's flood plain could contribute to recovery of the habitat on the floodplain once animals disperse.
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Situational reports involving poaching of elephants have been submitted in time. MIKE Data Base is also being maintained. A record of recovered of all ivory obtained is kept and the recovered tusks are constantly submitted to Head Office where they are again reweighed and recorded as well.

9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in the LZV adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	A number of organisations have come aboard in support of conservation through Joint Ventures and Memorandum of Agreements such organisations like: Zambezi Society, Tashinga Initiative, Animal Wildlife Fund Foundation, Sino Zimbabwe Wildlife Foundation Fund, and Kariba Animal Wildlife Fund Foundation, these have formalised they assistance to Mana Pools which vary from Anti-Poaching assistance to treatment of injured animals.
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	Benefits from wildlife utilisation are channelled through CAMPFIRE program through the local Rural District Council.
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	Only one case of Human Wildlife Conflict has been recorded since January where one person was attacked by a hippo but survived the attack. Cases of Wildlife encroachment onto the communities on the southern boundary are dealt with by the CAMPFIRE because of the buffer zone between the southern boundary of the park and the community.
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	Of the 16 located elephant carcass, six elephant carcasses were recovered from two contacts. Note that 22 other elephant carcass were recovered in Chirundu again from a contact but we cannot directly link them to the elephants poached in mana Pools though there is a very high possibility of having the elephants poached in Mana Pools as well or in Marongora or Sapi..

9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for the LZV - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in the LZV - Proportion of schools within or neighbouring elephant areas receiving and using information provided	2014 Elephant Survey Report

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- No of project proposals developed, submitted and funded - Value of funding and support in kind for conservation of elephants in LZV realised each year	A proposal was submitted by Tishinga Initiative for the establishment of the Nyakasikana Anti-poaching Base and has been funded and near completion. See section 9.6.3.1
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the LZV - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify equipment needs and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for the LZV developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	Mana Pools has one Ecologist

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. communities trained and implementing elephant management programmes	Training modules are guided as per the Mushandike College of Wildlife Management at the organisation training institute. The station has 8 staff members who have undergone training at Mushandike College of Wildlife Management in various fields from Accounting, Certificate in Wildlife Management, Diploma in Wildlife Management, and IT courses
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the LZV developed	- Rebuild / refurbish all main access roads to the LZV (c.150 km) - Repair, clear, grade where necessary some 600 km of internal roads and several bridges - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the LZV - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	Roads, bridges, airstrips refurbished and maintained as planned Feasibility study of required field stations completed by June 2016 Identified infrastructure requirements prioritised and required developments undertaken and completed	New operational roads are in the process of being opened, existed roads were maintained, the Mana Main Airstrip was renovated this year 2016 Of priority was to establish an anti-poaching base at Nyakasikana which I now near completion
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the LZV (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational communications system in place and being maintained	New operational radios, repeater links and potable GPS systems have been secured.

9.6.5 Coordination, Collaboration and Programme Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	Timely minutes of each meeting produced and circulated Committee resolutions and actionable points initiated and acted upon	
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA	Functional team established Technical support provided in keeping with TORs and planned activities implemented	A technical person has been seconded to Mana Pools by AWF to assist in Anti-poaching
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA - Establish terms of reference and recognition as formal entity - Establish effective engagement with RDCs, and Traditional Leaders in the LZV and neighbouring communities	Formal recognition by ZPWMA achieved Meetings held Effective engagement with neighbours	In 2016, 1 Meeting has been held between ZIMPARKS officers and the Chief (Chief Chundu) together with his village heads. Another meeting has also been held between Mana Pools Officers and Safari Operators to discuss their support in conservation.
5.4 Links with neighbouring Zambia and Mozambique to confer on the management of shared elephant populations established / strengthened	- Establish links with Zambia and Mozambique to confer on cross border elephant management issues	Links established and operating	There is cordial communication with ZAWA counterparts.
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	At least one awareness campaign conducted each year Annual progress reports produced Briefs / news releases on major developments or progress released Funds raised to support elephant conservation	Funds have been raised by Non-Governmental organisations through provision of camping equipment, availing vehicles for use in Anti-poaching, assisting in opening up of roads, developing of base camp for rangers and training

ANNEX 4.0 South East Lowveld Action Plan - *Status and progress report Aug – 2016*

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units strengthened	– Appoint anti-poaching coordinator (for region and/or separate areas) – Recruit staff – Train staff – Procure vehicles and equipment – Deploy unit – Support existing units	Trained and fully equipped units established and operating with relevant security agency by June 2016	Five units were established in Gonarezhou National Park, trained and fully equipped. Three new Lancruiser vehicles were procured to augment the existing patrol fleet. -Two candidates identified with one to be elected for the post of antipoaching coordinator for the Region. - 35 Cadet rangers recruited by the Gonarezhou Conservation Project to boost the existing staff compliment. Cadet Rangers trained in basic paramillitary skills by the Gonarezhou Conservation Project -A Gonarezhou Antipoaching Reaction Unit established and operating throughout the Gonarezhou Nationa Park. -Out of the 20 properties in Save Valley Conservancy, 8 properties have 2X call signs of 3 rangers each who are highly trained and able to carry out combined operations with security agencies in addition to the15scouts also highly trained with AggressiveTracking Specialist a security private company assisting in the protection of rhinos and elephants in SEL.
1.2 Informer and intelligence systems established and/or strengthened	– Identify and recruit informers – Establish and implement incentive protocols – Set up, implement hotline for anonymous reports and communicate it to the public – Analyse and use information – Ensure information is included in database outlined in Output 1.6	An active informer system/network operating within the SEL by Jan. 2016 Hotline widely advertised and operational by Jan 2016	-Informer network is being established and had a number of informer lead success. Awareness of the hotlines began in September 2016 by Regional team. -Informers recruited by the Gonarezhou Conservation Project. -A hotline set up for Gonarezhou and Save Valley Conservancy. -Data being analysed and a data base in place and being mantained at the Regional Office. -Hotline facility fully advertised through the Parks Investigations Branch.
1.3 Investigation of wildlife crime improved	– Implement training programmes for investigation personnel – Ensure collaboration between Parks, ZRP and intelligence officers	At least two law enforcement staff trained in scene of crime collection and preservation of	-3 Investigations officers trained in scene of crime collection and preservation of exhiits course

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
	– Recruit more investigators – Put in place Investigator incentive system – Collaborate with forensic scientists and ballistic experts, as well as agencies such as EMA and approved universities (e.g. Chinhoyi University of Technology, University of Zimbabwe, National University of Science and Technology)	evidence, ballistics evidence, etc. in SEL. Percentage of investigations resulting in successful prosecutions in SEL greater than in 2014	-1 investigations officer trained in Wildlife, Pestcide and Forensic Crime Scene Investigation Course. -Collaboration with other law enforcement agencies satisfactorily yielding results. -Collaboration with other agencies strengthened -plans are underway to recruit more investigators and to open an investigations office in Chiredzi. -Some stakeholders have pledged to assist the investigators with some incentives. -In Save Valley Conservancy one trained personnel is dealing with wildlife crimes and is based at Humani Ranch. - The % of successfulness on investigated cases is now higher than 2014, and the current % is estimated to be 60% after lobbying with the Judiciary Services
1.4 Prosecution of wildlife crimes improved	– Train prosecutors on legislation and processes available to deal with wildlife crimes – Conduct awareness / outreach programs with Prosecution, Judiciary – Utilize ancillary laws, such as those dealing with economic crime, organized crime, money laundering, – Communicate status of prosecutions to the public via ZPWMA website – Clear backlog of wildlife cases – Explore the possibility of appointing dedicated wildlife crime prosecutors at Regional and National level	Monthly liaison sessions on wildlife crime and law enforcement held with members of the judiciary Relevant legislation available and being used Wildlife crime prosecutors available and being used in SEL	-Liaison with the Judiciary, Courts and the Prosecuting Authority on wildlife crimes conducted. -Relevant legislation available and referred to in dealing with wildlife crimes -Wildlife Crime Prosecutors not available from the Wildlife Authorities but Public Prosecutors being used to deal with wildlife crimes to which they may not be well versed with certain technical wildlife issues. -No wildlife crime prosecutors appointed. - Inadequate resources of transport and fuels to fully implement monthly liaison.

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.5 Law enforcement in collaboration with communities enhanced [Links to Component 3]	– Engage and collaborate on curbing wildlife crimes (ZRP & Communities) – Establish anti-poaching clubs/ community natural resource monitors that collaborate with ZPWMA and ZRP – Lobby support from Chiefs to deal with local poachers – Hold workshops with Chiefs and communities about wildlife and wildlife crimes – Establish incentives for communities to provide information	Incentive schemes that encourage the public and members of rural communities to contribute to law enforcement (e.g. through informer hotline) established in SEL Increasing number of incidents of community contribution to law enforcement (e.g. whistle blowers) by Dec. 2017	Trained community rangers from Sengwe area, four passed and ready to carry out ant poaching operations within the Sengwe area. Several meetings on wildlife issues were held with Chief Sengwe. - Collaboration with ZRP and Communities strengthened and yielding results. -We have opened a hotline and fliers facility that we distributed through the Save Valley Conservancy, Gonarezhou and surrounding areas and information is coming in. -All stakeholders workshop on wildlife issues is planned soon -Some stakeholders have pledged to incentivize the whistle blowers -In Save Valley Conservancyseveral education awareness campaigns have been carried out in all areas bordering wildlife protected areas. -meetings with chiefs have been maintained regarding protection of wildlife. - Resource monitors have been selected by the communites. -The surrounding communities are benefitting from meat obtained from problem animal control and trophy hunting.
1.6 Local wildlife law enforcement database established	– Set up database, as per national database – Ensure inclusion of prosecution status in database – Implement national data recording protocols – Train data entry staff and crime analysts	Local database established and operating Illegal activities recorded and analyzed	Spatial Monitoring And Reporting Tool is being used in Gonarezhou and all captured data can be easily analysed.The SMART approachaims at improving conservation effectiveness and tracking of wildife crimes. -No SMART use in Save Valley Conservancy - A poaching database from when the crime is committed up to the final court outcome is in place. -A database of poachers and their modus operandi in place -Crime Registers being mantained.
1.7 Illegal settlements / grazing in wildlife areas reduced	– Liaise with RDC, Traditional Leaders and ZRP, DA's Office – Conducted Education programmes – Regular updated satellite mapping	Illegal settlements reduced to less than 5% of wildlife areas by 2020 (i.e. state protected areas, conservancies and community wildlife areas)	Illegal settlement in the park is still very low no other settlement after 2000 (Chitsa communities). Grazing of cattle in the park is under control in the GonarezhouT National Park. -The Southern part of the Save Valley Conservancy 85 % settled.An inter ministerial committee set up to look at the possibilities of fencing out the settlers and also there

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
[Links to activities on land use mapping and planning in Component 2 – Output 2.2 and incentivization / alternative livelihood activities in Component 3]			are proposals to remove some of the settlers from some of the properties to pave way for a game corridor and allow free movement of game within. -Local authority currently working out on orderly settlement in the Save Valley Conservancy. - Fencing of the Save Valley Conservancy is also expected to assist in reduced human and domestic animal movements.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1Research programme to understand temporal and spatial drivers of elephants established [Links to Component 4]	– Create enabling opportunities and environment for research – Prioritise research needs – Conduct localised case studies and research projects – Monitor and evaluate poaching and other drivers - hunting, water, food, human disturbance – Explore possibility of GLTFCA flagship research programme for elephants [linked to Component 5] – Carry out ground surveys to monitor distribution and density	Research programme that enables local and international researchers, and links with the GLTFCA research programme, in place and producing reports	-Ten elephants were collared to monitor elephant movement in Gonarezhou.
2.2Current elephant range defined and options for extending range and maintaining connectivity between fragmented populations explored	– Define elephant range use, and existing and potential connectivity – Identify priority corridors and human land use barriers – Conduct spatial analyses to inform land use planning – Advocate land use planning to facilitate connectivity and reduce human wildlife conflict – Explore options for translocating elephants to under-stocked areas	Identified priority corridors for elephant connectivity within SEL, between SEL and other areas in Zimbabwe, and with neighbouring countries	-Research is in progress in the Gonarezhou National Park - Elephant corridors are known in Save Valley Conservancy but because of illegal settlements the problem of understanding this is still far from reality.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.3Elephant population numbers, structure, mortality and trends monitored, quotas adjusted, and desired levels of trophy quality maintained	– Undertake standardised, regular, aerial and ground surveys of the elephant range – Explore methods to monitor elephant presence and abundance in Mozambique (to Zinave) and up to the Chimanimani range – Undertake trend analysis – Define elephant age and sex structures and extract birth and death rates – Establish annual monitoring plans – Record and analyse elephant mortalities (all causes e.g. poaching, PAC, natural, hunting, etc.) – Monitor trophy quality and age – Develop and implement an age-based and size-based trophy quota	Elephant range surveyed at regular intervals Demographic data available and analysed Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers and used in quota setting	-Biannual aerial survey carried in Gonarezhou and surrounding. Last survey in September 2016. Could not get authority to survey in Mozambique. Elephant's mortalities recorded in park security registers -Elephant survey in Save Valley Conservancy done 2013 -Quota setting being a wild life management tool is implemented annually - taking cognisance of research data -PAC , hunting etc information is kept
2.4Elephant impacts on their habitats and selected indicator species of biodiversity monitored	– Establish annual monitoring plans – Measure vegetation indicators such as woodland cover – Measure other functional biodiversity indicators e.g. bird responses to structural changes to woodlands – Measure ecosystem functions – Relate desired impact to measures of elephant abundance and spatial use – Research other drivers of ecological impact (climate change, change in land use, water provision, and fencing, amongst others) – Use research findings, expert opinion and informed public opinion to establish thresholds of potential concern (TPC or limits to change) to initiate management action in respect of elephant impacts in protected areas and effects in communal land – Identify areas with key vegetation communities that are utilized by elephants	Annual monitoring plans defined and implemented for selected indicator species of biodiversity TPC's established Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	-Annual monitoring through sightings when conducting hunts and patrol is in place.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.5Costs and benefits of elephants to local and national economy monitored and costs of elephants to local communities reduced	– Monitor and evaluate extent and costs of human-wildlife conflict incidents – Relate human-wildlife conflict to elephant abundance and spatial use – Understand drivers and social and economic consequences of human-wildlife conflict – Evaluate the direct and indirect contribution (financial, economic and social) and the direct and indirect costs of elephants to the well-being of people and to conservation, through both consumptive and non-consumptive uses – Implement ongoing and new mitigation for human-wildlife conflict	Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	-PAC programmes are conducted, meat shared among the communities affected, skins and ivory may be sold and money ploughed back in to the affected communities.
2.6Adaptive elephant management framework adopted and implemented [Links to Component 4]	– Ensure collaboration between Regional Elephant Management Committee and regional and local resource management committees (e.g. LOCAL Forum) – Implement annual process of adaptive planning, implementation and monitoring in line with elephant management objectives and TPCs within the SEL – Develop and implement localised management plans (e.g. SVC plan) – Ensure alignment and harmonisation with other Zimbabwean, regional and international plans	Annual elephant management plans developed, adopted and implemented	-Annual elephant management plans have only been confined to hunting and PAC and cropping to a large extent has not been done. -Huge costs of this exercise are a major impediment as evidenced by the number of elephants taken off so far this year under such local arrangements.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.7Alternative outcomes modelled	– Develop framework for examining and modelling potential linked impacts between biodiversity issues, elephant issues, and societal issues, including any 'surprises', such as disease or extreme weather events. – Implement the modelling framework to define the outcomes of various management scenarios	Established modelling framework being used to guide adaptive management Scenario outcome recommendations and being used in management	Nothing to report
2.8SEL reporting to meet national / international standards achieved	– Advocate key summary set of elephant KPIs/outcomes for national reporting (e.g. potential population sizes against actual population sizes) – Comply with national and international legal obligations – Explore the designation of GNP as a MIKE site	CITES reporting requirements met National reporting compliance requirements	-Gonarezhou National Park meeting CITES requirements. Park not yet a MIKE site. -No information on Save Valley Conservancy and the area is still not a MIKE site

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Community partnerships and joint venture oportunities are incentivised and facilitated	– Establish protocols, policies and models for development of joint ventures (PPCPs) – Identify potential areas – Facilitate development of new, and strengthen existing, institutional frameworks and legal entities for beneficiaries at sub-district level – Develop concepts, business plans and prospectuses for different areas through consultative processes with Communities – Develop a SEL Tourism plan and review potential concessions within the framework of this Plan – Develop mechanisms for inclusive and transparent engagement and selection of operators and JV partners. – Facilitate communication, endorsement and support of JVs – Explore potential incentives and avenues of material and technical support that can be provided by Local Government and Authorities to promote establishment and sustainability of Community JVs – Promote access to affordable capital funding – Enhance capacity of community members to engage in wildlife and tourism management through training and employment	Models and protocols for joint ventures established Community institutions to engage in joint ventures established Joint ventures established and operating, resulting in financial benefit to communities SEL tourism developed and potential concessions identified Mechanisms of support and incentivisation to JVs established	- Save Valley Conservancy has a Joint Venture model and community share ownership trust with the local communities -PPCPs envisaged with the Gonarezhou Conservation Trust.
3.2 Elephant management in community wildlife areas improved	– Promote improved and professionalized elephant management and security in community wildlife areas through establishment and maintenance of improved capacity, infrastructure, security and management systems – Develop and implement a transparent Performance Based Quota system which incentivises improved management and security systems for elephant in community hunting areas and which promotes effective buffering of source populations – Update terms of lease agreements in community wildlife areas to confer a broader range of roles and responsibilities on operators including resource management and protection; re-investment and	Infrastructure, equipment and systems for elephant management in community wildlife areas established and operational Reduced human-elephant conflict Community capacity for wildlife management improved	**-WILD project** working on two community wildlife areas that is Naivasha in Chiredzi district and Jamanda in Chipinge district.WILD(Wildlife In Livelihood Development Programme is an intiative of SAT (Sustainable Agriculture Technology) and ZWVT (Zimbabwe Wild Vet Trust) funded by the European Union and is aimed at improving socio-economic and ecological resilience in semi arid communal areas through incorporation of robust wildlife based land use enterprise into the mainstream of communal areas. -Nyangambe in Save Valley Conservancy is part of the elephant managemnt in the community.

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
	infrastructure development; employment targets; local sourcing; etc. – Review key cooperation opportunities across different land uses and countries within GLTFCA, e.g. Sengwe-Tshipise Wilderness Corridor	Opportunities for cooperation within GLTFCA identified	
3.3 3.3 Additional elephant-based tourism and sustainable utilisation oportunities explored	– Promote awareness and marketing of iconic tuskers – Explore opportunities for expansion of community wildlife areas in viable wildlife corridors to enable establishment of additional sustainable utilisation areas and enterprises. [Links to Output 2.2 – identification of corridors]	Corridors identified and Agreements concluded Tourism and awareness campaigns undertaken	- No corridors agreed and concluded as as yet.
3.4 Transparent distribution of the benefits and costs of elephant management and conservation facilitated [Links to Output 2.5]	– Conduct regular and comprehensive Community Awareness campaigns regarding quotas, revenues and distribution within Communities – Capacitate and incorporate direct community involvement in management of Community Wildlife Areas, enterprises and JVs. – Diversify downstream natural resources enterprises to multiply the revenues from CBNRM, e.g. NTFPs	Awareness campaigns conducted Community structures have improved capacity to manage NRs and wildlife areas CBNRM revenues are invested in establishment of natural-resource based enterprises Community realises greater employment and financial benefit from CBNRM revenues	Awaerness campaigns are being conducted in areas arround Gonarezhou National Park and Save Valley Conservancy focusing on natural resources management not rvenue management. -The community share ownership trust is a clear testimony of improved capacity to manage NRs and Wildlife areas.These programmes bring about financial benefits to the communities.
3.5 Effective techniques and land use strategies to mitigate human-elephant conflict are implemented	– Review land use zonation through consultative processes [link to Output 2.2] – Promote awareness and adoption of effective HEC mitigation measures – Promote improved rangeland rehabilitation and grazing management to reduce competition between livestock and wildlife. – Promote improved and rationalised crop production and alternative mechanisms to promote food security to reduce habitat destruction for inefficient dry land cropping (e.g. irrigation development; carbon sequestration credits to generate income & purchase of staple grains).	HEC is effectively reduced Availability and application of HEC mitigation measures improved There is participation in effective grazing management schemes Grazing is better managed and rangeland health is improved	-Proposed irrigation schemes in fenced areas will help reduce human/wildlife conflict -Grazing areas for domestic animals are to be separated from wildlife areas again to reduce human wildlife conflict

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
		There is increased uptake of improved cropping techniques Crop yields are improved Alternative land uses evaluated	
3.6 Information on elephants and their conservation is included in school curriculae and environmental education adjacent to key elephant populations in the SEL is promoted	– Promote awareness of elephant conservation (and other issues) through cultural events, art, plays, sport, etc. – Participate in syllabus review of national environmental science curriculum approved by the Ministry of Education – Develop approved environmental training and extension material and promote dissemination to different stakeholder groups within the community – Promote the formation of environmental science clubs at schools – Coordinate various education, training and extension campaigns operating within the district	School children and communities have greater appreciation of elephant conservation issues Greater participation in environmental clubs at schools with greater understanding of environmental issues More social events linked to environmental and conservation awareness are held Elephant conservation messages are conveyed through art and cultural events & competitions Parallel education programmes are coordinated through stakeholder planning sessions at district level	Education extension programe established that is Chilojo club focusing on all schools close to Gonarezhou. Environmental books distributed to above schools. -Education extension programme in place in save Valley Conservancy and being conducted and funded by the Painted Dog Conservation and the Gonarezhou Conservation Project targeting schools surrrrounding the Save Valley Conservancy. -Education awawreness campaigns regulary conducted in schools by our Extension and Interpretation Unit. --Essay competions with prize giving are regularly done in schools to effectively disseminate information on wildlife conservation.
3.7 Cultural tourism is developed and marketed as a centre-piece of SEL attractions and linked explicitly to conservation of flagship species including elephant	– Promote existing cultural tourism events and attractions and promote incorporation of messages of elephant conservation within these – e.g. Machangana Cultural Festival; GL-Cultural Festival – Explore and develop additional cultural tourism opportunities – including development of interpretive centres, craft centres, museums, monuments, events, etc. and market these – Document and communicate the specific cultural importance of elephant to communities in the SEL and incorporate this into education, marketing, event and cultural messages and interpretative centres.	Community participation and tourist attendance of cultural events is increased Messages relating to elephant conservation and environmental issues are key themes	-GonarezhouNational Park actively involved in cultural festivals. Supported the Muhlanguleni cultural festival this year(2016). -

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
		The number of cultural tourism developments and enterprises is increased Anecdotes, artifacts and oral tradition regarding cultural importance of elephants are recorded and insinuated into marketing strategies and event messages	
3.8 Regional tourism is promoted	– Promote the development of infrastructure critical to accessibility of the region: e.g. border crossing at Pafuri; road development and maintenance; scheduled flights to Chiredzi; etc. – Promote diversification, branding and marketing of SEL-specific tourism products linked within the region and with other attractions in Zimbabwe and neighbouring countries. – Focus special attention on development of community-led tourism initiatives that contribute to the sustainability of the STWC as a movement corridor for elephant – Clear mines from STWC	Increased tourism traffic and arrivals Infrastructure upgrades Scheduled flights established Pafuri border crossing operational Tourism products are diversified Marketing and branding consultants engaged to develop branding and strategy Scoping, feasiblilty studies are undertaken Increased number of CB enterprises are operational	-The current global economic challenges faced are still a draw back to marketing efforts , however some individuals within the are putting much effort on consumptive tourism.
3.9 Policy framework for conservation and CBNRM is well understood by communities and other stakeholders in SEL	– Compile factsheets on policy framework for conservation and CBNRM and disseminate to communities and other stakeholders	Communities have access to existing CBNRM and Policy frameworks	- The awareness campaigns which are frequently conducted through out the year also attempts to explain about the existence of these policies as well as on traditional gatherings, village and council meetings.
	– Consider innovative mechanisms for trans boundary resource sharing and expanding “space for elephants”	Workshops conducted	- Still a challenge as the conept has not been fully embraced by the affected communities.

9.7.4 Building Conservation Capacity(South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to implement the plan secured	– Implement variable / graduated trophy fee structure based on trophy size – Review levy / fee structure for elephant hunting and the distribution of these revenues for conservation and communities – Develop and submit bankable project proposals to potential funders – Explore potential business partnerships – Increase capacity and law enforcement coverage by ensuring that all key stakeholders contribute to and are engaged in law enforcement activities: hunting operators, tour operators, and community anti-poaching teams [Links to Output 1.1] – Explore the potential for a dedicated elephant fund for SEL.	Revised trophy fee structure developed, resulting in increased funds available or secured for elephant conservation Number of project proposals developed submitted and funded Number of developed and functional partnerships contributing to improved elephant management	Gonarezhou Conservation Trust's establishment could secure funding for improved elephant management. - Funding not yet secured for the entire Save Valley Conservancy, but expecting the EU to come in with an aid once the fencing boundaries have been established.
4.2 Current capacity analysed and needs identified	– Analysed current capacity – Carry out a needs assessment across the full range of human resources – Carry out a needs assessment for equipment and infrastructure – Develop a strategy to address the identified needs	Needs assessment report	
4.3 Capacity for research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	– Develop and implement a multi-disciplinary research and monitoring strategy – Develop and implement a research programme based on that strategy, including graduate studies, post graduate and external researchers as well as ZPWMA researchers – Undertake periodic research meetings / conferences – Recruit and meet demands and requirements for research personnel in Parks and surrounding areas – Collaborate with external research institutions – Develop and implement a mentoring programme for researchers – Procure relevant research equipment	Functional research programme in place Research meetings held Publications Number of research projects developed and implemented Number of research personnel on the ground Number of collaborative projects Mentoring plan / number of days spent with experienced researchers Inventory of equipment for research procured	-Nothing to report for Gonarezhou National Park -No Parks Resident Ecologist in Save Valley Conservancy.

9.7.4 Building Conservation Capacity(South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.4 Training and retraining programmes established	– Carry out a training needs assessment for law enforcement, resource and wildlife management, research and monitoring, education and awareness, community elephant management, etc. – Develop and implement strategies based on the needs assessment – Standardise and harmonize training in law enforcement	Training needs assessment report Training programmes established	-Training needs for law enforcement and research staff known.

9.7.5 Coordination, Collaboration and Programme Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 SEL Regional elephant conservation and management steering committee of 8 established (ZPWMA, SVC, MT, Bubi Conservancy, Chiefs' rep, GCP, ZRP, RDC) This committee should include a core set of competencies (and can co-opt expertise if needed).	– Develop TOR for the steering committee – Identify members – Oversee the implementation of the regional elephant strategy as per national mandate – Meet biannually – Attend national elephant management meetings	Functional committee meetings held biannually with adequate attendance	- Steering committee members identified - Logistics for first meeting have been concluded in collaboration with stakeholders
5.2 Links with neighbouring states to confer on the management of shared elephant populations strengthened	– GLTFCA coordinator to identify relevant stakeholders to participate in the implementation of the regional elephant action plan – Sustain collaboration with regional partners+(one committee member for the regional committee meetings) – Share knowledge / data of all 5 key components of the plan with the regional partners	Number of consultative meetings held Tangible regional collaboration and participation	-Relevant stakeholders known.
5.3 Coordination between the tourism industry (consumptive and non-consumptive) and the elephant management programme strengthened	– Identify consumptive and non-consumptive operators in SEL – Liaise with SOAZ, ZPHGA, ZATSO, ZHA, etc. – Encourage non-members to be affiliated to relevant associations – Hold quarterly meetings with operators – Consider scale of operations in non-consumptive tourism	Regular meetings and workshops convened with the operators	
5.4 Effective information dissemination and communication strategy implemented	– Ensure clear communication of progress against action plan to all relevant stakeholders – Identify target groups, i.e. traditional leaders, school groups, amongst others – Develop a communications strategy, making use of relevant media (print, social, road shows) – Implement communication strategy – Monitor and evaluate	Outreach programmes conducted	Outreach programmes conducted by the Gonarezhou Conservation Project's Liaison Officer and the Parks' Extension and Interpretation staff.

From: Liberty Nyaguse
To: "Vannorman, Tim"
Subject: RE: Zimbabwe"s Supplementary Elephant Management Plan (2015 - 2020)
Date: Wednesday, November 09, 2016 9:36:39 AM

Dear Tim

Thank you very much. Will await patiently

Best Regards

Liberty Nyaguse
National Elephant Manager
Cell: +263-772 130 074
Direct line: +263-4-790571

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From: Vannorman, Tim [mailto:tim_vannorman@fws.gov]
Sent: Wednesday, November 09, 2016 16:22
To: Liberty Nyaguse
Subject: Re: Zimbabwe's Supplementary Elephant Management Plan (2015 - 2020)

Dear Liberty,

Thank you very much for the supplementary elephant management plan. I have only had a chance to give it a quick review, but it appears to be very thorough. I should be able to give it a complete review in the next couple of days and will contact you as soon as I can.

Have a good day,

Tim

On Wed, Nov 9, 2016 at 2:06 AM, Liberty Nyaguse <lnyaguse@zimparks.co.zw> wrote:

> Dear Mr Timothy J Van Norman
>
> Please find as attached documentation relating to the Supplementary Elephant Management Plan for Zimbabwe as requested by yourselves.
>
> Best Regards
>
> **Liberty W Nyaguse**
> **National Elephant Manager**
> **Parks and Wildlife Management Authority**
>
> ***Cell:*** ***+263 772 130074***
> ***Phone:*** ***+263 4 790571/707626-9***
> ***Email:*** ***lnyaguse@zimparks.co.zw***

--
Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

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From:	Liberty Nyaguse
To:	tim_vannorman@fws.gov
Subject:	Zimbabwe"s Supplementary Elephant Management Plan (2015 - 2020)
Date:	Wednesday, November 09, 2016 2:07:36 AM
Attachments:	ZIMBABWE SUPPLEMENTARY NATIONAL ELEPHANT MANAGEMENT PLAN.pdf Letter to USFWS - Zimbabwe Supplementary Elephant Management Pl.pdf

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Dear Mr Timothy J Van Norman

Please find as attached documentation relating to the Supplementary Elephant Management Plan for Zimbabwe as requested by yourselves.

Best Regards

Liberty W Nyaguse
National Elephant Manager
Parks and Wildlife Management Authority

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Email: lnyaguse@zimparks.co.zw

From:	Hoover, Craig
To:	FWHQ DMA-STAFF
Subject:	Fwd: From Greenwire -- WILDLIFE: Elephant trophy imports get green light again
Date:	Wednesday, November 15, 2017 3:59:11 PM

FYI. There are also several NGO blogs on this subject. The FR Notice will be available in the reading room tomorrow and will publish on Friday.

craig
---------- Forwarded message ----------
From: **Parramore, Laury** <laury_parramore@fws.gov>
Date: Wed, Nov 15, 2017 at 1:59 PM
Subject: From Greenwire -- WILDLIFE: Elephant trophy imports get green light again
To: Barbara Wainman <barbara_wainman@fws.gov>, Matthew Huggler <matthew_huggler@fws.gov>, Gavin Shire <gavin_shire@fws.gov>, "Hoover, Craig" <Craig_Hoover@fws.gov>, Tim Vannorman <tim_vannorman@fws.gov>, Danielle Kessler <danielle_kessler@fws.gov>
Cc: Amy Jonach <amy_jonach@fws.gov>, Christina Meister <christina_meister@fws.gov>, Lisa Jones <lisa_m_jones@fws.gov>

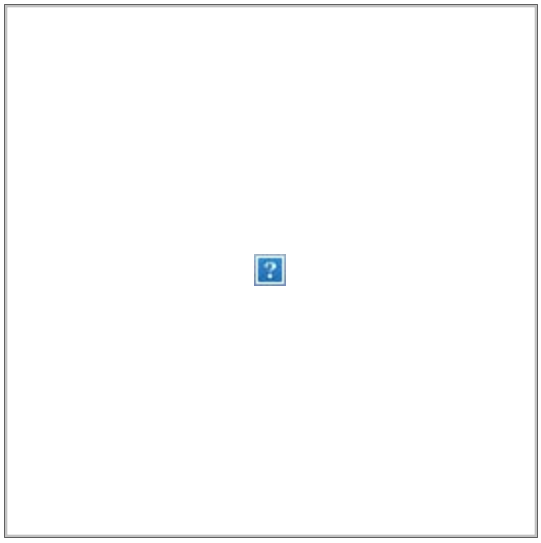
AN E&E NEWS PUBLICATION

WILDLIFE

Elephant trophy imports get green light again

Michael Doyle, E&E News reporter

Published: Wednesday, November 15, 2017



The Fish and Wildlife Service announced that elephants legally hunted in Zimbabwe and Zambia between 2016 and 2018 can be imported into the United States. Pxhere

Elephants legally killed in Zimbabwe and Zambia between 2016 and 2018 now can be imported into the United States, under a new Fish and Wildlife Service ruling that pleases hunters but could alarm some wildlife conservation advocates.

Revisiting a policy that's already sparked one court battle, the agency announced the new open door to certain imports at an African Wildlife Consultative Forum co-hosted by Tanzania and Safari Club International Foundation.

"Legal, well-regulated sport hunting as part of a sound management program can benefit the conservation of certain species by providing incentives to local communities to conserve the species and by putting much-needed revenue back into conservation," said FWS in a statement today.

The policy covers elephants hunted in Zimbabwe between Jan. 21, 2016, and Dec. 31, 2018, as well as elephants hunted in Zambia in calendar years 2016, 2017 and 2018.

"These positive findings for Zimbabwe and Zambia demonstrate that the Fish and Wildlife Service recognizes that hunting is beneficial to wildlife and that these range countries know how to manage their elephant populations," SCI Foundation President Paul Babaz said in a statement.

FWS's decision comes as the Interior Department is reaching out to the hunting community in a number of ways (***Greenwire***, Nov. 8).

Last week, Interior announced the establishment of the International Wildlife Conservation Council. The advisory group is supposed to raise public awareness of the "benefits that result from U.S. citizens traveling to foreign nations to engage in hunting," according to Interior.

The panel must include U.S. hunters actively engaged in "hunting conservation," as well as senior representatives of the "firearms or ammunition manufacturing industry" and the "archery and/or hunting sports industry," according to Interior's guidance.

Elephants in Zimbabwe are listed as threatened under the Endangered Species Act. The Obama administration's FWS banned elephant importation from Zimbabwe in 2014.

Zambia's elephants are listed as threatened.

The agency said in 2014 it could not make the finding that the sport-killing of the Zimbabwe elephants "would enhance survival of the species," as the law requires. Officials stated, in part, that the population of Zimbabwe elephants fell to 47,366 in 2013, down from 84,416 in 2007.

Safari Club International and the National Rifle Association filed suit to challenge the Zimbabwe ban. The groups contended FWS failed to support its ban with necessary findings and also challenged the agency's data on population and poaching.

A trial judge largely sided with FWS.

"The agency rationally determined that the status of the elephant population and Zimbabwe's management of the population did not warrant" a finding to allow imports, U.S. District Judge Royce Lamberth **ruled** last year.

A three-judge panel of the U.S. Court of Appeals for the District of Columbia Circuit heard oral arguments in the case last month (***Greenwire***, Oct. 13).

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Craig Hoover
Chief, Division of Management Authority
International Affairs
U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3803
ph: 703-358-2162
www.fws.gov/international

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From: Hoover, Craig
To: Greg Sheehan
Cc: Tim Van Norman; Danielle Kessler; Laury Parramore; Gavin Shire; Gloria Bell; Richard Ruggiero; Cogliano, Mary
Subject: Re: Zimbabwe coup
Date: Wednesday, November 15, 2017 9:34:43 AM

Thanks Greg. We will stay the course. Safe travels back.

craig

On Wed, Nov 15, 2017 at 9:02 AM, Greg Sheehan <greg_j_sheehan@fws.gov> wrote:

> Hi Craig
>
> We are here with several folks from the Zimbabwe government. While there is a coup under way it is believed by these staff(as our conversations this morning) that it will likely be quick and not result in any major changes in environmental staffing or programs.
>
> Of course we will continue to monitor but at at this point it doesn't appear that this unrest will have many impacts to the wildlife management program, regardless of the final resolution.
>
> Greg
>
> Greg Sheehan
> Principal Deputy Director
> US Fish and Wildlife Service
> 202-208-4545 office
> 202-676-7675 cell
>
> On Nov 15, 2017, at 4:16 PM, Hoover, Craig <craig_hoover@fws.gov> wrote:
>
> > Greg/Tim,
> >
> > I'm sure you're already aware of this, but sharing just in case. My suggestion is that we continue to closely monitor the situation and gather information on possible impacts on current wildlife management, but that it doesn't at this point affect our findings for elephants or lions. Any other thoughts or info to share?
> >
> > Best,
> >
> > craig
> > ---------- Forwarded message ----------
> > From: **Danielle Kessler** <danielle_kessler@fws.gov>
> > Date: Wed, Nov 15, 2017 at 7:15 AM
> > Subject: Zimbabwe coup
> > To: Craig Hoover <Craig_Hoover@fws.gov>, Laury Parramore <laury_parramore@fws.gov>
> >
> > Well, this is unfortunate timing...
> > https://www.google.com/amp/s/amp.theguardian.com/world/2017/

nov/15/mugabe-family-military-takes-control-zimbabwe-mnangagwa

Sent from my iPhone

--
Craig Hoover
Chief, Division of Management Authority
International Affairs
U.S. Fish and Wildlife Service
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November 21, 2017

Secretary Ryan Zinke
Department of the Interior
1849 C St., N.W.
Washington, D.C. 20240

Re: FWS Issuance of Import Permits for Zimbabwe and Zambia Hunting Trophies

Dear Secretary Zinke:

On November 17, 2017, the Fish and Wildlife Service (FWS) announced its finding that "killing of African elephant trophy animals in Zimbabwe, on or after January 21, 2016, and on or before December 31, 2018 will enhance the survival of the African elephant"[1], thus allowing elephant trophies from Zimbabwe to be imported in to the United States. Additionally, the Service released a similar finding for elephant trophies from Zambia.[2] The FWS also recently made positive enhancement findings on the lion trophy imports from Zimbabwe and Zambia.[3] The Humane Society of the United States (HSUS) and Humane Society Legislative Fund (HSLF) collected comments from our members and supporters who were outraged by these actions.

Regarding the Zimbabwe elephant decision, attached are comments from 32,308 HSUS supporters and 32,267 HSLF supporters urging FWS to not reverse critical elephant protections established in 2014. Additionally, there were 387,132 of signatories on a Care2 petition calling for FWS to stop supporting importation of elephant and lion trophies from Zambia and Zimbabwe.[4]

We are grateful for President Trump's announcement, that he is putting "big game trophy decision on hold"[5] and that the "[b]ig-game trophy decision will be announced next week".[6] We strongly urge the Department to rescind the findings for Zimbabwe and Zambia elephants and lions trophy imports, as the best available

---

[1] 82 Fed. Reg. 54,405.
[2] https://www.fws.gov/international/pdf/enhancement-finding-2017-elephant-Zambia.pdf.
[3] https://www.fws.gov/international/permits/by-activity/sport-hunted-trophies-lions.html.
[4] *https://www.thepetitionsite.com/takeaction/721/417/558/.*
[5] *Statement of President Trump, Nov. 17, 2017 at 8:47 pm,*
https://twitter.com/realDonaldTrump/status/931685146415255552.
[6] Statement of President Trump, Nov. 19, 2017 at 6:57 pm,
https://twitter.com/realDonaldTrump/status/932397369655808001.

science shows that elephant and lion trophy hunting in these countries does not enhance the survival of the species.

Sincerely,

Keisha Sedlacek
Senior Regulatory Specialist, Federal Affairs
Humane Society Legislative Fund
1255 23rd St., NW
Washington, DC 20037

From:	Keisha Sedlacek
To:	Vannorman, Tim
Subject:	Lion and elephant trophies- enhancement findings
Date:	Tuesday, November 21, 2017 2:03:47 PM
Attachments:	Cover letter for Supporters Comments 11.21.17 pdf.pdf

Tim,

As we spoke about today, the attached letter was sent to Secretary Zinke regarding Zimbabwe and Zambia hunting trophies and comments we had collected from our supporters. If you would like copies of the actual comments, please let me know and I can send the files over to you.

Additionally, would you please send over the enhancement findings for lion trophies for South Africa, and for elephant trophies for South Africa and Namibia?

Best,

Keisha

Keisha Sedlacek
Senior Regulatory Specialist, Federal Affairs
Humane Society Legislative Fund
1255 23rd Street, NW, Suite 455
Washington, DC 20037
T: 202-955-3661

22 November 2017

Mr. Donald J. Trump, President
United States of America
1600 Pennsylvania Ave.
Washington, D.C. 20006

RE: Conservation of African Elephants in Zimbabwe, Zambia, and other African countries

President Trump,

The conservation of threatened and endangered species is one of the most formidable challenges facing professional wildlife managers. Conservation of these species requires biological expertise and effective engagement of stakeholders. The Wildlife Society supports cooperative programs, both nationally and internationally, that are designed to manage and conserve threatened and endangered populations. *(Threatened & Endangered Species Standing Position)*

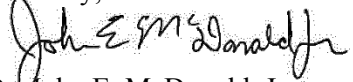
The Wildlife Society also believes that human-wildlife interactions should enhance the overall value of wildlife resources—creating incentives to conserve and perpetuate wildlife through enhanced economic, cultural, and social importance *(Responsible Human Use of Wildlife Standing Position)*. Hunting and other means of harvest, when based on biological principles and properly regulated, has clearly been shown to enhance wildlife conservation efforts and be an appropriate human use of wildlife. *(Hunting Standing Position)*

Importation to the U.S. of hunter-harvested African elephants is permitted under the U.S. Endangered Species Act's Section 4(d) rule, where such activities are determined to enhance the survival of the population; such imports are currently permitted from Namibia and South Africa. The U.S. Fish & Wildlife Service has undertaken a rigorous review of the African elephant management plans for Zambia and Zimbabwe and has determined these plans, and their restrictive harvest components, will enhance conservation efforts for those populations.

The Wildlife Society supports sustainable harvest of wildlife and the concept that such hunting in Africa can be a source of funding that otherwise would not be available for local conservation efforts. Fees paid by foreign hunters provide funding that can create incentives for local communities to maintain large and potentially dangerous wildlife on the landscape, rather than kill them as pests, and retain their habitats, rather than convert them to agriculture or pasture. Hunter-generated funds are used to help resolve local human-wildlife conflicts, support anti-poaching and wildlife trafficking efforts, and secure tracts of suitable habitat.

We support and applaud the U.S. Fish & Wildlife Service's science-based process for evaluating African elephant management plans, and for determining that any harvest components will contribute to the survival of the species. Given the apparent political transition underway in Zimbabwe, we recommend the Service determine if the plans it has already reviewed for Zimbabwe are supported by the country's new leadership before a final decision is rendered regarding elephant imports from that country. We encourage your administration to advance science-based policies that will conserve and enhance African elephant populations and support sustainable use of wildlife resources.

Sincerely,



Dr. John E. McDonald, Jr.
President

Cc: Ryan Zinke, David Bernhardt, Greg Sheehan, Jim Kurth, Steve Guertin

From:	Bell, Gloria
To:	Greg Sheehan; Matthew Huggler; Craig Hoover; Vannorman, Tim
Subject:	Fwd: Hunted Elephant Importation - Letter from The Wildlife Society
Date:	Wednesday, November 22, 2017 10:33:27 AM
Attachments:	TWS_ElephantImportLetter_FINAL_2017.11.22.pdf

FYI

Gloria Bell | Acting Assistant Director for International Affairs | U.S. Fish & Wildlife Service
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---------- Forwarded message ----------
From: **Keith Norris** <knorris@wildlife.org>
Date: Wed, Nov 22, 2017 at 10:29 AM
Subject: Hunted Elephant Importation - Letter from The Wildlife Society
To:

Please see the attached letter from The Wildlife Society regarding the importation of elephant trophies from Zimbabwe, Zambia, and other African countries. The letter supports science-based policies that promote sustainable use of wildlife, and recognizes that hunting can enhance wildlife conservation efforts.

Best,

Keith

Keith Norris, AWB®
Director, Wildlife Policy & Programs
The Wildlife Society

425 Barlow Place, Suite 200
Bethesda, MD 20814
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MINISTRY OF TOURISM AND ARTS

OFFICE OF THE PERMANENT SECRETARY

KWAMAKOSI
CAIRO ROAD
P.O. Box 30575
10101 LUSAKA

23rd November 2017

The Director
US Fish and Wildlife
Department of the Interior
1849C Street NW, Room 3358
Washington, DC 20240

Dear Sir,

RE: IMPORTATION OF ELEPHANT TROPHIES INTO THE UNITED STATES OF AMERICA

We write in reference to the above subject, especially after considering the recent occurrences in the public media. In November 2017, we received notification that USA would accept imports of elephant trophies from Zambia. However, it has been reported in the media recently that this had been put on hold. We therefore hasten to point out the following facts for your consideration on the matter:

1. There has never been a "ban" on the importation of elephant trophies from Zambia. In October 2011, the Fish and Wildlife Service (FWS) made a positive enhancement finding to authorize the import of regulated elephant hunting trophies from Zambia. However, 2013 and 2014, Zambia's Wildlife Authority suspended hunting to review practices, and obtain more current wildlife population information.

   In 2015, Zambia's government lifted the hunting suspension, and set a conservative annual quota of 80 elephants. In August 2016, the Chief of Permits sent an email indicating that the FWS was trying to issue import permits for elephant trophies from Zambia before the CITES Conference of the Parties in September 2016, based on an April 2015 Non-Detriment and Enhancement Finding the FWS received from Zambia's Wildlife Authority. At the CITES Conference of the Parties, the Chief of Permits indicated that elephant permits from Zambia would likely be issued before the end of the year.

Interesting. Pls. make sure POL/ECON has a copy, along w/ USAID & PAS. Curious to hear from Gunner when he's back regarding the veracity of some of M. Hale's claims.

2. Management of elephant is through a well-articulated policy, law and management plan and formalized utilization guidelines. Management guidelines have set standards of utilization and the quality of trophies in agreement with International Standards. According to these standards, exportable tusks must be either 15 kg or 1.5m or both, and more.

3. Zambia's elephant population inhabits seven sub-regions covering National Parks and Game Management Areas. According to the 2016 African Elephant Status Report, Zambia's elephant population is estimated at over 21,000. This is generally considered stable over the past 25 years, and is stable compared to Zambia's population in 1992, when the FWS determined to maintain elephant as "threatened" listed. However, several population surveys indicating an estimate closer to 30,000 were not included in the 2016 African Elephant Status Report, and Zambia's wildlife authority estimates the country's population at more than 30,000.

4. Utilization of elephant is through a carefully set quota considering the population and trends. Zambia maintains a cautious quota of way below the official voluntary quota of 80 elephants. A national quota of 80 elephants represents less than 0.4% of a population of 21,967 elephant. Actual hunting offtakes are negligible and have no impact on the national population growth rate.

   2015 Hunting offtake (% of Total Elephant Population): 3 (0.014%)
   2016 Hunting offtake (% of Total Elephant Population): 12 (0.055%)
   2017 Hunting offtake (% of Total Elephant Population): 11 (0.050%)

5. Elephant sport hunting contributes significantly not only to the income for conservation of the African Elephant itself, but also to the livelihoods of local communities through income and provision of protein in the meat distributed. Between 2010 and 2012, regulated hunting revenues accounted for approximately 32% of the operating budget funding for Zambia's wildlife authority. With a potential to generate nearly $1 million in elephant hunting fees, in 2015 and 2016, these fees amounted to only $150,000, due mainly to import restrictions. This amount is divided, on 50:50 ratio, between DNPW and the Community Resource Boards in Game Management Areas (GMA). DNPW uses this revenue for payment of Community Scout salaries and resource protection through Anti-poaching operations, as well as management, surveys, staff training, and other activities. DNPW's expenditures are mostly for anti-poaching related activities.

6. Moreover, under the wildlife management regulations in Zambia, at least 50% of harvested game meat is donated and distributed to local communities. A 2015 study found that hunting outfitters in three GMAs contributed an average of 6,000 kilograms of harvested meat per season, and estimated that outfitters across all GMAs could provide ~130 tons of much-needed protein annually. This reduces the incentive for bush meat poaching in these areas bordering and buffering Zambia's National Parks.

7. The benefits from elephant hunting mitigate the hardship of communities that they have through conflict. These benefits persuade communities to have a positive attitude towards elephants and other wildlife species.

8. The consequence of withdrawing these benefits from communities is the destruction of the species through poaching and conflict retaliation. Elephant hunting helps in the conservation of the species itself through management and conflict mitigation.

9. Hunting outfitters' concession agreements with DNPW and the Community Resource Board identify mandatory anti-poaching obligations and expenditures. At present, 75 Community Resource Boards employ over 750 wildlife Community Scouts and 79 support personnel, at a monthly cost of over $38,800. Those scouts are paid emoluments from revenues from hunting tourism. A small sample of four operators spent over $201,000 on anti-poaching in 2015, community scouts and on equipping their own anti-poaching teams. Hunters largely pay for this anti-poaching support, and over half of all hunting clients in Zambia are from the U.S.A.

With the above reflections, we remain hopeful, despite the pressures that you will favourably consider our plea that the survival of the African Elephant in Zambia and other range states largely depends on the positive decision on this matter. We also wish to encourage the US Fish and Wildlife to visit Zambia and appreciate the vital link between trophy hunting and conservation.

Yours faithfully,

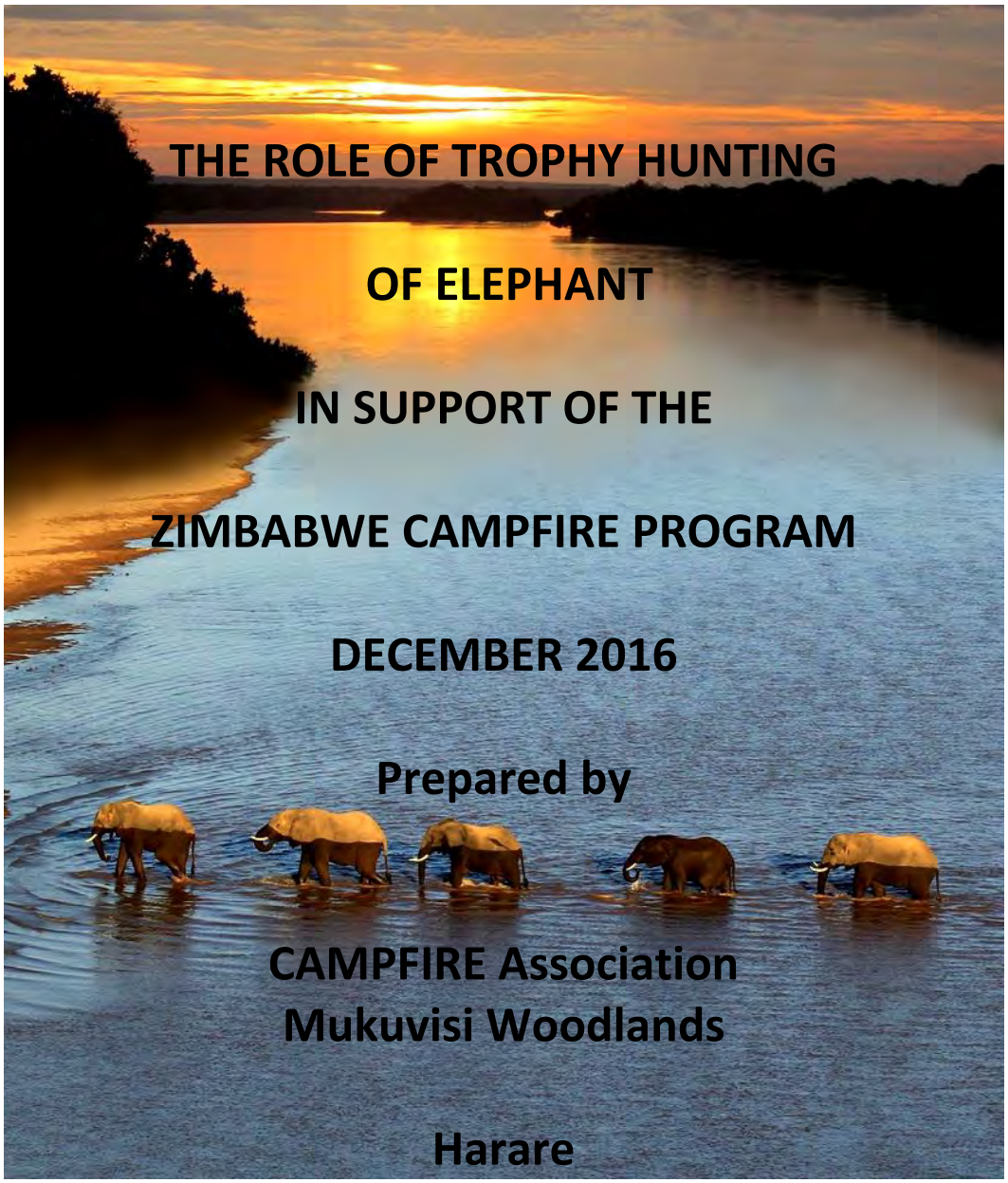
Dr. Liya Mutale (Mrs.)
Permanent Secretary
Ministry of Tourism and Arts

cc: Minister of Tourism and Arts, Zambia

cc: Permanent Secretary – Ministry of Foreign Affairs, Zambia

cc: USA Ambassador to Zambia, Lusaka ✓

cc: Director – National Parks and Wildlife



THE ROLE OF TROPHY HUNTING

OF ELEPHANT

IN SUPPORT OF THE

ZIMBABWE CAMPFIRE PROGRAM

DECEMBER 2016

Prepared by

CAMPFIRE Association
Mukuvisi Woodlands

Harare

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ACRONYMS AND ABBREVIATIONS

AA	Appropriate Authority
CA	CAMPFIRE Association
CAMPFIRE	Community Areas Management Program for Indigenous Resources
CCG	CAMPFIRE Collaborative Group
DNPWLM	Department of National Parks and Wildlife Management
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
RDCs	Rural District Councils
SOAZ	Safari Operators Association of Zimbabwe
USAID	United States Agency for International Development
ZPHGA	Zimbabwe Professional Hunters and Guides Association
ZPWMA	Zimbabwe Parks and Wildlife Management Authority

Acknowledgements

This report has been prepared on behalf of the CAMPFIRE Association by Vernon Booth, with support from Safari Club International Foundation. The input from all CAMPFIRE Managers in the respective RDCs is greatly appreciated. The CAMPFIRE Association also acknowledges the help provided by Mr. Kennedy Chiremba with data analysis.

Cover photo: Lin Berrie, Chilo Lodge, Mahenya CAMPFIRE Area

EXECUTIVE SUMMARY

In April 2014, the United States Fish and Wildlife Services (FWS) suspended the import of elephant trophies taken in Zimbabwe. In March 2015, the suspension was extended to include future hunting seasons. For it to reverse this decision, the FWS must make a finding that the killing of the animal whose trophy is intended for import would enhance the survival of the species in the wild. The Zimbabwe Parks and Wildlife Management Authority (ZPWMA) defended its position and provided the FWS with significant amounts of information and data related to elephant management. While this is acknowledged, the FWS was still of the opinion that its concerns had not been addressed, and identified six areas where additional information was required.

The CAMPFIRE Association has taken these into consideration, especially the issues regarding "excessive retention of generated funds by Rural District Councils", and how much revenue elephant sport-hunting provides and how much of that comes from U.S. hunters. This document addresses part of the information requested by the FWS under "Revenue Utilization" to demonstrate that by allowing the importation of trophies taken by U.S. hunters, the survival of elephants in Zimbabwe would be enhanced. To support this position, the CAMPFIRE Association outlines the evolution of the CAMPFIRE Program, describing the extent of its coverage and the impact that it has had on wildlife conservation in Communal Areas of Zimbabwe.

Evidence from the 2014 national elephant survey is provided to show that Zimbabwe has a substantial elephant population that is managed sustainably through an adaptive quota setting mechanism. Data from 9 CAMPFIRE Districts that participated in this audit of CAMPFIRE revenue shows that approximately 60% of the allocated CAMPFIRE elephant quota is utilized and that the majority of hunters (53%) originate from America. These hunters have contributed US$8 million towards the CAMPFIRE Program during the period 2010-2015 compared to US$8 million by the other 40 nations.

The income generated from trophy fees in the last 6 years (2010 – 2015) is approximately US$11.4 million of which elephant trophy fees contributed 65%, while a further US$4 million has come from the sale of hides, concession fees and other sundry income. These funds have been distributed to CAMPFIRE communities in various Wards who received approximately 57% (range 39% - 77%) of the Trophy Fees.

A standardized tool designed to gather baseline data has provided information on the physical and human parameters of the 9 participating Districts including how and on what the revenues from hunting have been utilized. At the District level, approximately 80% of the funds are used to support the administration and management of the CAMPFIRE program, including investment on law enforcement. In contrast, 55% of revenues provided to the producer Wards are channeled towards supporting social services such schools, clinics and other programs that benefit the community.

The cost of living with wildlife, and particularly elephants, is shown through providing data on the scale of crop damage (7,000ha over 6 years) that has a significant impact in terms of its monetary value on rural communities who face food insecurity and deep poverty (average income US$1 a day). 96 human lives were lost to wildlife attacks, with elephant accounting for more than half of those deaths. Yet despite these challenges, communities still retain a high level of tolerance for elephants, but this support is rapidly dissipating because of the loss of income from trophy hunting. This places almost two million hectares of wild land at risk, including the risk of increasing retaliatory killing through poisoning and illegal wildlife crime.

A way forward is discussed outlining how the resumption of trophy imports can offset the challenges facing the CAMPFIRE program and through this, enhance the conservation of elephant outside of the protected areas.

1 INTRODUCTION

In April 2014, the United States Fish and Wildlife Services (FWS) suspended the import of elephant trophies taken in Zimbabwe. The suspension was extended to include future hunting seasons on March 26, 2015. In May 2015, the Assistant Director (International Affairs) from the United States Fish and Wildlife Service (FWS), Mr. Byron Arroyo, wrote to the (then) Minister of Environment, Water and Climate outlining the reasons why the Service made a determination on 26th March 2015 that it was unable to authorize the import of elephant trophies taken in Zimbabwe in future. This is further explained in detail in the "Enhancement Findings for African Elephant Taken as Sport-hunted Trophies in Zimbabwe during 2014" published on the 7/22/14 (see reference FWS/AIA/DMA).

The FWS make the point that for it to authorize imports of sport-hunted African elephant trophies into the USA, the Service must be able to determine that the requirements of the special rule for the African elephant under the U.S. Endangered Species Act (ESA) have been met (see 50 CFR 17.40(e)(3)(iii)C). Specifically, the FWS must make a finding that the killing of the animal whose trophy is intended for import would enhance the survival of the species in the wild.

In defense of this, the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) provided the FWS with significant amounts of information and data related to elephant management. The FWS also communicated with various stakeholders including the Safari Operators Association of Zimbabwe (SOAZ), Zimbabwe Professional Hunters and Guides Association (ZPHGA), the CAMPFIRE Association, as well as individual professional hunters and outfitters, and independent scientific researchers.

The FWS acknowledged this input but still believed the data received did not fully address the questions regarding how elephants are managed in Zimbabwe, and how, by allowing the importation of trophies taken by U.S. hunters, that the survival of elephants in Zimbabwe would be enhanced. Six areas were identified where additional information was required. These are:

1: Updated Elephant Management Plan with formalized targets or indicators

2: Current elephant population data and the impact of hunting on the elephant population

3: Levels of poaching and prevention, including MIKE and PIKE data

4: Regulation and enforcement, particularly regarding the use of funds generated by U.S. hunters to support law enforcement and management

5: Sustainable use of elephant, specifically information of the levels of legal and illegal offtake

6: Revenue utilization from the hunting of elephant on Communal Lands, Safari Areas, Forestry and Private Conservancies.

The CAMPFIRE Association is not in a position to address all of these issues since these are the prerogative of the ZPWMA who is responsible for the conservation and management of elephant at the national level. Nonetheless, the CAMPFIRE Association is able to address part of the information requested under "Revenue Utilization", and contribute indirectly to the other five issues raised by the FWS.

2 Overview of Community Based Natural Resources Management in Zimbabwe

There are numerous reports and references in the literature that analyze the community based natural resources management program (CBNRM) in Zimbabwe. A more recent assessment can be found in the document prepared for USAID Zimbabwe by Mazambani and Dembetembe (2010).

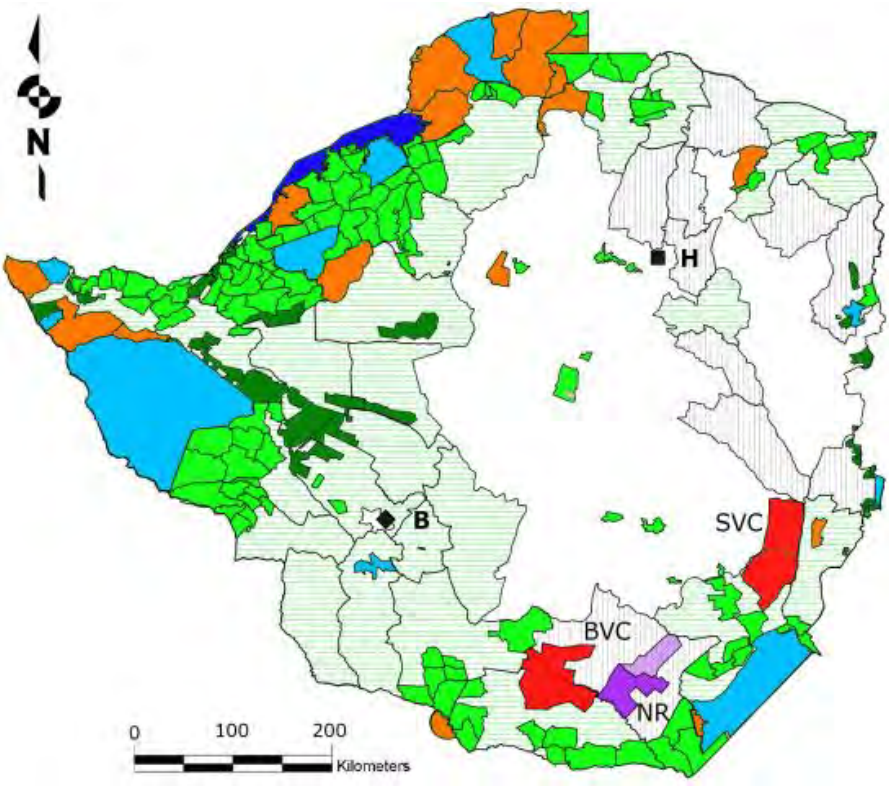


Figure 1: The location of CAMPFIRE areas (in light green) relative to National Parks (blue), Safari Areas (orange), Forest Areas (dark green) and Conservancies (red).

In 1982, the government amended the 1975 Parks and Wildlife Act to enable Rural District Councils (RDCs) to obtain 'appropriate authority' (AA) to utilize wildlife for commercial gain. The proposed changes were aimed at finding alternative forms of land use to subsistence agriculture on marginal lands. At that time, there was no particular model as to how this could happen without threatening the resource base. The (then) Department of National Parks and Wildlife Management (DNPWLM) began to explore options within the framework of an integrated landuse plan for the communal lands bordering National Parks and Safari Areas. This Act provided an opportunity to extend to communities in the Communal Lands the benefits that the private landowners enjoyed as a result of the 1975 Parks and Wild Life Act. This eventually led to the birth of Zimbabwe's Community Areas Management Program for Indigenous Resources (CAMPFIRE), which had far reaching impacts on wildlife productivity as well as the socio-economic wellbeing of CAMPFIRE communities.

2.1 The CAMPFIRE Program

The CAMPFIRE program was conceptually designed to focus on wildlife, woodlands, water, grazing resources, and grasslands. In practice, it focused on managing wildlife because of the direct monetary benefits which this resource offered to producer communities. The CAMPFIRE concept (see Murphree, 1993; Jones and Murphree, 2001) was developed in response to the realization that unless communities living adjacent to National Parks can obtain direct value from wildlife, they will not protect the wildlife. These communities would also need to have a much greater say in how those benefits would be derived and utilized.

While the 1982 amendment of the 1975 Parks and Wildlife Act permitted devolution of authority over wildlife to Rural District Councils (RDCs), the DNPWLM had meager resources to render the program operational (Jones and Murphree, 2001). The DNPWLM therefore turned to such institutions as the Center for Applied Social Sciences (CASS) at the University of Zimbabwe, which was assigned a socio-economic research and evaluation role; the WWF Multispecies Animal Production System Project in Zimbabwe; and the Zimbabwe Trust—an NGO focusing on rural development. These agencies had different but complementary objectives and together with the DNPWLM they formed the original CAMPFIRE Collaborative Group (CCG).

From 1986 to 1988, DNPWLM and its CCG partners engaged in discussions with selected communities and RDCs to identify locations for the inception of the program. The discussions focused on two main criteria, namely:

(a) voluntary interest in participation by communities and District Councils, and

(b) the presence of wildlife populations capable of producing sustainable and economically significant revenues.

The CCG work during this period also involved securing political support for the program, and attending to the demands of institutional and administrative detail associated with the conferment of Appropriate Authority (AA) by DNPWLM to RDCs, including the guidelines for awarding revenues and other benefits to communities from the the number of animals harvested within a local community's area each hunting season.

The agreed but non-binding guidelines stated that not less than 50% of the revenues was to be paid to the communities (as wards), not more than 35% was to be allocated to wildlife management (habitat management, fire control, monitoring, hiring of game scouts, etc.), and that 15% could be retained by the District Councils as an administrative levy.

Under the CCG, the CAMPFIRE Program attracted donor support and evolved through a number of phases.

- **Phase I** 1989-1994: ($10m grant support – USAID and various partners). The period saw the initiation of CAMPFIRE and donor support was channelled towards the improvement of safari hunting in major districts that had been granted AA by 1995. This is also the period in which CAMPFIRE Association was established to coordinate the program.
- **Phase II** 1994-2003: ($30m - USAID). This support focused on the capture of other natural resources (e.g. timber, sand, fishing, etc.). High-end non-consumptive tourism facilities were developed in Nyaminyami and Chipinge districts in the early 1990s, and 12 'joint venture' eco-tourism lodges were in operation in communal areas by 1999. Small grants were also provided to support the development of eco-tourism, crafts, and other community based natural resources management projects. Investments were also made in the production of natural resource products (e.g. fish in Beitbridge, Mwenezi; mopane worms in Bulilima Mangwe and Gwanda; honey in Binga, Kusile, Mutoko, and Nyanga districts) and many other products.
- **Phase III** 2003-2007: ($165,000 – Ford Foundation). This period saw the cessation of major donor funding to CAMPFIRE, and it also coincided with larger macro level policy changes in

Zimbabwe after 2000, and the subsequent adverse socio-economic conditions. This led to the collapse of financial and technical support previously provided by the CCG.

- **Phase IV** 2007-present: ($350,000 WK Kellogg Foundation). During this period, there was hyper-inflation, which led to the loss of income from hunting in real terms. This situation stabilised in 2009, when multiple foreign currencies were introduced. The CAMPFIRE Association maintained operations through a 4% levy paid by major hunting districts amounting to less than $100,000 annually.

Following are key achievements in the development of CAMPFIRE (see Mazambani and Dembetembe, 2010):

I. Guruve and Nyaminyami, the first RDCs to be granted AA status, received their first hunting revenues in 1988. This had a dramatic effect in that many districts that are rich in wildlife applied for AA status and by the end of 1991 eleven additional districts had been granted AA status.
II. By the end of 1991, the 13 districts participating in the program collectively grossed US$1.1 million in revenue for that year.
III. By 1995 there were 23 districts participating in the program.
IV. The CAMPFIRE Association (CA), the secretariat for all districts with CAMPFIRE activities, was formed in 1992. Its primary objectives were to promote the wildlife interests of RDCs and to serve as an association of producer communities. The association played an important role in securing full government support for wildlife management in communal lands so that CAMPFIRE became a recognized conservation program.
V. Between 1995 and 2000 CAMPFIRE not only witnessed growth in terms of attracting more districts, but also in building the capacity of the RDCs, and in diversifying their activities to include other natural resources. The number of RDCs that were awarded AA status to manage wildlife increased from 2 in 1988 to 27 in 1996. Institutional capacity building grants via United States Agency for International Development (USAID) funding were secured for 24 districts from 1996 to 1999.
VI. Between 1989 and 2001, CAMPFIRE revenues amounted to almost USD $ 20.3 million, 97% of which originated in the original 13 districts. Of this, 49% was disbursed to communities (118 wards with over 121,500 households), 20% used for wildlife management, just over 12% retained by the District Councils as a levy, 3% used for other expenses (including the then 1.5% levy to the CAMPFIRE Association), and about 15% was retained by the RDCs pending allocation (Khumalo, 2003). Almost 90% of this income came from safari trophy hunting.
VII. The period from 2001 to 2003 witnessed two significant developments in CAMPFIRE:
    a. formation and registration of community trusts as a strategy for devolving decision making and control over resources from the RDCs to community groups, and
    b. a concerted drive to diversify CAMPFIRE. Twenty-eight non-wildlife-based community projects received financial support through CAMPFIRE compared to only five wildlife-based community projects.
VIII. At its peak in 2002, CAMPFIRE encompassed 53 districts with AA, though only 23 of these really functioned as intended, while only 12 received regular income from wildlife.
IX. The Association has spearheaded the revision of CAMPFIRE revenue sharing guidelines to improve the community's share of income from 50% to 55% of hunting income. A Direct Payment System was developed in 2006 to ensure that communities receive their income on

time. A standard hunting contract has been developed to improve hunting administration by RDCs.

In summary, CAMPFIRE protects about 50,000 km^2 (12.7%) of land in Zimbabwe (Figure 1). Benefits from wildlife and other incomes encompass:

- Approximately 777,000 households (25%) in Zimbabwe benefited from CAMPFIRE directly or indirectly;
- Approximately 25% of Zimbabwe's people are receiving incentives to conserve wildlife and prevent anti-poaching through CAMPFIRE;
- Between 1994 and 2012, CAMPFIRE generated US$39 million of which US$21.5 million was allocated to communities and used for resource management (22%), household benefits (26%), and community projects (52%).
- About 90% of CAMPFIRE revenue comes from hunting with elephant hunting contributing up to 70% of annual revenue.
- Based on Constitution of the CAMPFIRE Association as amended in 2007, all major RDCs use CAMPFIRE revenue sharing guidelines, and in these districts revenue is paid directly into community controlled bank accounts by safari operators using the following guideline:
  - RDC fees (41%), CAMPFIRE Association Levy (4%), and CAMPFIRE community (55%).

In the following sections, we describe how the income from the hunting of elephant is generated and utilized using data from 9 Districts (Beitbridge, Binga, Bulilima, Chipinge, Chiredzi, Hwange, Mbire, Nyaminyami, and Tsholotsho) for the period 2010 and 2015[1]. For each of these areas we provided:

- Total number of elephant hunted
- Total revenue earned from elephant (and other trophy species)
- How the revenue is spent on various management and social services

We also provide examples of community project support, and the impact of human-wildlife conflict over this period.

3 Sustainable Use and Utilization of CAMPFIRE Resources and Revenues

The CAMPFIRE program relies almost exclusively on income from hunting. Since 2009, the number of RDCs where hunting is practiced has decreased, mostly because of the prevailing socio-economic conditions that has resulted in high levels of poverty. This is seen as the key driver of the escalating levels of illegal wildlife crime, and poaching of elephant in particular. Maintaining elephant numbers outside of the protected areas is important to their overall conservation, and the reason why Zimbabwe regards the sustainable utilization of all wildlife as critical to its national conservation strategy. The hunting of elephant in CAMPFIRE areas thus plays an important role and is the major source of income to communities in these areas.

[1] Hurungwe provided partial information, as explained in relevant parts of the report

3.1 NUMBERS, DISTRIBUTION AND REGIONAL TRENDS OF ELEPHANT IN ZIMBABWE

Elephants are distributed in four main regional populations in Zimbabwe, namely, Northwest Matabeleland, the Sebungwe, the mid-Zambezi Valley, and the South-East Lowveld**.** Crude ecological densities vary between 2.16 elephant/km^2 in Northwest Matabeleland and 0.46 elephant/km^2 in the Sebungwe region**.**

Elephant densities in the Communal Areas varies from 1.50 elephant/km^2 in the south-east Lowveld to 0.06 elephant/km^2 in the Sebungwe region. Overall it is estimated that 5,000 elephants reside in Communal Areas and occupy approximately 16,000km^2 (Table 1, Zimbabwe Elephant Management Plan: 2015-2020).

Table 1. Numbers and densities of elephants in the four regions of elephant range within Zimbabwe. (Source: Zimbabwe National Elephant Management Plan 2015 - 2020, see Dunham *et. al.* 2015a, b, c and d).

Name of Region & Area	Area (km2)	Estimated Number of Elephants	Density of Elephants/km^2
NW Matabeleland	**24,989**	**53,991**	**2.16**
Hwange National Park	15,180	45,846	3.02
Matetsi Complex	4,402	4,843	1.10
Forest Areas	2,332	1, 101	0.47
Communal Lands	**3,075**	**2,201**	**0.72**
Sebungwe	**15,529**	**3,407**	**0.22**
Parks & Wildlife Estate	6,234	2,894	0.46
Forest Areas	261	16	0.06
Communal Lands	**9,034**	**497**	**0.06**
Mid-Zambezi Valley	**16,014**	**11,656**	**0.73**
Parks & Wildlife Estate	12,257	9,752	0.80
Communal Lands	**3,757**	**1,904**	**0.51**
South East Lowveld	**8,835**	**13,037**	**1.48**
Gonarezhou NP & Malapati SA	5,118	11,120	2.17
Save Conservancy	3,496	1,585	0.45
Communal Lands	**221**	**332**	**1.50**
Mozambique Border	*1,574*	*0*	*0*
National Total*	**65,367**	**82,091**	**1.23**
Parks & Wildlife Estate	43,191	74,455	1.75
Forest Areas	2,593	1,117	0.43
Save Conservancy	3,496	1,585	0.45
Communal Lands	**16,087**	**4,934**	**0.18**

* The survey did not include Bubye Valley Conservancy or the Tuli Safari Area and some other small populations that likely add another 1,000 elephants to the estimated total for the country. The area surveyed in Mozambique is not included in the national total or in the South-East Lowveld total area.

3.2 ELEPHANT QUOTA ALLOCATION AND UTILISATION

Zimbabwe is allocated an export quota of 500 elephants (1,000 tusks) in terms of the CITES regulations (see https://cites.org/eng/res/10/E-Res-10-10R16.pdf). In practice, Zimbabwe adopts an adaptive management strategy that sets the overall elephant quota at up to 0.75% of the overall population. This implies that the maximum national quota should not exceed 600 animals at the current population estimate of 80,000 elephants. However, to maintain trophy quality at approximately 35kg (77lbs), the national quota is set at 0.3 – 0.5% of the overall population i.e. 240 – 400 elephants, assuming an average offtake of 60% (R.B. Martin, pers. comm.).

The approach applied to the CAMPFIRE areas is to set quotas that use parameters that are higher than these national guidelines. This strategy is adopted to provide incentives to local communities that reside in areas where high levels of human-elephant conflict is recorded, and to facilitate benefits to local communities through sport hunting.

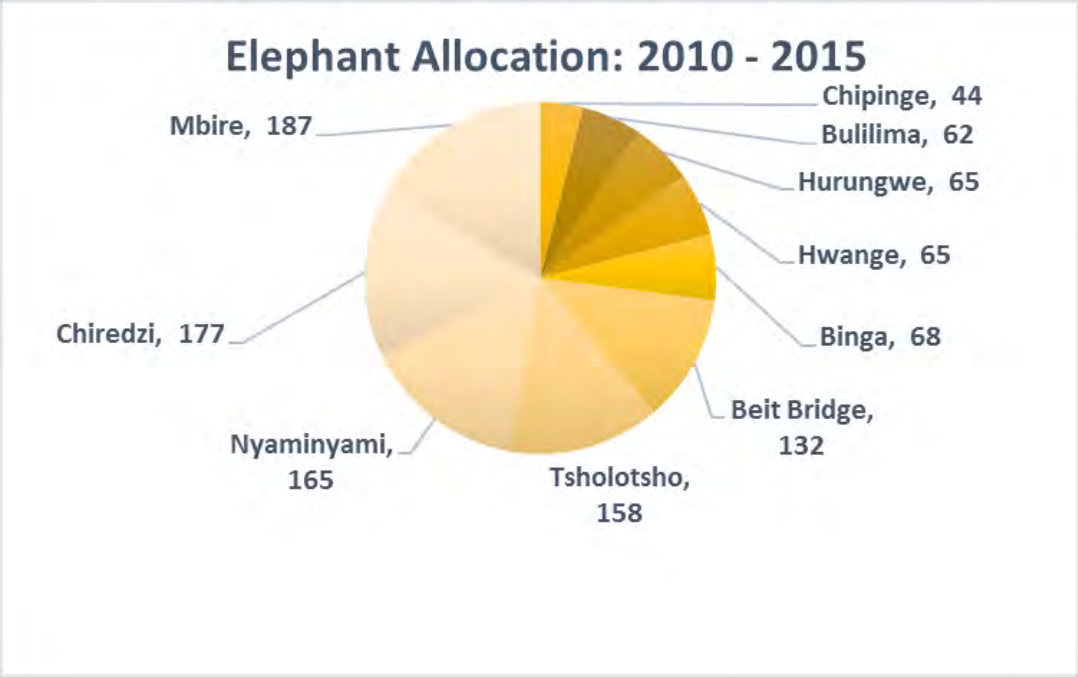


Figure 2: Total allocation of trophy elephant (N=1087) to nine major CAMPFIRE areas over a 6-year period

A total of 1,087 elephants have been allocated on quota to nine major CAMPFIRE areas since 2010 (Figure 2). This equates to 180 elephants per year. The distribution of this quota among the nine CAMPFIRE areas is dictated by the relative density of elephants in the neighboring protected areas and those residing in the CAMPFIRE areas. Tsholotsho, for example, that borders the southern boundary of Hwange National Park, was allocated 158 elephants (or 26/year) while Hwange, Binga and Hurungwe CAMPFIRE Areas that do not border onto areas of high elephant densities receive approximately 10 elephants/year.

The historical trend of utilization of the elephant quota (667 elephant or 61% of the quota allocation) is provided in Figure 3.

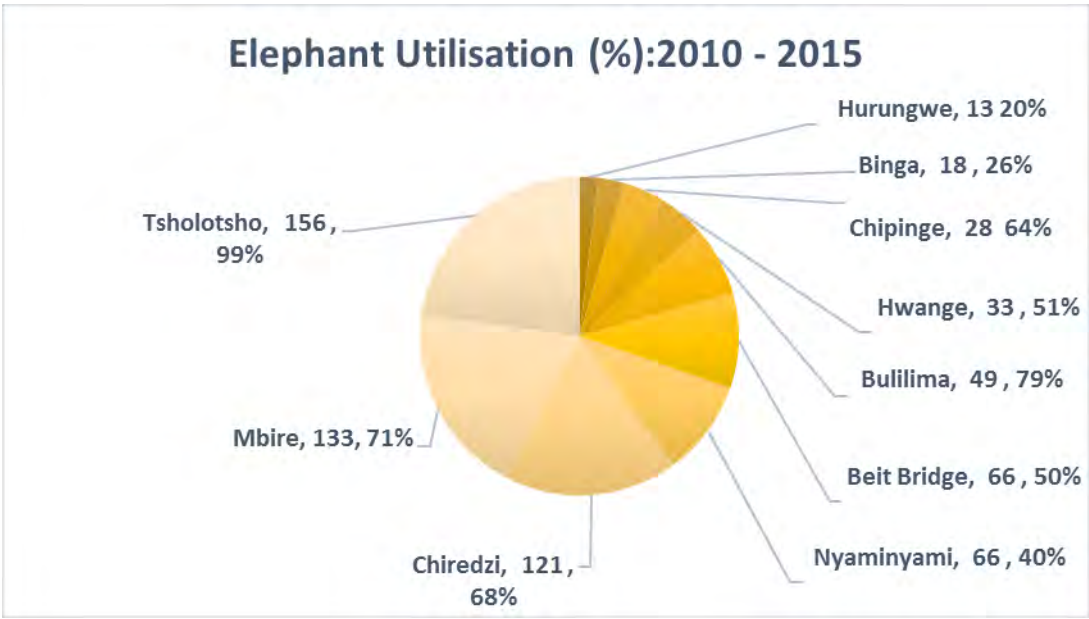


Figure 3: Overall utilization (%) of elephant quotas in nine major CAMPFIRE Areas over a 6-year period

Over the six years, Tsholotsho (99%), Mbire (71%) and Chiredzi (68%) have successfully utilized their allocated quotas while areas such as Hurungwe (20%) and Binga (26%) have not performed as well. The origin of clients hunting in these areas is summarized in Table 2. Over the 6-year period 1702 clients (average 284/year) have hunted in the seven CAMPFIRE Areas (excluding Binga and Hurungwe for which no data are available). Of these 897 clients (c.150/year or 53%) originated from the USA and 461 (c.77 or 27%) from Europe.

Table 2: Origin of hunting clients visiting the major CAMPFIRE Areas :2010 – 2015. Note. No data are available for Binga and Hurungwe

Origin of Clients	USA	Europe	Africa	Asia	South America	Oceania	Canada	Middle East	Total	Average
Beit Bridge	172	36	10	3	14	9	3	0	247	41
Bulilima	17	9	0	0	7	0	0	4	37	6
Chipinge	17	5	0	0	1	0	0	0	23	4
Chiredzi	151	52	57	69	0	0	0	0	329	55
Hwange	20	14	1	5	4	4	1	1	50	8
Mbire	213	90	36	0	10	16	3	0	368	61
Nyaminyami	273	218	24	1	18	21	8	0	563	94
Tsholotsho	34	37	3	4	1	1	1	4	85	14
Total	**897**	**461**	**131**	**82**	**55**	**51**	**16**	**9**	**1702**	**284**
Percentage	**53%**	**27%**	**8%**	**5%**	**3%**	**3%**	**0.9%**	**0.5%**		
Average/year	150	77	22	14	9	9	3	2		

3.3 Income Generation from Sport Hunting of elephants and other Key Species

3.3.1 Income received by Outfitters

To fully account for earnings in the hunting sector, the Reserve Bank of Zimbabwe, in collaboration with all the relevant stakeholders, introduced the Tourism Receipts Accounting System (TRAS) that required all outfitters to submit returns listing the revenue generated for hunting activities. This system has been in place for several years but required manual analysis of the data to extract the information. In January 2015, a web-based system (TRAS2) was introduced which links Safari Operators, Zimbabwe Parks and Wildlife Management Authority, Taxidermists, Shipping Agents, International Marketing Agents and Reserve Bank. Under this system all authorized hunts are registered allowing for the capture of hunting data (origin of clients, value of trophies and hunts, area hunted etc.), monitoring hunting quota utilization and tracking hunted trophies (Chitauro, 2016). The Exchange Control Division of the Reserve Bank of Zimbabwe and the ZPWMA are now able to:

1. Assess regional price differentials of similar hunts and the reasons thereof;
2. Present TRAS2 systems updates and reports to the users including international marketing agents;
3. Engage with international marketing agents of sport-hunting;
4. Obtain relevant insights on governing of the hunting sector; and
5. Come up with an effective mechanism to fully account for export proceeds from the hunting sector.

Outfitters that operate hunting concessions in CAMPFIRE Areas are required to deposit copies of the TRAS2 form with the CAMPFIRE Administrators in their respective RDCs/Wards. Each Administrator is therefore able to extract data on daily rates, trophy fees and other incidental revenues. Figure 4 provides a summary of the income by country of origin. This data confirms the major role of American hunters to the CAMPFIRE program who contribute 52% of the overall income.

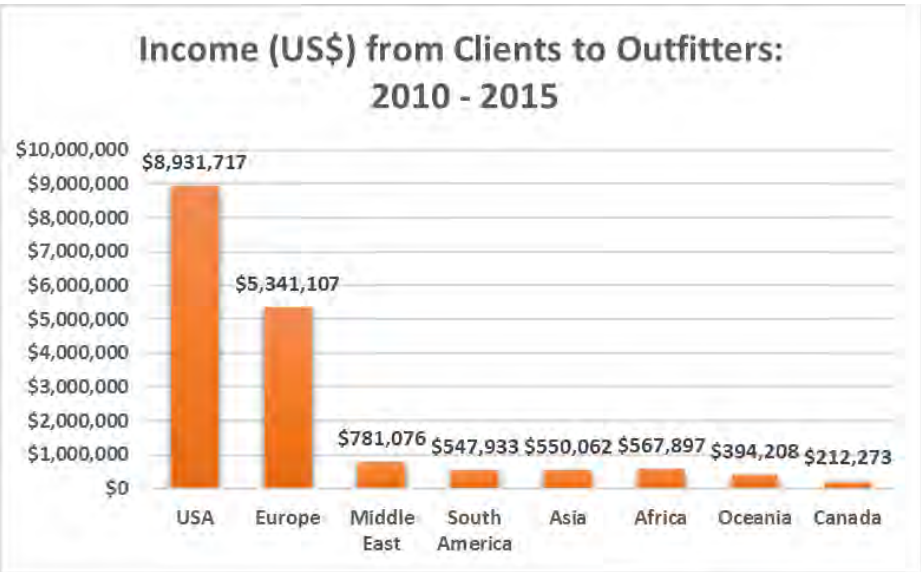


Figure 4: Contribution of hunting clients to the CAMPFIRE Program

3.3.2 Income from Trophy Fees

The data for the total amount of revenue generated for elephant, buffalo, leopard, hippo, crocodile and lion between 2010 – 2015 (approximately US$11 million) is shown in Figure 5.

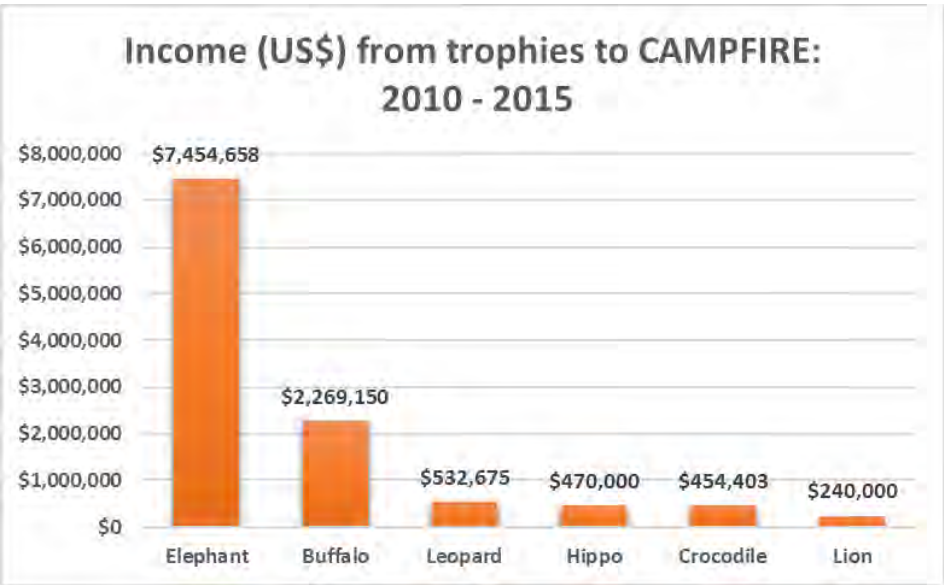


Figure 5: Income (US$) generated from the sale of key trophies

The importance of the income from elephant is clear from these data. Trophy fees from elephant account for 64% of all fees generated from the key species (approximately US$1.2 million/year). Buffalo (20%) are ranked second while leopard, hippo and crocodile contribute approximately 5% each. Noteworthy here is the low contribution of lion (approximately 2%). This low level of income generation is partly a result of the impact of the lion import suspension into the USA and Europe, decreasing quota allocations and decreasing offtake levels brought about by the recently imposed lion age hunting regulations. By comparison, the 913 American clients who hunted in CAMPFIRE Areas in the six-year period paid US$9 million in trophy fees and daily rates. Other nationalities, contributed US$8 million.

3.3.3 Other Income to RDCs

RDCs can generate income for other revenue streams, notably receiving a percentage of the daily rate, concession fees, bed night levies from photographic camps and from the lease/rent of equipment (Figure 6). The eight RDCs for which data are available generated approximately US$4 million from these revenue streams. Excluded here are revenues that could have been earned from the sale of ivory recovered from problem animal control (PAC) and natural deaths, and from the distribution of meat estimated at 550,000kg over the 6-year period.

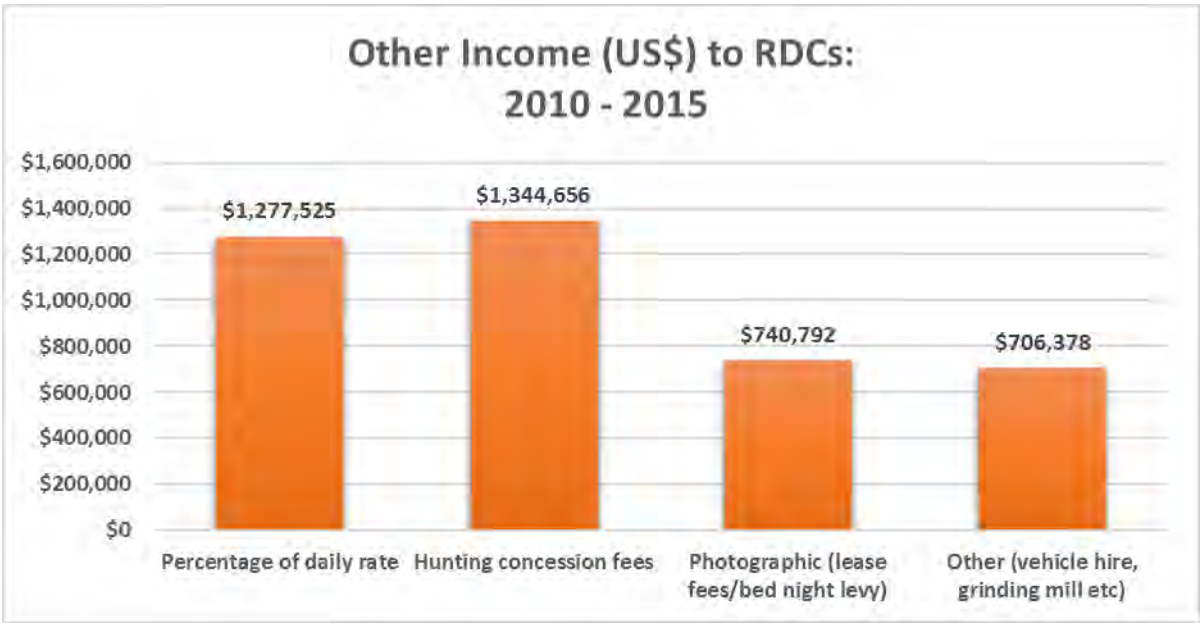


Figure 6: Income (US$) accruing to the RDCs from related income revenue streams

3.3.4 Benefit sharing: RDC vs Wards

Communities at the Ward level receive funds directly from the outfitter utilizing their area, except for those in Beitbridge and Hwange who are paid from dedicated CAMPFIRE accounts with the respective RDC. These funds are generated through trophy fees and income from the sale of hides, concession fees etc. (Table 3).

Over the last 6 years, the income generated from trophy fees is approximately US$11 million while a further US$4 million has come from the sale of hides, concession fees and other sundry income. The agreed split of these funds is that not less than 55% of the revenues is paid as Ward dividends, not more than 35% is allocated to the RDC for wildlife management (habitat management, fire control, monitoring, hiring of game scouts, etc.), and 15% is retained by the RDC as an administrative levy. Some RDCs do not consider all these revenues as "CAMPFIRE Funds" and segregate trophy fees from the other revenues. On average, the CAMPFIRE District Wards received 42% (range 23% - 66%) of the ***combined Concession and Trophy Fees***, but the Wards received approximately 58% (range 26% - 77%) of the ***Trophy Fees*** (Table 3).

Table 3: Summary of the benefit sharing (US$) of hunting related income between RDCs and Wards: 2010 - 2015

Districts	Income to RDC from trophy fees	Income to RDC from Hides, Concession fees etc.	Income to Wards	% All Revenue share: RDC vs Wards	% Trophy Fee Revenue share: RDC vs Wards
Beit Bridge	$657,458	$12,298	$370,228	55%	56%
Binga	$299,800	$364,224	$162,062	24%	54%
Bulilima	$521,700	$46,337	$403,685	71%	77%
Chipinge	$349,500	$139,259	$135,572	28%	39%
Chiredzi	$1,848,600	$181,420	$1,339,678	66%	72%
Hwange	$394,000	$105,131	$237,245	48%	60%
Mbire	$3,022,250	$54,420	$1,740,714	57%	58%
Nyaminyami	$1,883,853	$1,319,772	$1,132,204	35%	60%
Tsholotsho	$2,136,000	$1,990,200	$1,109,956	27%	52%
Total	**$11,420,886**	**$4,213,061**	**$6,631,342**	**42%**	**58%**

4 USE OF FUNDS BY RDCS AND WARDS

The CAMPFIRE Association prepared two templates in conjunction with district based CAMPFIRE Managers that were used as tools to audit of the flow of income from safari hunting for the period 2010-2015, and how these funds are used to benefit CAMPFIRE communities. The tools gathered information on the following:

Tool 1: Data related to Rural District Councils

1. Area of district (either sq. km / ha) and total number of wards
2. The income generated by elephant, lion, leopard, hippo and crocodile i.e. Allocated quota (Number), Trophy fee, number hunted (offtake), percentage quota utilization.
3. The origin of the hunters (i.e. USA, Germany etc.) and the value of the safaris extracted from the TRAS2 forms where available. This data provided an indication of the income generation by outfitters.
4. The gross income that CAMPFIRE Districts received from the hunting and photographic activities (i.e. trophy fees, daily rates, concession fees, photographic fees, meat and any other sundry income).
5. Human resources employed at the District level (i.e. number of Wildlife Managers, number of Game Scouts, equipment (e.g., vehicles, patrol equipment etc.), patrol days per year.
6. The use of the funds to support:
    a. Meetings and Administration (i.e. the “15%” of funds)

   b. Law enforcement (RDC Game scouts, equipment, operational costs etc.)
   c. Compensation schemes (burial expenses, education, payment for hospital expenses etc.)
7. Management activities (fire guards, rehabilitation of water supplies, anti-poaching, problem animal control etc.)
8. Social services i.e. support to clinics, schools etc.
9. Other expenses not related to the above.

Tool 2: Data related to Wards

The following data was summarized for each ward in the District. The data collected at the Ward level was supported with evidence of income and expenditure e.g. copy of accounts, photographs of infrastructure etc.

1. Name of ward and ward number
2. Name and size of hunting area(s)
3. Name and number of village(s) and number of household beneficiaries
4. Income received at Ward level from hunting income, income generating projects from wildlife and other income (grinding mills etc.)
5. Allocation and use of income at Ward level for
   a. Meetings and Administration
   b. Wages/salaries
   c. Compensation schemes (e.g., burial expenses, education)
   d. Management activities (e.g., fire guards, rehabilitation of water supplies, anti-poaching, problem animal control.)
   e. Project running costs
   f. Social services (e.g. clinics, schools, grinding mills, roads, fencing, equipment, boreholes/pumps)
   g. Food security
   h. Direct cash benefits (i.e. to individuals, households, if applicable)
   i. Other
6. Human resources employed at the Ward level (i.e. number of Wildlife Managers, number of Game Scouts, equipment (e.g., vehicles, patrol equipment etc.), patrol days per year.
7. Number of Human and Wildlife Conflict cases by year and type (human death, injury, livestock, infrastructure)
8. Population estimates of major species (where available)

4.1 Profile of Rural District Councils

The data presented here has been extracted from Tool 1. For ease of understanding, these are presented below as follows:

- Characteristics of CAMPFIRE Districts
- Human resources and patrol effort
- Investment in equipment
- Expenditure

4.1.1 Characteristics of the CAMPFIRE Districts

The main parameters of the 10 RDCs (including Hurungwe) that provided data for this analysis are provided in Table 4. These RDCs represent approximately 9 million hectares of which 3.7 million hectares fall under the CAMPFIRE program. These RDCs have entered into agreements with both hunting and photographic outfitters who have invested in 25 hunting camps and 7 photographic camps respectively.

Altogether there are 224 Wards represented in these areas of which 104 are under the CAMPFIRE program. Excluding the Hurungwe RDC, there are 737 villages with a minimum of 85,847 households. This represents a community of approximately 600,000 people assuming that the average household is represented by 7 family members.

Table 4: Baseline features of the nine CAMPFIRE Districts

District	Total Area (Ha)	CAMPFIRE Area (Ha)	Hunting camps	Photo camps	Number of Wards	Number of Campfire Wards	Number of Villages	No of Households
Beit Bridge	1,269,700	310,300	4	1	15	8	15	5,070
Binga	1,230,800	364,000	1	0	25	21	51	19,474
Bulilima	203,300	203,300	1	0	22	13	51	7,767
Chipinge	522,300	40,800	1	1	33	2	15	951
Chiredzi	1,710,239	481,004	5	0	32	9	52	9,461
Hurungwe	1,967,834	529,800	2	1	26	7	N/A	N/A
Hwange	376,963	376,963	2	1	20	18	93	13,980
Mbire	781,000	898,000	6	0	17	9	328	12,302
Nyaminyami	369,931	140,000	3	3	12	6	62	5,875
Tsholotsho	833,600	410,000	2	1	22	11	70	10,967
Total	**9,265,667**	**3,754,167**	**27**	**8**	**224**	**104**	**737**	**85,847**

4.1.2 Human resources and equipment employed at the District Level

Each of the RDCs employ staff to manage the CAMPFIRE program in their Districts. The number of people employed and the roles that they play is dependent on the level of income generated by the CAMPFIRE program. The core function of these staff is to monitor wildlife related activities in their respective areas, notably recording and dealing with human-wildlife conflict, coordinating meetings at the Ward level and monitoring outfitter hunting activities.

Most RDCs employ Game Scouts to conduct routine patrols and undertake basic law enforcement activities. In most cases this is low key since the CAMPFIRE program relies on members of the community to report incidents of wildlife crime, and any other matters related to wildlife in their respective Wards and villages.

Table 5: Summary of Human Resources Employed at District Level.

District	Wildlife Managers	Wildlife Officers	Game Scouts	Employees	Patrol Days
Beit Bridge	2	0	0	76	0
Binga	2	0	9	0	48
Bulilima	1	0	4	5	24
Chipinge	1	0	10	0	365
Chiredzi	2	0	8	8	91
Hurungwe	1	1	4	0	31
Hwange	1	0	6	0	144
Mbire	2	0	21	50	255
Nyaminyami	1	0	23	46	112
Tsholotsho	1	0	10	30	162
Total	**14**	**1**	**94**	**215**	**1231**

All RDCs have invested in various equipment that are employed on wildlife management activities. The number and type of equipment depends on the level of income and sophistication of the CAMPFIRE program. For example, the relatively wildlife endowed Mbire RDC has invested in a VHF radio system and camping gear for its scout force.

Table 6: Summary of equipment used in the CAMPFIRE Districts.

District	Vehicle (4 x 4, pick up etc.)	Truck	Tractor	Trailer	Grader/Tow Grader	Motor cycle	Bicycles	Radio Base Station	Radio hand sets	Rifles	Tents	Other
Beit Bridge	2	-	-	-	-	-	-	-	-	7	-	-
Binga	1	-	-	-	-	-	-	-	-	-	-	-
Bulilima	1	1	-	-	-	-	2	-	-	-	-	-
Chiredzi	2	-	1	1	1	-	-	-	-	-	-	-
Chipinge	1	-	-	-	-	-	-	-	-	7	-	-
Hurungwe	1	-	-	-	-	-	-	-	-	-	-	-
Hwange	1	-	-	-	-	3	-	-	-	7	1	-
Mbire	3	-	-	-	-	2	20	6	15	-	23	8
Nyaminyami	1	-	-	-	-	-	-	-	-	27	-	10
Tsholotsho	2	-	-	-	-	-	-	-	-	-	-	-
Total	**15**	**1**	**1**	**1**	**1**	**5**	**22**	**6**	**15**	**48**	**24**	**18**

4.1.3 RDC expenditure

CAMPFIRE related expenditure over the 6-year period is approximately US$6.2 million (or US$1.0 million/year). Figure 7 represents a breakdown of how the RDCs utilize the income from hunting to support the CAMPFIRE Program in their respective areas. These can be broken down into Administration, Management and Law Enforcement which accounts for approximately 80% of the expenses (or approximately US$835,000/year). The remaining 20% are used to support various community benefits and are aggregated under Social Services, Compensation and Other[2] activities. This equates to approximately US$220,000/year.

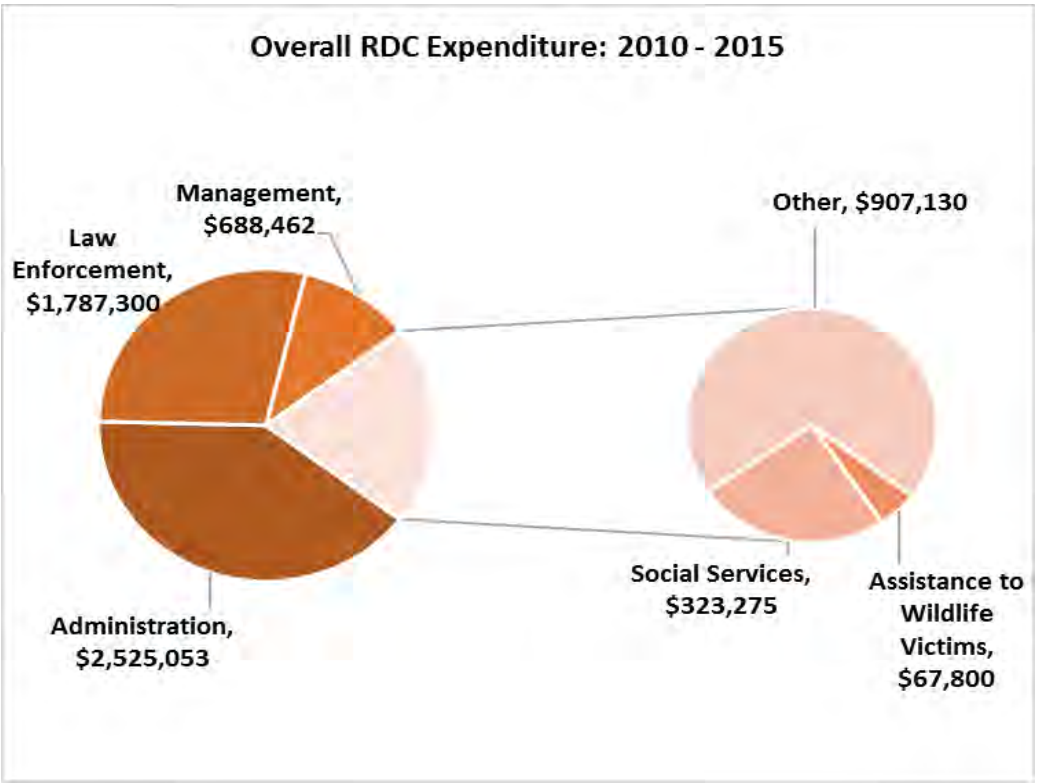


Figure 7: Breakdown of expenditure at the District level on CAMPFIRE program activities

A strategy employed by most RDCs is to invest more in activities related to the management and administration of the CAMPFIRE program rather than on social services. On average, 40% is spent on administration, 20% of law enforcement and 11% on management related expenses while 6% is allocated to support social services. There is no official national compensation scheme, however, RDCs and Wards (including outfitters) assist people and families who are injured or killed by wildlife.

[2] The "Other" activities have been skewed by the inclusion of several expenses registered by Mbire RDC that include construction and maintenance of staff housing, promoting and managing a community cattle production scheme and purchasing vehicles and office equipment.

4.2 PROFILE OF CAMPFIRE PRODUCER WARDS

The data presented here has been extracted from Tool 2. For ease of understanding, these are presented below as follows:

- Human resources and patrol effort
- Human – Wildlife Conflict
- Investment in equipment
- Expenditure

4.2.1 Human Resources, Patrol Effort and Equipment

Table 7 represents the decision that the CAMPFIRE producer Wards elect to invest in their respective CAMPFIRE Programs. Each Ward is required to establish a Wildlife Committee to which at least 7 members are elected from the villages located in that ward. Each Wildlife Committee employs several people either as ward based monitors or as Game Scouts. This workforce is responsible for approximately 2.6 million hectares of land and represent the 85,847 households that reside in the 737 villages.

The decision to invest in equipment is dictated by the level of income that each producer Ward receives, and the ability of the Ward to service and maintain the equipment in the long term. The records kept at the Ward level under estimate the number of patrol days (minimum 3,002/year) achieved.

Table 7: Average number of staff employed at the Ward level, patrol effort and investment in equipment

District	Number of Wildlife Committee members	Number of Employees paid by community	Number of Game Scouts paid by community	Patrol days per year	Equipment (e.g., vehicles, tractors, grinding mills)	Concession Area (Ha)	Number of Villages	Number of Households
Beit Bridge	66	1	3	152	1	324,300	15	5,070
Binga	7	-	-	-	-	364,000	51	19,474
Bulilima	-	-	100	7	-	193,984	51	7,767
Chiredzi	56	32	-	-	3	N/A	52	9,461
Chipinge	9	5	5	1,584	4	9,400	15	951
Hwange	49	-	-	-	-	342,750	93	13,980
Mbire	76	90	48	1,259	19	898,000	328	12,302
Nyaminyami	45	30	12	-	-	140,000	62	5,875
Tsholotsho	77	2	-	-	1	410,000	70	10,967
Total	**385**	**161**	**168**	**3,002**	**28**	**2,682,434**	**737**	**85,847**

4.2.2 Human – Wildlife Conflict and Problem Animal Control

Communities living in CAMPFIRE areas are on the front line and are required to deal with wildlife problems almost on a daily basis. Table 8 below provides a summary of the magnitude of human – wildlife conflict (HWC) recorded over a 6-year period (2010 – 2015) in 9 CAMPFIRE Districts. Conflict with wildlife falls under two areas: crop damage and livestock deaths. While there are many other wildlife species responsible for crop damage (baboons, monkeys, bushpig, rats, quelea birds etc.), elephant are considered the greatest threat and problem.

Although the data are incomplete, it is estimated that 7,000ha of crops were destroyed by elephant during the 6-year period under review. It is not possible to accurately place a monetary value to this because crop production varies greatly from one year to the next, and from one region to another. It is important however to take into consideration that the impact of crop destruction in the highly prone drought areas and areas of low rainfall (e.g. Beit Bridge, Binga, Tsholotsho) is more acute than in areas where crop production may be higher. To place this into perspective, the national average maize yield in Communal Areas is estimated at 300 – 600kg/ha, and the minimum cash value is US$180/ton[3]. The approximate value of the maize lost is therefore US$500,000 – US$1.0 million. Applying this to livestock losses, the average price of cattle is US$400 – US$700/head depending on the time of year and condition of the livestock. Lion and crocodile are responsible for most cattle deaths and at these prices, the value of stock lost to these predators is US$500,000 – US$1.0 million. Hyena equally destroy cattle but are more likely to kill small livestock (goats, sheep). At US$75 – US$125/head, the minimum cost of predation on small livestock is estimated at US$170,000 – US$300,000 (Table 8).

Table 8: Summary of the extent of human – wildlife conflict recorded in CAMPFIRE Wards: 2010 - 2015

District	Crop Damage (estimated Ha)			Livestock killed (cattle, goats, sheep)				Human deaths
	Elephant	Hippo	Buffalo	Lion	Leopard	Crocodile	Hyena	
Beit Bridge	268	-	1	3	-	-	30	4
Binga	26	35	-	1	-	32	29	7
Bulilima	522	-	-	5	-	-	231	-
Chiredzi	18	9	-	122	-	21	-	2
Chipinge	22	10	-	5	-	7	-	7
Hwange	461	-	-	71	2	15	-	2
Mbire	3,878	475	1,146	426	52	416	1,870	53
Nyaminyami	1,216	49	102	59	6	9	-	13
Tsholotsho	1,085	-	20	175	19	-	211	8
Total	**7,495**	**578**	**1,269**	**867**	**79**	**500**	**2,371**	**96**
	9,342ha			**3,817**				
Cost (US$)	**@300kg/ha*$180/ton**		**$504,473**	**Cattle@$400 - $700/head**		**$546,800 - $1,040,400**		
	@600kg/ha*$180/ton		**$1,008,947**	**Small livestock@$75 - $125/head**		**$177,825 - $296,375**		

[3] Note: the official price for maize is approximately $350/ton but sellers rarely receive this price from the millers and other interested buyers.

Communities who live with wildlife also pay the ultimate price and 96 people have lost their lives and others have been injured after encountering dangerous animals. Crocodile and hippo are responsible for most human deaths and injuries but there are incidents where elephant have killed and maimed people who were tending their fields or traversing wildlife areas.

Table 9 summarizes the incidents of problem animal control and illegal activities recorded in the 9 major CAMPFIRE RDCs (data extracted from The Proceedings of the CAMPFIRE workshop, Gandiwa et. al. 2014).

Table 9: Summary of problem elephant destroyed and through illegal activities in 9 CAMPFIRE Districts

	2009	2010	2011	2012	2013	2014	Total
Conflict	250	283	340	208	295	478	**1854**
PAC	55	66	41	33	36	66	**297**
Illegal	7	14	12	11	16	19	**79**

It is not unexpected that local communities will seek to mitigate these losses either through retaliatory killings (this applies mostly to the carnivores) or through removal of problem animals. With respect to elephant, it is important to understand the relationship between trophy hunting, problem animal control and illegal offtake. The interactions amongst all three variables are not simply additive. For example, a relatively small offtake of problem animals can have a significant influence on the mean tusk weight of hunting trophies taken from the population and, hence, the income derived from hunting. Martin (pers. comm.) uses a population simulation model (Craig et. al. 2011) to carry out an analysis to examine these interactions. This model assumes that Problem Animal Control (PAC) is selective, and that most of the elephants killed are males between the ages of 13-36 years old and females between the ages of 22-42 years old. Moreover, more males are killed than females (5:1).

Martin demonstrates that the combined effect of trophy hunting quotas and level of PAC shows that in a scenario where there is no PAC, trophy hunting quotas can be set ranging from 0.1 - 0.6 % of the population. However, as PAC increases, so the trophy hunting quotas must be decreased to maintain trophy quality. The magnitude of the changes caused by relatively minor increments in PAC are highly significant. The modelling shows that increases in the trophy hunting quotas and PAC offtake causes only a minor drop in the rate of increase of the population which remains above 4% per annum, however, if the PAC offtake exceeds 1% of the population, then hunting quotas should not exceed 0.1% of the population. Unless these ratios are maintained, there is a real risk that the elephant populations will decline with the consequential loss of income from sport hunting.

Currently Zimbabwe adheres to quotas set at 0.3 – 0.4% of the population, and slightly higher in the CAMPFIRE areas. The PAC levels shown in Table 9 do not approach these critical thresholds, however, close attention needs to be paid to trophy quality and age (see discussion of elephant hunting in Mbire - in The Proceedings of the CAMPFIRE workshop, Gandiwa et. al. 2014).

4.2.3 Beneficiaries of CAMPFIRE Income at the Ward Level

The beneficiaries of revenues from the CAMPFIRE program are the community's resident in the producer Wards. However, the volume of people residing in these areas precludes providing individuals with direct dividends since the value of such dividends would be meaningless. The CAMPFIRE wards

have therefore elected to invest in projects that provide social services to the whole community and only in special circumstances are dividends paid out for food security and direct cash benefits.

Table 10: Examples of Social Services funded in selected CAMPFIRE areas from Ward Revenues generated from sport hunting: 2010-15

District	Project
Beitbridge	Rehabilitation of schools, clinics and protection of irrigation schemes
Bulilima	Rehabilitation of 3 clinics and 3 primary schools, hall, fencing of fields and rehabilitation of lodge, community truck, tractor, dam repair machinery.
Chipinge	3 grinding mills, lorry, teachers houses, community office, shop
Chiredzi	Clinic, teachers' houses, primary school, community-grinding mill, Police sub-office, piped water and electrification of clinic.
Hurungwe	Construction of classroom block Nyamakate Secondary, Maintenance of Nyamakate bridge. Purchase of tractor tube, payment of carpenters, Roofing Chipfuko Primary School and Huyo Secondary School, CAMPFIRE Ward tractor major service, Purchase of Treasurers bicycle, Payment of Nyamakate Clinic guard, 7 resource monitors allowances, 26 bag cement Chitindiva, Kabidza , Manyenyedzi and Mawau schools for toilets construction, renovation Karuru School (5 bags cement), and toilet construction, Chitindiva Clinic toilet construction, Roofing Chikova Secondary School, Purchase of buiding materials Chikova Secondary Block, Painting Dete Primary School, Building toilets Makwiye school, Building shed Mupuse school, Roofing Bhashungwe primary school, Sanyati Bridge camp renovation, Purchase of Cement Tashinga Primary School, 6 pairs uniform for resource monitors, Purchase of 20 bags cement Chisipite Primary School, Purchase of tires for Ward tractor, Bridge maintenance
Mbire	Clinic, nurse's houses, office, storerooms, 14 classrooms, 7 teachers houses, grinding mill, school office, wildlife administration offices, 2 hand pump boreholes, water piping, toilet, water storage tanks, 2 tractors, a basic tourist camp with 4 chalets;
Nyaminyami	Tillage tractors, renovation of dispensary at clinic, nurse's house. Construction of Mayovhe classroom block, 3 grinding mills, Teacher's house, Jongola school. School bursaries x 3 students at Seke Teacher's College. Renovation of pre-schools x 2. Negande: Rehabilitation of water pipeline, grinding mill. Nebiri: Chikuro primary block, rehabilitation of Harudziva water pipeline. Kasvisva: Rehabilitation of water pipeline to supply water to Kasvisva clinic, Kasvisva Secondary school block. Msampa: Teacher's house, Majazu primary, renovation of ward warehouse; Kanyati: Cement for teacher's house renovation.
Tsholotsho	Classroom blocks and furniture (Sihazela, Mlevu, Mtshwayeli, Ntulula, Dibutibu, Gwaai, Nkwizhi, Zibalongwe, Malindi, Mgodimasili, Phelela, Mpilo, Jimila, and Kapane Primary schools), 2 F14 cottages, 10 sewing machines (Dibutibu Secondary school), 7km piped water system for Thembile primary school, Sikente Clinic, Tshitatshawa and Jowa clinics construction, fencing of Madlangombe clinic, 10 water engines, borehole drilling and repairs and repair kits, Lister diesel engines for 6 villages in ward 21 and at Sihazela Line in ward 1, grinding mills, solar water pumping in wards 1, 2 and 4. 2 pickup trucks for wildlife monitoring purchased in 2015.

Figure 8 summaries the distribution of the US$5.4 million that Wards in 9 CAMPFIRE areas received over the 6-year period under review (2010 – 2015). As with the District expenditure, the Ward Wildlife Committees allocate 42% of the funds (US$2.2 million) for administrative functions (i.e. Meetings and Administration, Wages and Salaries, Management and Projects) and 55% of the funds (US$2.9 million) to community benefits. Most of the funds are allocated to social services (US$2.4 million) that support schools, clinics and other infrastructure that benefit the whole community. Examples of this support are provided in Annex 1.

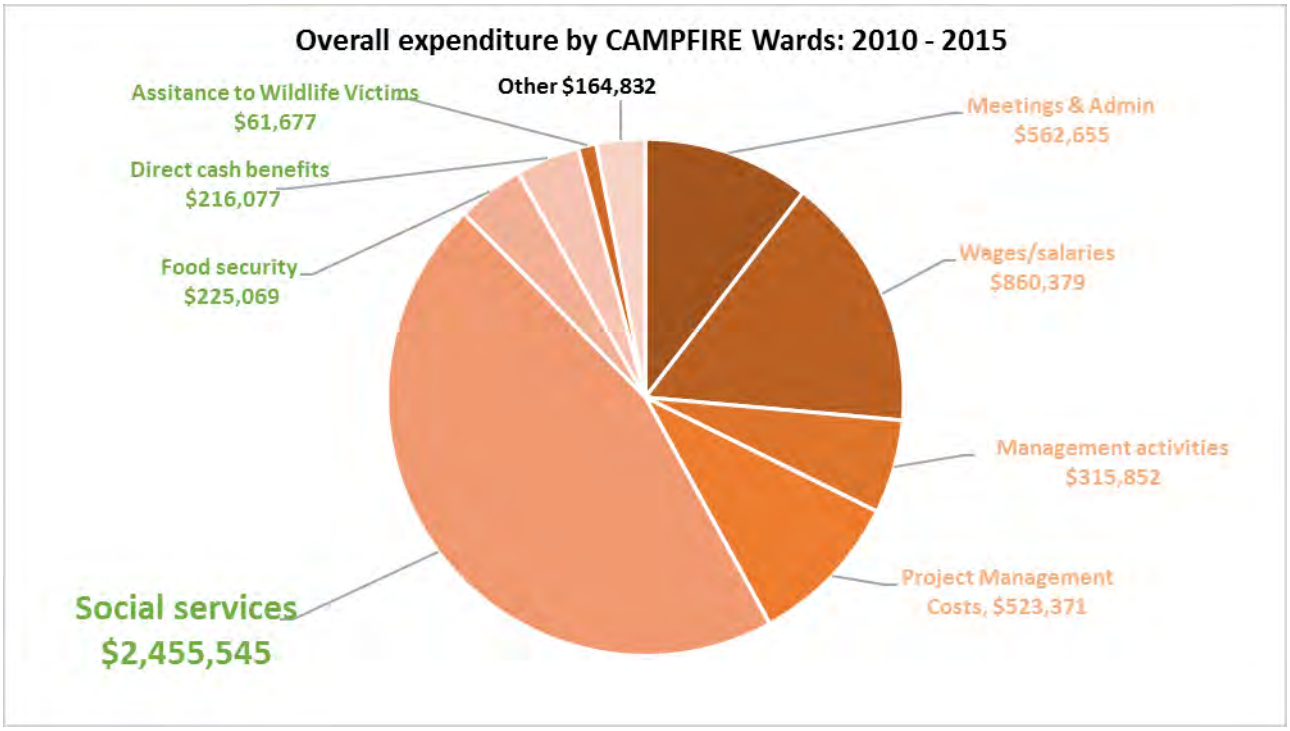


Figure 8: Allocation of Ward Campfire funds

5 Impact of the Suspension of Elephant Trophy Imports to the United States on THE CAMPFIRE Program

The income to CAMPFIRE from the use of elephants has been declining since 2013, with 2014 registering a significant drop following the announcement of the ban on ivory imports into America (Figure 9). Although the hunting industry responded by seeking alternative markets (e.g. Russia, Middle East), this trend continued through 2015 and unconfirmed reports suggest that the decline has continues in 2016.

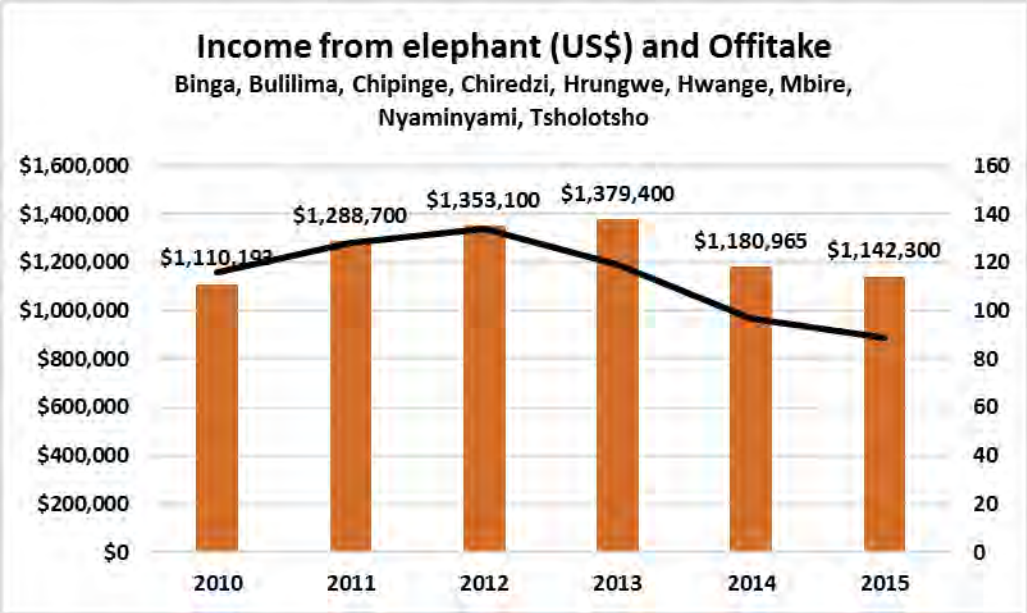


Figure 9: Annual income (US$) and offtake of elephants in 10 CAMPFIRE Districts

It is difficult to show concisely how the American ban on importation of elephant ivory from Zimbabwe has contributed to the decline in CAMPFIRE revenue. The hunting sector is integrated across a wide range of socio-economic activities and withdrawing one segment adversely affects a range of other wildlife based activities. It is therefore essential that hunters visit these areas and pay to hunt but not necessarily kill a trophy elephant. In this way revenues from hunting will continue to flow into the CAMPFIRE RDCs and Wards. Several indicators are provided here to demonstrate this:

1. The US suspension of ivory imports from Zimbabwe has had a significant impact on CAMPFIRE, and resulted in the cancellation of 108 out of 189 (57%) elephant hunts in all major districts initially booked by US citizens in 2014. The net impact of this was a reduction of CAMPFIRE income from US$2.2m in 2013 to US$1.7 in 2014. A similar pattern prevailed in 2015 and 2106 where outfitters struggled to sell elephant safaris to hunters from other countries, and those that did had to heavily discount their prices.
2. The key trophy species (elephant, buffalo, leopard, hippo, crocodile and lion) contribute approximately US$1.8 million/year to CAMPFIRE revenues. Elephant account for 64% of these fees.

3. Quota utilisation of elephant prior to the ban did not exceed 60% of the CAMPFIRE quota allocation.
4. American hunters make up 53% of the clients in CAMPFIRE areas.
5. CAMPFIRE producer Wards receive on average 57% of all trophy revenues.
6. The CAMPFIRE hunting industry in the 9 RDCs covered in this analysis supports 104 producer Wards representing 737 villages or 85,847 households.
7. The CAMPFIRE program employs managers, officers and game scouts at both the District and Ward level who are responsible for monitoring wildlife based land use activities in their areas and these are directly paid from safari hunting income.
8. Both RDCs and Wards invest in a variety of equipment that benefits communities and wildlife management. The operational and maintenance costs for this equipment is drawn from CAMPFIRE revenues.
9. RDCs utilise 80% of the CAMPFIRE revenues to support administration and management of the program. 20% is invested in global social services that benefit communities at the District level.
10. Producer Wards, representing approximately 2.6 million hectares, bear the cost of living with wildlife. Under the 6-year period under review, elephants are responsible for the destruction of approximately 7,000ha of croplands in the 9 Districts. The minimum cost of this in terms of food production is estimated at US$500,000 – US$1.0 million.
11. Producer Wards have elected to invest 55% of their dividends from CAMPFIRE revenues in social services (schools, clinics etc.). 74% of these revenues are generated through trophy fees where elephant play a significant role.
12. Although CAMPFIRE communities suffer most from elephant crop damage, the number of elephant destroyed as problem animals is well within acceptable limits and with few exceptions, has little or no impact on population numbers.

In conclusion, the CAMPFIRE program relies almost exclusively on revenues generated through hunting. These revenues cannot be replaced through alternative wildlife based activities. This places almost two million hectares of wild land at risk, including the risk of increasing retaliatory killing through poisoning and illegal wildlife crime.

Wildlife in Communal Lands is under pressure. Removing any benefits will tip the balance and disgruntled CAMPFIRE communities will turn to pastoralism and unsustainable agricultural practices, thereby reducing wildlife habitat. The suspension is effectively encouraging communities to become willing tools for poaching – a forced abandonment of CAMPFIRE.

6 The Way Forward

The ZPWMA has recently developed and approved its 5-year Elephant Management Plan (ZPWMA, 2015). This plan recognizes that if elephants are to survive in the future, they must have a value, both to the governing authorities and to the local people. Unless the local communities, who live closest to elephants, are tolerant of this charismatic yet destructive species, it is unlikely that they will survive in the long term.

The Elephant Management Plan recognizes that "*regulated sport hunting converts wildlife into assets for the benefit of local people and the country as a whole. Wildlife can be a most valuable asset and in turn*

empower local communities and provide basic necessities. When it is viewed as a valuable asset, wildlife becomes an economically competitive land use in Zimbabwe, which leads to habitat preservation instead of habitat destruction and conversion to agriculture or livestock production."

The presence of regulated hunting can also reduce illegal activities, and private outfitters' lease agreements are being reviewed to include anti-poaching as an obligation of the concessionaire. Trophy hunting revenues are vital to facilitating not only law enforcement activities but also general wildlife management. Alternative wildlife land use practices, e.g. eco-tourism, cannot generate sufficient revenues to cover these costs, and certainly not to justify wildlife as a land use outside of protected areas.

Hunting can generate revenues under a wider range of scenarios than eco-tourism, including in remote areas lacking infra-structure, attractive scenery, or high densities of viewable wildlife. Consequently, elephant and other wildlife populations will be negatively affected through reduced conservation efforts arising from low funding and reduced goodwill from the communities.

The Zimbabwe CAMPFIRE program has been widely regarded as one of Africa's most successful contemporary conservation initiatives. Hunting of elephants plays an integral part in promoting CAMPFIRE as it permits the residents of communal lands to share in the benefits generated by wildlife utilization on those lands.

As shown above, the bulk of CAMPFIRE's revenue comes from hunting, with elephant hunting contributing more than 60% of annual revenue. The revenue sharing guidelines developed by the CAMPFIRE Association require safari outfitters to pay revenue directly into community-controlled bank accounts. These funds have been used by RDCs and producer Wards to promote wildlife conservation, but despite its achievements, CAMPFIRE still faces fundamental challenges.

The most crucial of these challenges is developing strategies to accommodate the increasing human populations in CAMPFIRE areas. Understandably, the focus of these households is on food security requiring the extension of basic agricultural schemes and increased livestock numbers. Such land uses are incompatible with wildlife based land use.

Other CAMPFIRE challenges include: (i) the downturn in Zimbabwe's economy and tourism sector post-2000, (ii) great reliance on consumptive trophy hunting and less focus on other uses and non-consumptive uses of natural resources due to viability problems, (iii) increasing human populations averaging 16-20 people per km^2 in some key wildlife districts, and (iv) low re-investment in development, fixed assets, human capital, and management and protection of wildlife in CAMPFIRE areas.

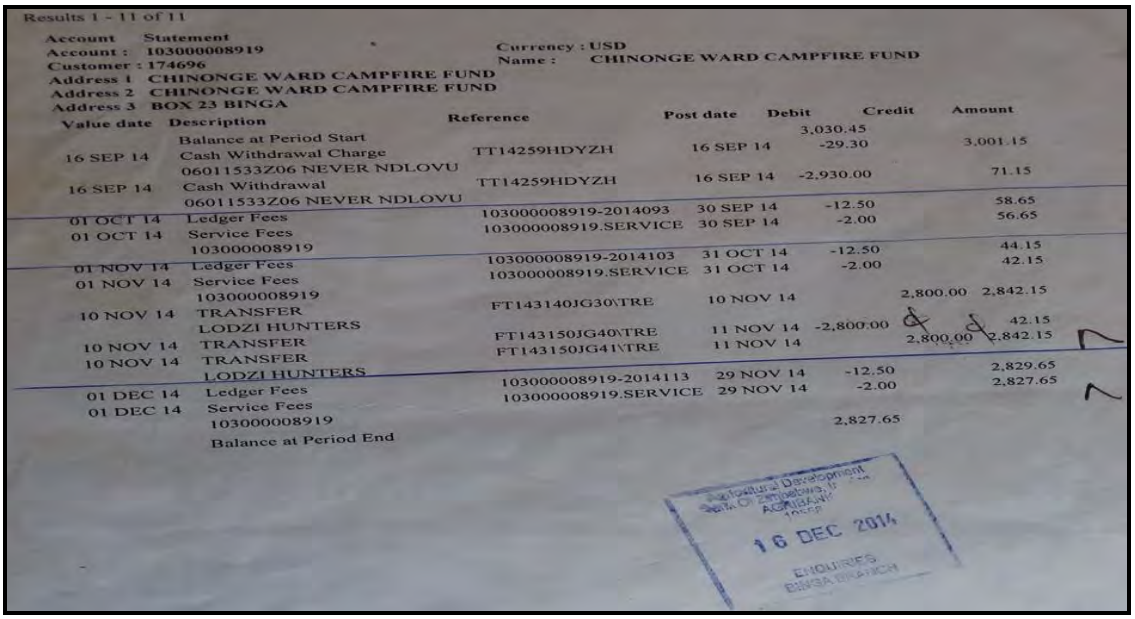
Despite these challenges, CAMPFIRE stands very high in the agenda of Zimbabwe's Government, and an evaluation dedicated to improving the program is ongoing and should be finalized by the end of 2017. Zimbabwe's Government recognizes that the survival of wild animals depends entirely on those among whom they live. Unless local people want to save them, wildlife will be poached to the point where just a few remain in fortified reserves. CAMPFIRE is meant to avoid this and the future of wildlife in communal areas rests on the success of this program.

The hunting of elephants, under sustainable and well-regulated conditions, has the potential to raise adequate funds to support itself and other species in CAMPFIRE areas. For these reasons, Zimbabwe

confirms its commitment to the sustainable use of elephant and other wildlife in its Elephant Management Plan, and recognizes the role that elephant play in the CAMPFIRE program.

7 ANNEX 1: EXAMPLES OF SOCIAL SERVICES PROJECTS SUPPORTED BY CAMPFIRE FUNDS AT THE DISTRICT AND WARD LEVEL

CHINONGE WARD Binga District: Clinic under construction and example of Ward bank statement.



Results 1 - 11 of 11

Account Statement
Account : 103000008919
Customer : 174696
Address 1 CHINONGE WARD CAMPFIRE FUND
Address 2 CHINONGE WARD CAMPFIRE FUND
Address 3 BOX 23 BINGA

Currency : USD
Name : CHINONGE WARD CAMPFIRE FUND

Value date	Description	Reference	Post date	Debit	Credit	Amount
	Balance at Period Start				3,030.45	
16 SEP 14	Cash Withdrawal Charge 06011533Z06 NEVER NDLOVU	TT14259HDYZH	16 SEP 14	-29.30		3,001.15
16 SEP 14	Cash Withdrawal 06011533Z06 NEVER NDLOVU	TT14259HDYZH	16 SEP 14	-2,930.00		71.15
01 OCT 14	Ledger Fees	103000008919-2014093	30 SEP 14	-12.50		58.65
01 OCT 14	Service Fees 103000008919	103000008919.SERVICE	30 SEP 14	-2.00		56.65
01 NOV 14	Ledger Fees	103000008919-2014103	31 OCT 14	-12.50		44.15
01 NOV 14	Service Fees 103000008919	103000008919.SERVICE	31 OCT 14	-2.00		42.15
10 NOV 14	TRANSFER LODZI HUNTERS	FT143140JG30\TRE	10 NOV 14		2,800.00	2,842.15
10 NOV 14	TRANSFER	FT143150JG40\TRE	11 NOV 14	-2,800.00		42.15
10 NOV 14	TRANSFER LODZI HUNTERS	FT143150JG41\TRE	11 NOV 14		2,800.00	2,842.15
01 DEC 14	Ledger Fees	103000008919-2014113	29 NOV 14	-12.50		2,829.65
01 DEC 14	Service Fees 103000008919	103000008919.SERVICE	29 NOV 14	-2.00		2,827.65
	Balance at Period End			2,827.65		

Agricultural Development Bank Of Zimbabwe
16 DEC 2014
ENQUIRIES BINGA BRANCH

Beit Bridge CAMPFIRE Program: Masera Secondary School Classroom Block and Staff Housing

Tsholotsho RDC: CAMPFIRE Vehicles, Tshitatshawa Clinic under construction, Ward 8, Tsholotsho CAMPFIRE District Wildlife Committee, Hunting Camp, solar powered piped scheme

8 REFERENCES

Chitauro. 2016. Status of the hunting sector in Zimbabwe. Internal report prepared by the Director of Exchange Control om behalf of the Reserve Bank of Zimbabwe. Unpublished.

Craig G.C., Martin, R.B. and Peake, D.A. 2011. The Elephants of Northern Botswana: Trophy Hunting, Population Dynamics and Future Management. Study funded by the Conservation Trust Fund (CTF) of the Ministry of Environment, Wildlife and Tourism, Botswana. Awaiting publication.

Dunham, K.M. 2008. Detection of anthropogenic mortality in elephant *Loxodonta africana* populations: a long-term case study from the Sebungwe region of Zimbabwe. Oryx, 42, 36– 48.

Dunham, K.M. Mackie, C.S. and Nyaguse, G. 2015a. Aerial Survey of Elephants and other Large Herbivores in the Zambezi Valley (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 118 pp.

Dunham, K.M., Mackie, C.S., Nyaguse, G. and Zhuwau, C. 2015b. Aerial Survey of Elephants and other Large Herbivores in north-west Matabeleland (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 126 pp.

Dunham, K.M., Mackie, C.S., Nyaguse, G. and Zhuwau, C. 2015c. Aerial Survey of Elephants and other Large Herbivores in the Sebungwe (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 111 pp.

Dunham, K.M. & van der Westhuizen, H.F. 2015d Aerial Survey of Elephants and other Large Herbivores in Gonarezhou National Park and Save Valley Conservancy (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 115 pp.

Gandiwa, E., Jonga, C. and Mufute, O. (editors). 2014. *Proceedings of the CAMPFIRE stakeholders' workshop: Towards the development of a new Elephant Management Plan and Policy*. Harare, Zimbabwe, 17–18 November 2014.

Jones, B. and Murphree. M. 2001. The Evolution of Policy on Community Conservation in Namibia and Zimbabwe. In: *African wildlife and livelihoods: The promise and performance of community conservation*. (Eds. D. Hulme and M. Murphree). James Currey, Oxford.

Khumalo, A. 2003. CAMPFIRE Monitoring and Evaluation Data, 2001. WWF SARPO, Harare.

Mazambani, D. and Dembetembe, P. 2010. *Community Based Natural Resource Management. Stocktaking Assessment: Zimbabwe Profile*. Publication produced for review by the United States Agency for International Development (USAID). It was prepared by DAI in collaboration with World Wildlife Fund, Inc. (WWF).

Murphree, M.W. 1993. Communal Land Wildlife Resources and Rural District Council Revenues. CASS Occasional Paper No.53/93. 10pp.

ZPWMA. 2015. Zimbabwe National Elephant Management Plan (2015-2020). Ministry of Environment, Water and Climate. Harare, Zimbabwe. 84 pages.

From:	Vernon Booth
To:	Dan Ashe
Cc:	Vannorman, Tim; Charles Jonga
Subject:	Role of elephant to Zimbabwe CAMPFIRE Program
Date:	Saturday, December 17, 2016 5:31:45 AM
Attachments:	Role of Elephant Hunting_CAMPFIRE_Final_17.12.16.pdf

Dear Dan,

I trust that you are a well and looking forward to your new adventures in the New Year.

When we met at COP 17 CITES in Johannesburg, you mentioned that the CAMPFIRE Association should submit an enhancement finding to support the resumption of elephant trophy imports to the USA. Since then, I have been working with the CAMPFIRE Association assisting them to prepare this document.

FWS will receive an official version via the Ministry in due course, but this is not likely to happen before January. The reason for this is that there is party conference in progress at the moment, and the Minister responsible is away from office until after Christmas.

The CAMPFIRE Association is eager to get this document to FWS before you leave office, and asked whether I could pass this on to you.

The Association and its members are hoping that elephant trophy imports to the US can be resumed, and are available to answer any questions or queries that FWS may have.

A Merry Christmas to you and your family, and all the best for 2017.

Best wishes

--
Vernon Booth
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Skype: (b) (6) [redacted]

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY

LEGAL TRADE, CONSERVATION AND RURAL LIVELIHOODS: A ZIMBABWEAN PERSPECTIVE:

- L.W. NYAGUSE

AREAS TO BE COVERED

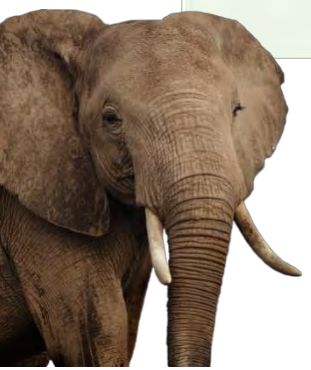
- Sustainable Utilisation
- Population Status of Key Species
- Quota Setting and CITES Quotas
- Quota Setting Considerations
- Legal Trade Framework
- Funding For Conservation
- Rural Livelihoods and Legal Trade
- How Does CAMPFIRE Work
- Community Benefits
- Revenue Generation
- Impacts of Community Benefits on Conservation

SUSTAINABLE UTILISATION

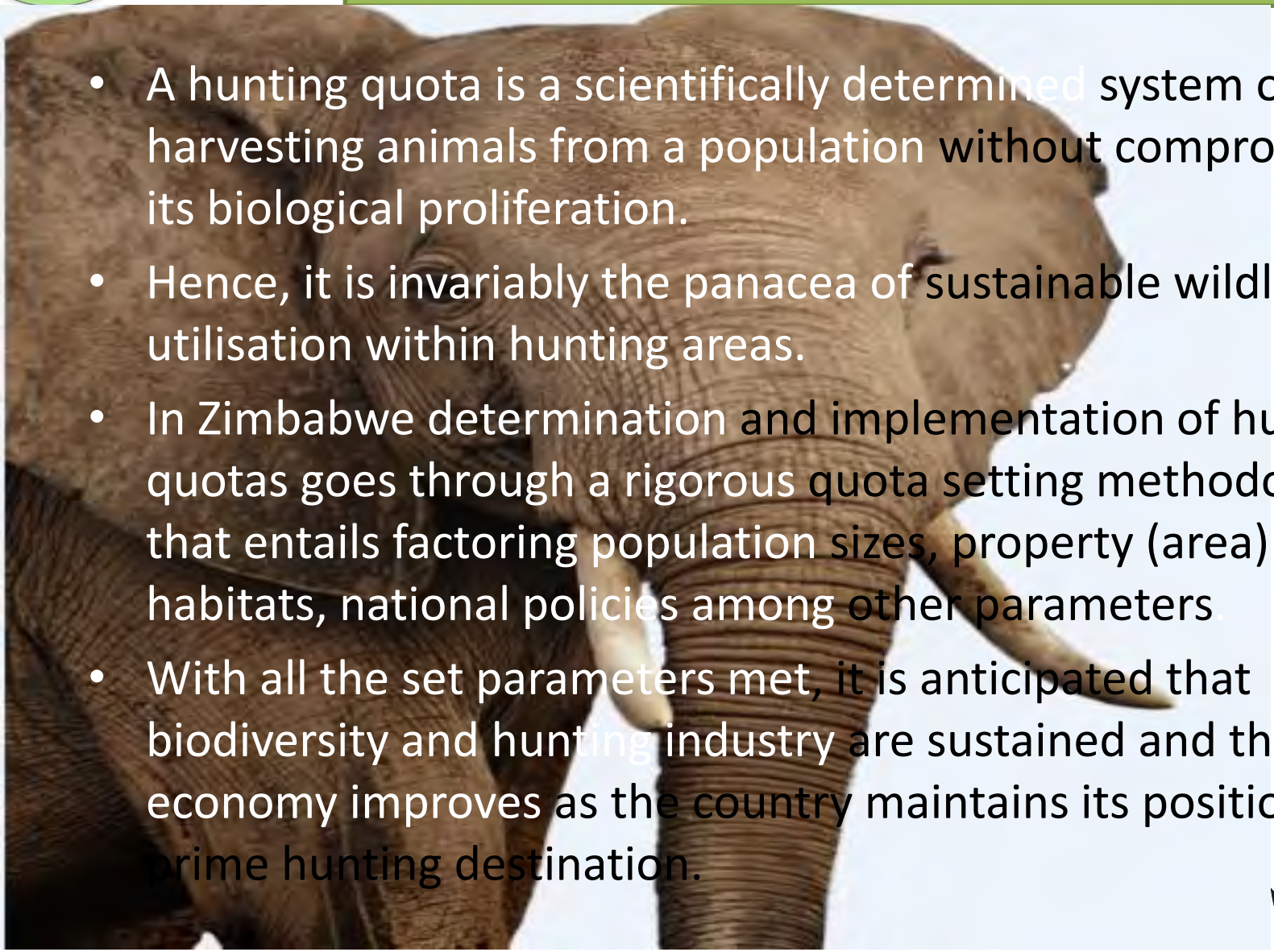
- Zimbabwe's conservation is based on the principle of sustainable utilisation, that the various species that are being conserved must contribute to conservation. This is the major source of funding for conservation.
- How successful has the concept been?????
- Adaptive management is probably one of the most important concepts in the implementation of this philosophy.

POPULATION STATUS OF KEY SPECIES (ELEPHANTS)

REGION	1980	1983	1989	1993	1995	2001	2014	2001 vs. 2014
North-West Matabeleland	20 444	25 888	27 411	27 841	30 985	49 310	53 949	9.4% increase at 0.7% per annum
Zambezi Valley	10 152	9 907	13 029	14 361	16 842	19 297	12 2 11	36.7% decline at 2.8% per annum
Sebungwe	11 126	9 302	12 946	10 742	11 796	13 989	3 634	75% decline at 5.7% per annum
Gonarezhou	4 704	3 985	5 286	5 241	4 156	4 992	10 722	115% increase at 8.8 % per annum
TOTAL	46 426	49 082	58 672	58 185	63 779	88 123	80 516	8.6% decline at 0.7% per annum



Quota Setting and CITES Quotas



- A hunting quota is a scientifically determined system of harvesting animals from a population without compromising its biological proliferation.
- Hence, it is invariably the panacea of sustainable wildlife utilisation within hunting areas.
- In Zimbabwe determination and implementation of hun quotas goes through a rigorous quota setting methodology that entails factoring population sizes, property (area) sizes habitats, national policies among other parameters.
- With all the set parameters met, it is anticipated that biodiversity and hunting industry are sustained and the economy improves as the country maintains its position as a prime hunting destination.

Quotas and Quota Setting Considerations

1. CITES National Quota
2. National aerial survey results
3. Research publications and preliminary results
4. Off takes for key species including leopards, lion and elephant
5. Size of property relative to the species requested and distribution
6. Illegal Off-take/Poaching
7. Property based Ecological assessments
8. Management regime on the properties (habitat, fire, water, land-use planning and zonation, fencing, supplementary feeding).
9. Human wildlife Conflict hotspots, Communal Benefits and conflict mitigation
10. Species sensitivity
11. Other off-takes (illegal management offtakes, live sells)
12. Trophy Quality
13. Habitat Change/fragmentation
14. Recommended sustainable off-take levels
15. Offtake Data

Quota Setting and CITES Quotas

Species	CITES Quota
Elephant	500
Leopard	500
Crocodile	200
Cheetah	50

LEGAL TRADE FRAMEWORK

- Current CITES regulations on trade in elephant and elephant products for Zimbabwe have an annotation affecting Zimbabwe's population of *Loxodonta africana* on Appendix II which restrict trade in hunting trophies for non-commercial purposes, trade in live animals to appropriate and acceptable destinations, trade in hair, hides, and leather goods for non-commercial purposes and trade in registered raw ivory for whole tasks and pieces.

FUNDING CONSERVATION

Zimbabwe's Protected Area Management system is self-funding in nature. This means therefore that the resource protection budget is financed through the sustainable utilisation of the various wildlife resources therein.

The African Elephant is one of the biggest drawcard species from a hunting perspective, and is at the centre of all the major hunts in the country. Generally hunting contributed an average of USD22m to the country's GDP in 2014 and 2015 (*RBZ Exchange control report on hunting tourism in Zimbabwe*) and contributes about 20% annually of the Authority's revenue budget.

The annual offtake quota provided through CITES is for 500 elephants per annum.

It is the utilisation of these offtake quotas that contribute significantly to Zimbabwe's conservation budget.

FUNDING CONSERVATION

Zimbabwe's Protected Area Management Funding

	2013	2014	2015	2016	2017
	Actual	Actual	Actual	Budget	Budget
	US$	**US$**	**US$**	**US$**	**US$**
REVENUE					
Hunting Income	5,423,995	5,072,493	3,256,698	4,418,700	3,000,000
Sale of park products/live sales	515,509		810,000		
TOTAL Revenue	**5,939,504**	**5,072,493**	**4,066,629**	**4,418,700**	**3,000,000**
EXPENDITURE					
Operational costs	5,766,886	6,071,981	5,123,926	7,525,500	4,000,000
Staff costs	16,850,007	20,294,821	19,705,931	21,666,800	19,725,000
Administration costs	2,558,886	3,244,961	2,922,619	2,004,900	2,000,000
TOTAL EXPENDITURE	**25,175,779**	**29,611,763**	**27,752,476**	**31,197,200**	**25,725,000**
SURPLUS/ DEFICIT	**-19,236,275**	**-24,539,270**	**-23,685,847**	**-26,778,500**	**-22,725,000**

RURAL LIVELIHOODS AND LEGAL TRADE

- One of the biggest CBNRM initiatives in Zimbabwe is the Communal Areas Management Programme For Indigenous Resources (CAMPFIRE)
- CAMPFIRE has a combined 2.4 million beneficiaries, made up of 200,000 households that actively participate in the program, and another 600,000 households that benefit indirectly from social services and infrastructure supported by CAMPFIRE income within districts.
- There are in excess of 120 elected and constituted Village and Ward CAMPFIRE Committees that operate through specific Traditional Leaders in their areas. *'Communal' in the acronym CAMPFIRE, has since been changed to 'Community' in order to focus on communities instead of the geographic spread of the programme.*

HOW CAMPFIRE WORKS

There are rural communities living adjacent or around most of Zimbabwe's National Parks or Protected Areas. These communal areas are under Rural District Councils (RDCs)

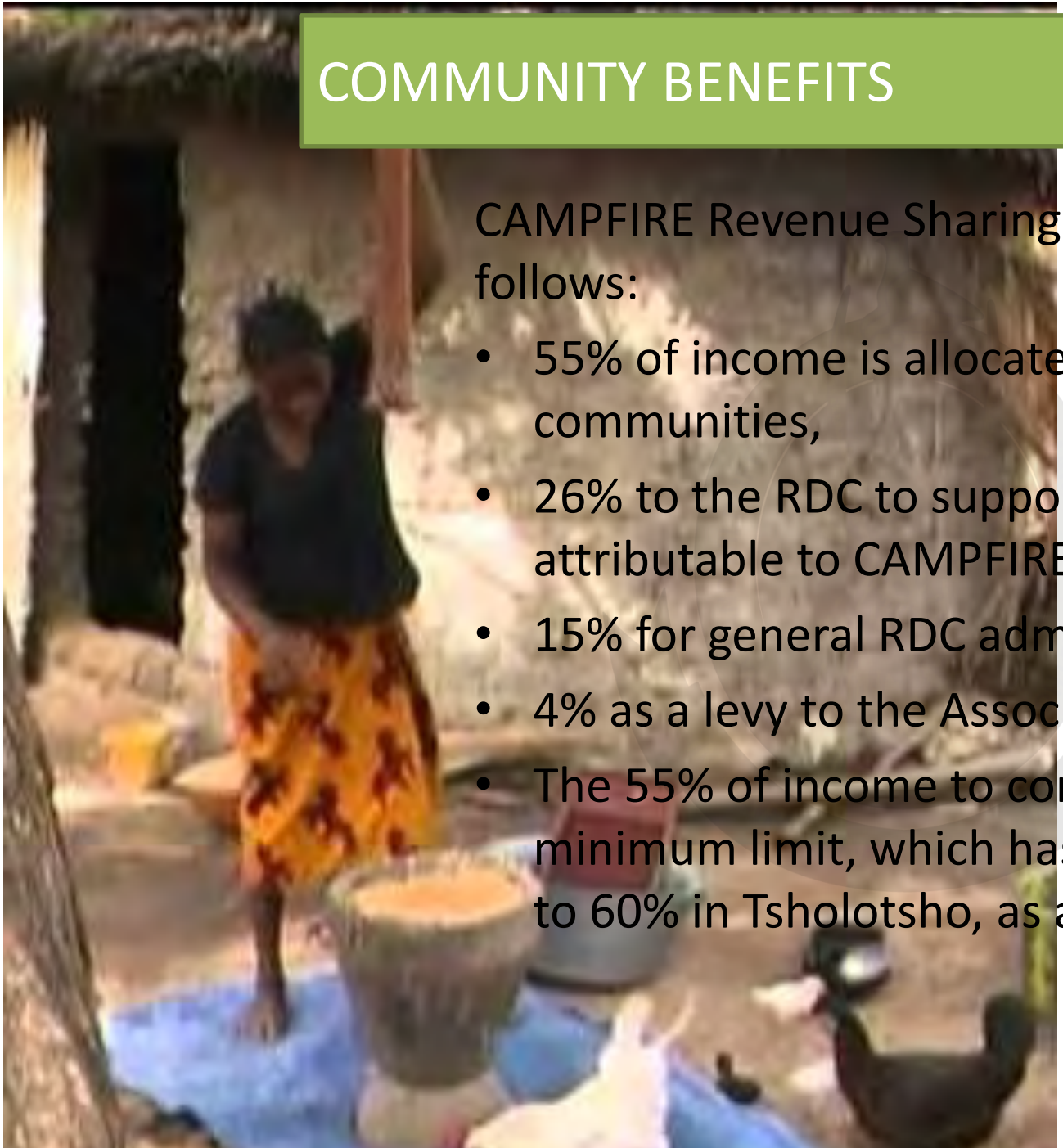
In the 1980s, the Zimbabwean government embarked on a Community Based Natural Resources Management Programme which would empower the rural communities to manage and utilise the natural resources in their districts.

To this end, the communities applied for and were given Appropriate Authority over their wildlife resources. This appropriate Authority meant that they could then embark on empowerment programmes for their own benefit.

All these districts fall under the CAMPFIRE Association

CAMPFIRE AREAS

Land area under CAMPFIRE	50,000 km^2 - 12% of Zimbabwe
No of CAMPFIRE Districts	58
No of wildlife districts	28 (15 active in hunting)
No of Safari Operators	33
No of Photographic safaris	10
No of leased Parks Safari Areas	4



COMMUNITY BENEFITS

CAMPFIRE Revenue Sharing Guidelines are as follows:

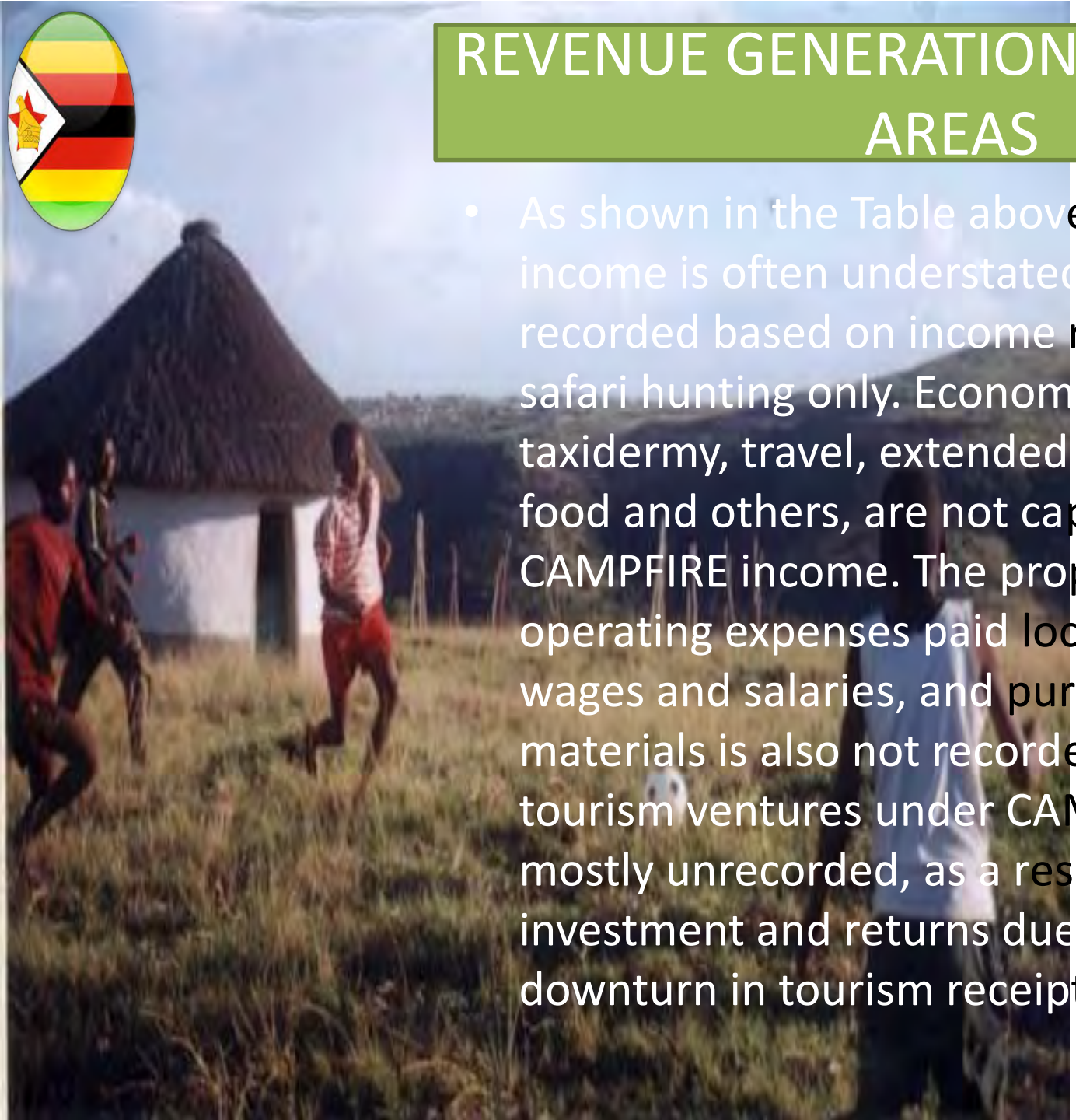
- 55% of income is allocated to communities,
- 26% to the RDC to support costs attributable to CAMPFIRE activities,
- 15% for general RDC administration, and
- 4% as a levy to the Association.
- The 55% of income to communities is the minimum limit, which has been exceeded to 60% in Tsholotsho, as an example.

REVENUE GENERATION - HWANGE

YEAR	GROSS INCOME	COMMUNITY 55%	CAMPFIRE MGT 26%	COUNCIL LEVY 15%	CAMPFIRE ASS 4%
2009	32,500	17,874	8,450	4,875	1,300
2010	41,725	22,948	10,848	6,258	1,669
2011	63,070	34,648	16,398	9,460	2,522
2012	74,408	40,924	19,346	11,161	2,976
2013	65,300	35,915	16,978	9,795	2,612
2014	85,777	47,177	22,302	12,866	3,431
2015	49,350	27,142	12,831	7,402	1,974

REVENUE GENERATION IN CAMPFIRE AREAS

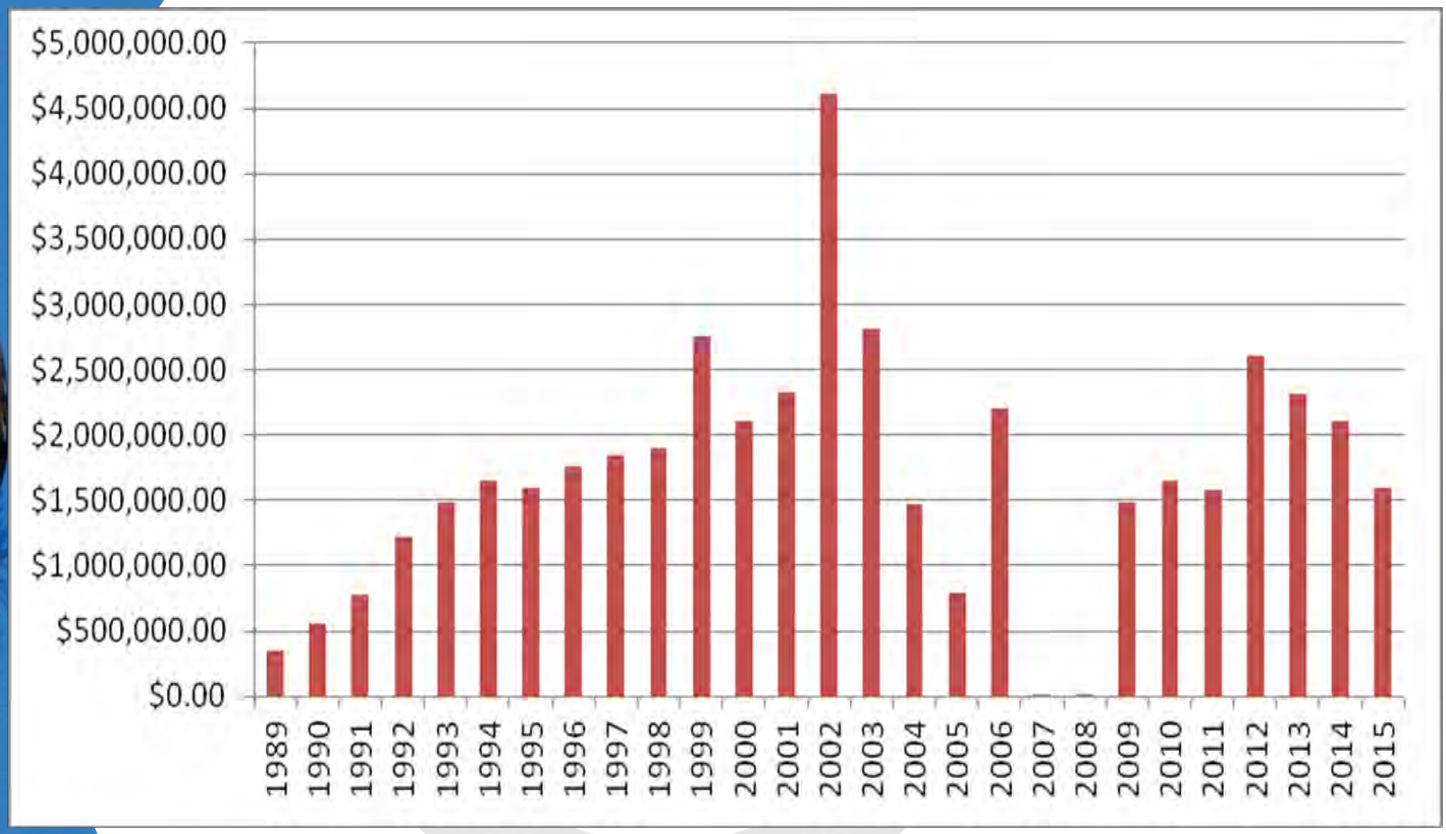
- On average CAMPFIRE generates nearly US$2million per year. This means that communities in major CAMPFIRE areas receive about US$1million every year in total. Since 2007, these communities have been opening their own bank accounts to receive cash from safari operators under a Direct Payment System. This system eliminates previous delays in money reaching the communities and ensures that communities see the value of wildlife.



REVENUE GENERATION IN CAMPFIRE AREAS

- As shown in the Table above, CAMPFIRE income is often understated as it is largely recorded based on income receipts from safari hunting only. Economic multipliers like taxidermy, travel, extended tourism activities, food and others, are not captured as part of CAMPFIRE income. The proportion of safari operating expenses paid locally in the form of wages and salaries, and purchase of materials is also not recorded. Income from tourism ventures under CAMPFIRE is also mostly unrecorded, as a result of low investment and returns due to the current downturn in tourism receipts for the coun

REVENUE GENERATION – CONT'D



MODELS FOR REVENUE DISBURSEMENTS

- The gross amount disbursed to communities as dividends from 1989 to 2006 was US$20,8million, representing 52% of the total income earned. Total income generated between 2009 and 2015 was US$10,2million. The amount disbursed to communities was US$5,5million, representing 54% of total income earned.
- American clients generally constitute 76% of hunters in CAMPFIRE areas for all animals hunted each year. The suspension of ivory imports from Tanzania and Zimbabwe by the United States of America (USA) in April 2014 resulted in the cancellation of 108 out of 189 (57%) elephant hunts initially booked by US citizens in CAMPFIRE areas. As a result of the ban, CAMPFIRE income dropped to US$2,1million in 2014, compared to US$2,3million in 2013, as fewer American hunters conducted their safaris nevertheless in anticipation of the lifting of the ban. However, the ban continued into 2015, resulting in a massive decline of total CAMPFIRE income to US$1,6million.

Use of Income

- Revenue received by communities (about USD1 million annually) helps directly offset the costs of living with wildlife.
- Most communities have voluntarily invested in infrastructure which has long term benefits such as clinics, schools, and grinding mills.
- However, in some areas, the projects are spread too thinly to meet the needs of a growing number of people.
- Other communities have drilled boreholes, constructed seasonal roads, erecting of fencing to keep out wildlife, purchase of tractors, and direct purchase of drought relief food. Children benefit from reduced walking distances through the construction of schools, procurement of learning materials, and payment of school fees from CAMPFIRE proceeds.
- Communities also benefit from meat in excess of the requirements of safari hunting operations, and from problem animal control.

COMMUNITY PROJECTS FUNDED FROM CAMPFIRE REVENUE

District	Project
Beitbridge	Rehabilitation of schools, clinics and protection of irrigation schemes
Bililima	Rehabilitation of 3 clinics and 3 primary schools, hall, fencing of fields and rehabilitation of lodge, community truck, tractor, dam repair machinery.
Chipinge	3 grinding mills, lorry, teachers houses, community office, shop
Chiredzi	Clinics, mothers waiting shelters, teachers' houses, primary schools, community-grinding mills, Police sub-office, piped water and electrification of clinic.
Hurungwe	Construction of classroom block - Nyamakate Secondary, Maintenance of Nyamakate bridge. Purchase of tractor tube, Payment of carpenters, Roofing Chipfuko Primary School and Huyo Secondary School, CAMPFIRE Ward tractor major service, Purchase of Treasurers bicycle, Payment of Nyamakate Clinic guard, 7 resource monitors allowances, 26 bag cement Chitindiva, Kabidza , Manyenyedzi and Mawau cchools for toilets construction, Renovation Karuru School (5 bags cement), and toilet construction, Chitindiva Clinic toilet construction, Roofing Chikova Secondary School, Purchase of buiding materials Chikova Secondary Block, Painting Dete Primary School, Building toilets Makwiye school, Building shed Mupuse school, Roofing Bhashungwe primary school, Sanyati Bridge camp renovation, Purchase of Cement Tashinga Primary School, 6 pairs uniform for resource monitors, Purchase of 20 bags cement Chisipite Primary School, Purchase of tyres for ward tractor, Bridge maintenance
Mbire	Clinics, nurses houses, ward offices, storerooms, 14 classrooms, 7 teachers houses, grinding mills, school offices, wildlife administration offices, 2 hand pump boreholes, water piping, toilet, water storage tanks, 2 tractors, a basic tourist camp with 4 chalets;
Nyaminyami	Tillage tractors, renovation of dispensary at clinic, nurse's house. Construction of Mayovhe classroom block, 3 grinding mills, Teacher's house, Jongola school. School bursaries x 3 students at Seke Teacher's College. Renovation of pre-schools x 2. Negande: Rehabilitation of water pipeline, grinding mill. Nebiri: Chikuro primary block, rehabilitation of Harudziva water pipeline. Kasvisva: Rehabilitation of water pipeline to supply water to Kasvisva clinic, Kasvisva Secondary school block. Msampa: Teacher's house, Majazu primary, renovation of ward warehouse; Kanyati: Cement for teacher's house renovation.
Tsholotsho	Classroom blocks and furniture (Sihazela, Mlevu, Mtshwayeli, Ntulula, Dibutibu, Gwaai, Nkwizhi, Zibalongwe, Malindi, Mgodimasili, Phelela, Mpilo, Jimila, and Kapane Primary schools), 2 F14 cottages, 10 sewing machines (Dibutibu Secondary school), 7km piped water system for Thembile primary school, Sikente Clinic, Tshitatshawa and Jowa clinics construction, fencing of Madlangombe clinic, 10 water engines, borehole drilling and repairs and repair kits, Lister diesel engines for 6 villages in ward 21 and at Sihazela Line in ward 1, grinding mills, solar water pumping in wards 1, 2 and 4. 2 pickup trucks for wildlife monitoring purchased in 2015.

IMPACT OF COMMUNITY BENEFITS ON CONSERVATION

- Every time there is human-elephant conflict, the communities need to see that action is taken by the Authorities, either through compensation for loss and/or damage and through eliminating further potential threats. Any inaction by the Authorities usually results in communities taking matters into their own hands, to the detriment of the wildlife resources therein. However, where communities derive benefit and where there are locally designed and built-in mechanisms for compensation for the whole community through the utilisation of the resources, the communities tend to be more tolerant towards the animals.
- Elephant damage to Community Property includes the following;
- Destruction of crops which affects both the quality and quantity of harvests and impacting negatively on food security;
- Destruction of property;
- Depletion of water sources;
- Destruction of water infrastructure;
- Reduced grazing land;
- Restricted access to essential commodities such as firewood;
- All this results in loss of property and opportunities to carry out other activities due to time spent guarding crops and property.

THANK YOU

MAZVITA!!!

From:	Regina A. Lennox
To:	Vannorman, Tim; Vargas, Darcy
Cc:	John J. Jackson, III
Subject:	Enhancement Information - Zimbabwe Elephant and Lion - PRTs Zimbabwe: PRTs 03369C, 03902C, 04846C, 04847C, 06118C, 11229C, 86471B, 86472B, 86473B, 86474B, 88388B, 94865B, 94867B, 94868B, 94869B, 94870B, 94871B, et al.
Date:	Tuesday, December 27, 2016 2:31:42 PM
Attachments:	Zimbabwe Presentation- Legal Trade, Conservation and Rural Livelihoods - FINAL.pdf

Dear Tim and Darcy,

Attached please find a presentation given by Liberty Nyaguse, the Elephant Coordinator for ZimParks, at the CITES and Livelihoods Workshop held in George, South Africa, at the end of November. Conservation Force had a contractor attend this Workshop who just provided the attached presentation. Please consider this presentation in making enhancement findings and considering permit applications for the import of African elephant and African lion trophies from Zimbabwe, including PRTs 03369C, 03902C, 04846C, 04847C, 06118C, 11229C, 86471B, 86472B, 86473B, 86474B, 88388B, 94865B, 94867B, 94868B, 94869B, 94870B, 94871B, et al.

This presentation provides information on Zimbabwe's adaptive management and science-based quota-setting for hunting offtakes; the revenue generated from licensed, regulated hunting for ZimParks; and the revenues and benefits generated for rural communities through the CAMPFIRE program. For example, ZimParks' quota-setting considerations are explained on slide 6 and include, among other things, survey results; research publications; offtakes from legal and illegal sources; the size, management regime, and ecology of the properties where the quotas are allocated; changes in habitat; trophy quality; and more.

ZimParks' receipts of hunting revenues and expenditures on operational, staff, and other costs are explained on slide 10. A dramatic decline in revenue (almost $2 million) occurred from 2013 to 2015/2016 as a result of the suspension on import of elephant trophies into the U.S. and the ESA listing of the African lion.

The benefits generated by sustainable use through hunting for Zimbabwe's CBNRM program, CAMPFIRE, is explained on slides 11-21. Again, there is a significant decline in revenues from hunting fees, with a "massive decline" of CAMPFIRE hunting fee income in 2015 (slide 19). The decline is even greater due to losses in unrecorded income from tourist support businesses, wages, etc. As explained on slide 17, much CAMPFIRE income from is understated, and the decline in U.S. hunting tourism has caused an even larger decline than the reduced trophy fee revenues indicate.

As this presentation demonstrates, licensed, regulated hunting is an essential part of

Zimbabwe's wildlife management and CBNRM, and the decline in U.S. hunters is reducing the enhancement generated by hunting for Zimbabwe's elephant and lion.

Sincerely,

Regina A. Lennox
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Metairie, Louisiana 70001 USA
504-837-1233 (office)
919-452-8652 (cell)
regina.lennox@conservationforce.org

From: Kohn, Frank
To: FWHQ DMA-STAFF
Subject: Zimbabwe ships live elephants to wildlife parks in China
Date: Tuesday, December 27, 2016 7:55:03 AM

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https://www.theguardian.com/environment/2016/dec/23/zimbabwe-ships-live-elephants-to-wildlife-parks-in-china

From:	Gadd, Michelle
To:	Hoover, Craig; Tim Vannorman; Laura Noguchi; Richard Ruggiero; Rosemarie Gnam; Pamela Scruggs; Horton, Monica; Dirck Byler; Danielle Kessler
Subject:	John Jackson"s 2017 year end report of successes
Date:	Wednesday, December 13, 2017 3:43:42 PM

https://www.africahunting.com/threads/conservation-force-end-of-the-year-report-2017.41260/

Dear Supporter,

Our twentieth anniversary year has been one of the most successful in our history. We have been rewarded with many hard-earned victories. But as this is being written the media and anti-hunters have bombarded the President with “false facts” that threaten some of our achievements. Rest assured we are working hard to contend with those lies.

Successes

We began 2017 by reaching out to the new administration for urgent help with an array of worsening crises. The last administration had suspended important import permits and neglected to process others in an apparent strategy to persuade countries to abandon safari hunting. Numerous organizations signed-on to letters circulated by Conservation Force to bring the deteriorating state of safari hunting to the attention of Secretary Zinke and Acting FWS Director Greg Sheehan. One result is the new International Conservation Council to advise the Secretary of Interior about hunting issues from excessive trophy seizure practices to chronic delays of the import permitting process. The promising agenda of the Council tracks the “urgent” issues we asked the Secretary to address.

I. Enhancement Permitting

One of Conservation Force’s signature pro bono programs is Enhancement Permitting. Read how we put those skills to work this year.

1. **Cape Mountain Zebra**: We filed a petition jointly with PHASA to downlist the Cape mountain zebra from its endangered listing on the ESA. We followed that up with well- supported enhancement import permit applications that have been noticed in the Federal Register and are pending. The plan is to establish enhancement import permits while we wait for the longer downlisting review to proceed.

2. **Wood Bison**: We filed a petition to exempt the Canadian wood bison from enhancement import permitting. After over a decade of work to downlist and import those trophies, it once again requires enhancement import permits despite being downlisted to threatened status under the ESA and being completely delisted from CITES. We expect to eliminate the enhancement requirement but have enhancement permit applications in the works to cover both alternatives.

3. **Markhor**: We successfully challenged the FWS misinterpretation that only one markhor per year could be imported by an individual even when taken in different countries. We also continued to represent applicants for permits to import markhor trophies from Tajikistan’s conservancies, an import we established last year.

4. **RSA Lion**: We succeeded in obtaining a positive enhancement finding for import of “wild” and “wild-managed” lion for 2017, 2018, and 2019. At this time the wildlife authority (DEA) in South Africa are not approving export permits for wild-managed lion though they are working on those, and we anticipate exports to resume in the next quarter. The DEA is not likely to approve export

permits of captive bred lion so all the conflict over the shooting of captive bred lion is moot. Also, the FWS is unable to make a positive enhancement finding for captive bred lion hunting so those lion are not importable even if DEA approves export. Bones of wild and wild- managed lion trophies are not exportable from South Africa for commercial use. Forget about exporting or importing trophies of captive bred lion in the near future. Also, Conservation Force will not assist with reestablishing import of captive bred lion.

5. **Zambia Lion**: Conservation Force provided technical advice to Zambia, filed numerous well-supported enhancement import permit applications, and campaigned for processing of those applications over the last year (or longer). Consequently, the FWS found enhancement and approved lion import permits for 2016 through 2018. (BUT SEE BELOW.)

6. Zimbabwe Lion: Conservation Force provided technical assistance to satisfy the new FWS enhancement requirement for lion trophy imports for 2016 through 2018. We filed and followed up on numerous well-supported import permit applications. The permits include areas like Bubye and Save Valley Conservancies as well as concessions in the CAMPFIRE Program. (BUT SEE BELOW.)

7. **Tanzania Lion**: Conservation Force provided the necessary technical support to get the EU to make a positive finding allowing the import of lion, and we soon expect a positive finding from the FWS for the numerous well-supported enhancement permit applications we have filed. Tanzania has the world's largest lion population, the most habitat, and the largest prey base. Nevertheless, Tanzania failed to file a National Ivory Action Plan update at the CITES Standing Committee meeting in late November and has been issued a warning of suspension of all trade. As this goes to print we have dispatched a consultant to assist with the reporting.

8. **Namibia Black Rhino**: We continue our leadership in enhancement permitting and organizing conservation hunts of select black rhino to fund the successful rhino conservation strategy of Namibia. We are ready to help step the number up to the full CITES-approved export quota (5) in 2018. The hunting is designed to increase the reproductive rate of the rhino which in turn offsets any losses from poaching, and also funds anti-poaching and community buy-in.

9. **Zambia Elephant**: Conservation Force's well-supported enhancement import permits were approved in late November but appear to be on political hold because of a deluge of fake news and ignorance by the media and anti-hunters. The enhancement finding was an update of the previous positive finding (October 2011) we had secured before Zambia closed safari hunting for two years. There was neither a "ban" nor suspension of elephant imports from Zambia. We anticipate these imports will resume once these true facts are explained to the President.

10. **Zimbabwe Elephant**: After over three years of working night and day, we were able to get the FWS to act on the applications that were ready for decision but stalled for more than a year. Without requesting any further information from Zimbabwe or the applicants, the FWS had not acted on the applications since November 2016, when all information requests were satisfied. Imports from a country maintaining the world's second-largest elephant population, with the world's most up-to-date elephant management plan implemented by a parastatal independent of the government, were shelved for over a year because the FWS was "overwhelmed" with rosewood permit applications after the October 2016 CITES CoP. As the FWS acknowledged in its positive October 2017 enhancement finding, there was never a "ban" on Zimbabwe elephant trophy imports, but a "suspension" until the supporting documents and management plan could be brought up-to-date. An intense campaign of false facts has caused a hold on the issuance of these import permits. We have organized a response and are facilitating a delegation of African wildlife leaders meeting in Washington as I write this. The coincidence of the overthrow of the former Zimbabwean president was unfortunate but welcome, peaceful, and long overdue, with little

impact on the parastatal ZPWMA that administers the elephant management plan and derives its revenue from safari hunting. Although the transition in Zimbabwe has been peaceful, prudence requires a short delay until the new government stabilizes before the imports can resume. We remain confident that the positive enhancement finding, which was based on a scientific assessment of Zimbabwe's management by the FWS, will remain in place and authorize elephant trophy imports.

In addition, after the FWS denied two applications to import elephant trophies hunted in early 2015, we filed and argued an appeal before the Acting FWS Director in August. Since that date the FWS has asked for several extensions because of apparent conflict with SCI's litigation concerning the same period (2014-2015) and, now, perhaps the toppling of the presidency of Zimbabwe. In any event, we remain optimistic that the administrative appeal will succeed in light of the extensive information provided by ZPWMA and Conservation Force, which clarified the asserted lack of information and misinformation on which the initial suspension was based.

11. Tanzania Elephant: With our technical assistance, Tanzania was able to get the EU to approve import of elephant trophies from most of the country including the Selous Game Reserve. The FWS should not be far behind because of the well-supported enhancement import permit applications we have submitted.

II. CITES and ESA

1. **CITES**: Conservation Force's highly-trained team participated in both the Animals and Standing Committee meetings in Geneva as an international NGO Observer. Breaking news comes from the Standing Committee meeting that closed as this was being written. The trade of hippo from Mozambique is once again lawful after a suspension of nearly six years. The participation of rural communities is being given a mechanism following Conservation Force's assistance in establishing a rural communities' working group at the 2016 CITES CoP. Conservation Force has been appointed to the lion, elephant, rhino, and other important inter- sessional working groups. The AC and SC meetings are building towards a serious review of lion and leopard hunting in 2018 in preparation for the next CITES CoP in 2019. Believe me, we are staying on top of those matters.

2. **Listing Petitions of Anti-Hunters**: Anti-hunters have filed petitions to list as endangered all African elephant, leopard, and giraffe. In January, we filed a 40-page opposition to the petition to uplist the leopard along with 124 supporting documents. In early November, we followed up with a public document identifying 50 reasons leopard should not be listed as endangered. We are working on a similar document with respect to the elephant. The giraffe petition is still undergoing the first stage of review.

3. **Petition to Reform Administration of the ESA**: In response to the Department of Interior's Regulatory Reform Initiative, we filed a petition/comment to stop the FWS from treating threatened listed species the same as if they were listed as endangered. In a nutshell, the petition calls for repeal of the enhancement requirement and special rules for threatened listed game species, and particularly species that are listed on Appendix II of CITES and which would otherwise be subject to the presumption of legal import in Section 9(c)(2) of the ESA, as well as the rolling back of other practices that have gone from bad to worse in recent years.

4. **Cecil Campaign**: The anti-hunters continue to lobby for state legislation to prohibit import of Big Five trophies in states with designated ports for import. In each instance we have been able to kill the legislation by acting quickly before a repeat of Conservation Force's New Jersey-type of injunctive litigation was necessary. As the year closes some animal rights groups pledge to continue their campaigns for the unlawful legislation—apparently for fundraising purposes. We remain vigilant and notify each state's governor, director of wildlife, and relevant legislators

within days of the illegal legislation being floated across the entire country.

III. Other Matters

1. **Airline Embargos**: Although early in the year, the federal appellate court denied our appeal to overturn the dismissal of our injunctive litigation against Delta, we continue the administrative claim against Delta. Zimbabwe complained of these embargos at the CITES Standing Committee meeting as this goes to print, and Zimbabwe's concerns were supported by SADC countries as well as China and Japan. We are still hoping for some Congressional or regulatory relief from the laws and regulations that exempt airlines from litigation for discriminatory treatment of customers and cargo under the guise of deregulation. In short, Congress can keep public air carriers honest by not allowing them to discriminate. The airlines are undermining ESA enhancement permits.

2. **Revision of Permit Application Forms**: In response to a Federal Register notice by the FWS, Conservation Force filed a comment suggesting 31 specific revisions to the import permit application forms currently in use. The FWS accepted most of these suggestions. Among other things, the application forms will no longer ask for Social Security numbers, fax numbers, occupation and affiliation, or about prior permit numbers that were a pain to find. The FWS has also removed the question asking for the "parts" to be imported, allowing all parts that meet the definition of a "trophy." The FWS has not yet published its updated permit application forms on its website, but we expect this soon.

3. **Smart Projects and Partnerships**: Conservation Force continues with a number of projects. We funded the Namibian Conservancy Support Association (NACSO) red lechwe and antelope survey in the Western Caprivi Strip in Namibia with money from our Ranching for Restoration Program in Texas. We funded Eld's deer ecology and conservation projects supported by the IUCN Deer Specialist Group in Southeast Asia with funds from our Ranching for Restoration Program as well.

We acted as the charitable funding conduit for Robin and Pauline Hurt's Gamsberg White Rhino project in Namibia and the Robin Hurt Wildlife Foundation in Tanzania. We continued to serve as the charitable funding conduit of the Dande Anti-Poaching Unit (DAPU) in Zimbabwe. We also established the Custodians Conservation Program with McCallum Safaris in Tanzania.

We wholly-funded the new Zimbabwe National Scientific Research Workshop and Plan to guide that country's research projects over the next ten years. Likewise, we funded ZPWMA's creation of a national CITES Coordination Unit and National CITES Strategy and roadmap to CITES CoP 18. In Tanzania, we funded an addendum to the lion non-detriment findings that documented the success of Tanzania's aging regulations governing lion harvest from 2011 through 2016 (since it began). We deployed several experts in key field projects to assist range state wildlife authorities in numerous bio-political and technical issues.

4. **Rural Community Participation and Programs**: In Tanzania, we entered into a memorandum of understanding with the consortium of all Community Wildlife Management Areas. In Namibia, we funded several NACSO projects and its outreach across the globe. At the CITES CoP 17 in October 2016, we initiated the formation of a mechanism to give rural communities a seat in CITES decision-making, and this rural communities working group was officially created at the Standing Committee that just ended in Geneva. We pledged funding for a rural communities' workshop to assist Zimbabwe's communities in preparing for this new working group.

5. **Public Relations and Education**: We helped contend with the blow-up over the hunting of Xanda the lion (the alleged son of Cecil), and the import permitting of elephant from Zambia and

Zimbabwe with the most detailed talking points, articles, and experts. We continue to work on developing positive press and especially, in bringing African voices into the Western media to clarify misconceptions and misinformation.

6. **Anti-Hunters Suits Against Import of Elephant and Lion Trophies from Zimbabwe**: In November, two sets of Anti-hunting organizations filed separate suits to prevent the import of elephant trophy imports from Zimbabwe, and in one case, also the import of lion trophies from Zimbabwe. Conservation Force is preparing to intervene on behalf of itself, the permit applicants, Zimbabwe's wildlife authority, and perhaps other supporting organizations. Intervening and defending these suits will be a great deal of work, but we certainly know the administrative record well. We intervened in similar challenges to the issuance of black rhino enhancement permits in 2015/2016. We expect to win, just as we did in those suits.

There are so many opportunities, but also risks. The events of November have set the stage for an even busier 2018. We thank you for your important support and promise to always give you the best return on your conservation and advocacy dollar.

Most sincerely,

John J. Jackson, III
President

From:	Vannorman, Tim
To:	Gadd, Michelle
Cc:	Dirck Byler; Richard Ruggiero; Gloria Bell; Danielle Kessler; Rosemarie Gnam; Pamela Scruggs; Laura Noguchi; Hoover, Craig
Subject:	Re: Zambia: resident hunting permit management
Date:	Monday, December 18, 2017 10:41:10 AM

Thanks Michelle for the update.

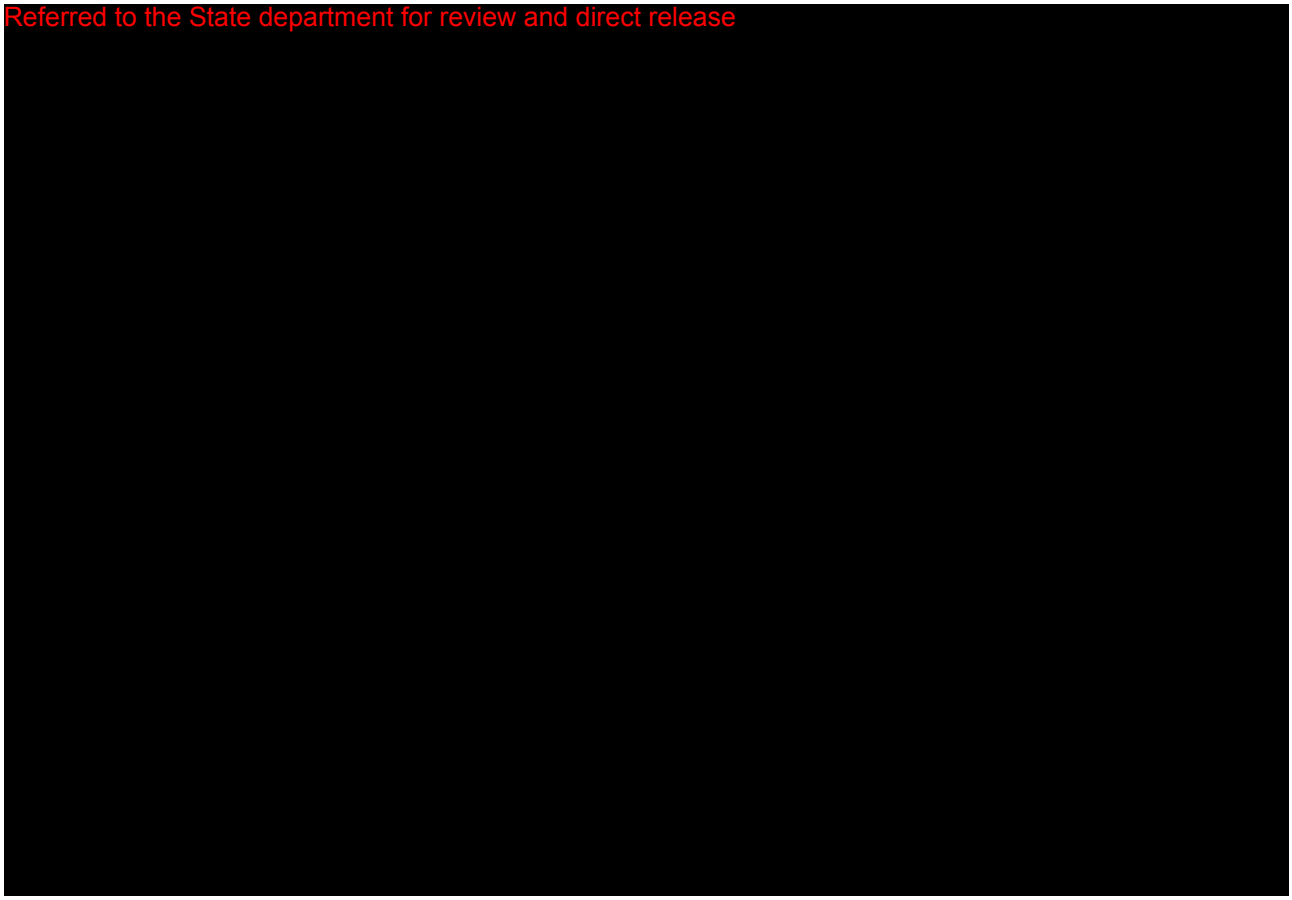
It would be good to know if the lack of a resident hunting season this year was due to mismanagement OR unsustainable hunting practices in the past. Two completely different issues.

Tim

On Mon, Dec 18, 2017 at 10:28 AM, Gadd, Michelle <michelle_gadd@fws.gov> wrote:

> Additional info from US Embassy Lusaka on questionable management of wildlife and hunting by Zambia. -mg
>
> Referred to the State department for review and direct release
>
> [redacted]

Referred to the State department for review and direct release



From: Gadd, Michelle [mailto:michelle_gadd@fws.gov]
Sent: Friday, December 15, 2017 3:50 PM
To: Newcomer, Edward (FWS)
Cc: Hamlyn, Gunner G; Newcomer, Edward L
Subject: Re: Letter from Ministry RE: Elephant hunting

Thanks Gunner, very well articulated. Don't know if you've seen Conservation force's year end letter about 'false facts' - I will send it along.

This is helpful. I have sent it to the DMA and DSA and International Deputy Asst. Director. -mg

On Fri, Dec 15, 2017 at 4:40 AM, Newcomer, Ed <ed_newcomer@fws.gov> wrote:

Hi Gunner,

Thanks so much for forwarding this with your comments. Much appreciated. I will share with the FWS Office of Law Enforcement chain of command.

Have a good weekend.

Yours,

Ed

Ed Newcomer

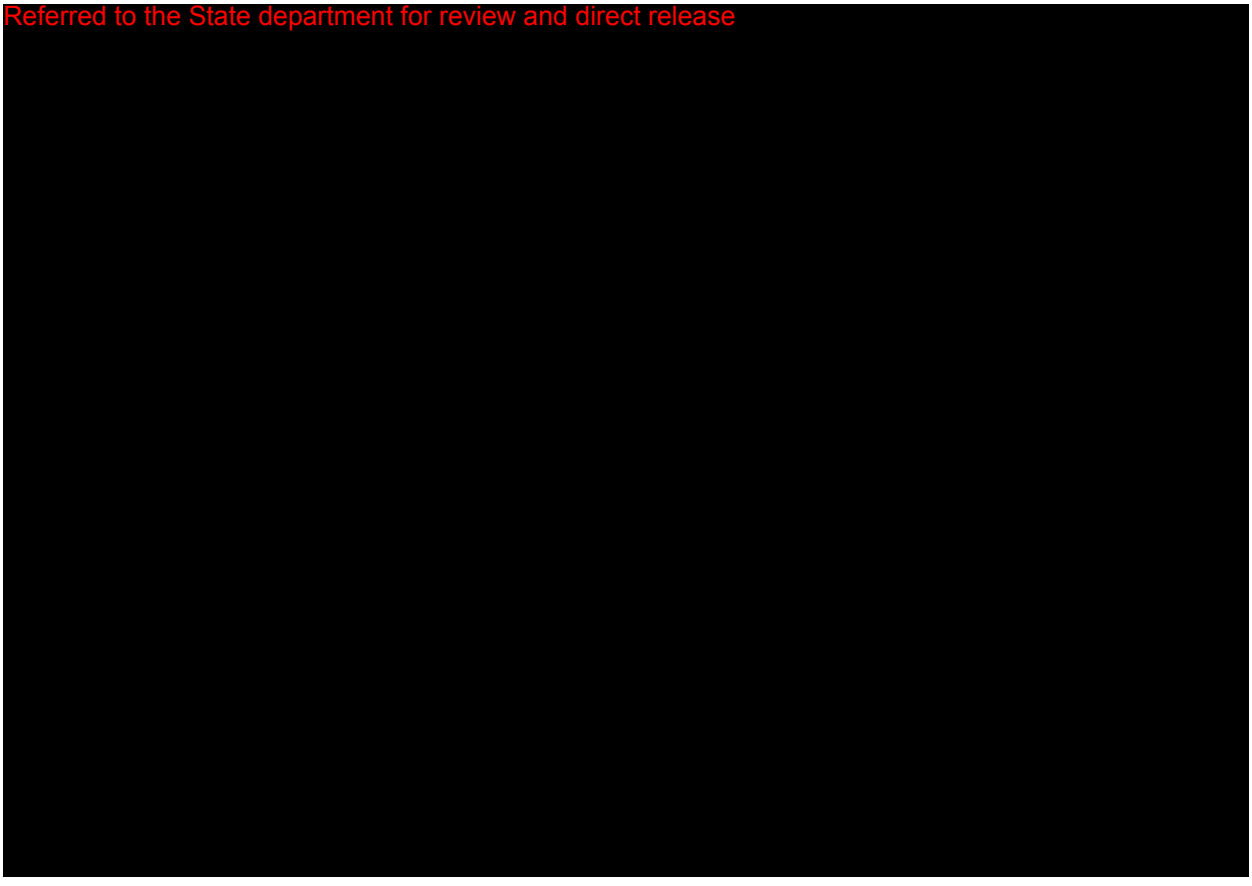
Senior Special Agent

Law Enforcement Attaché for Southern Africa

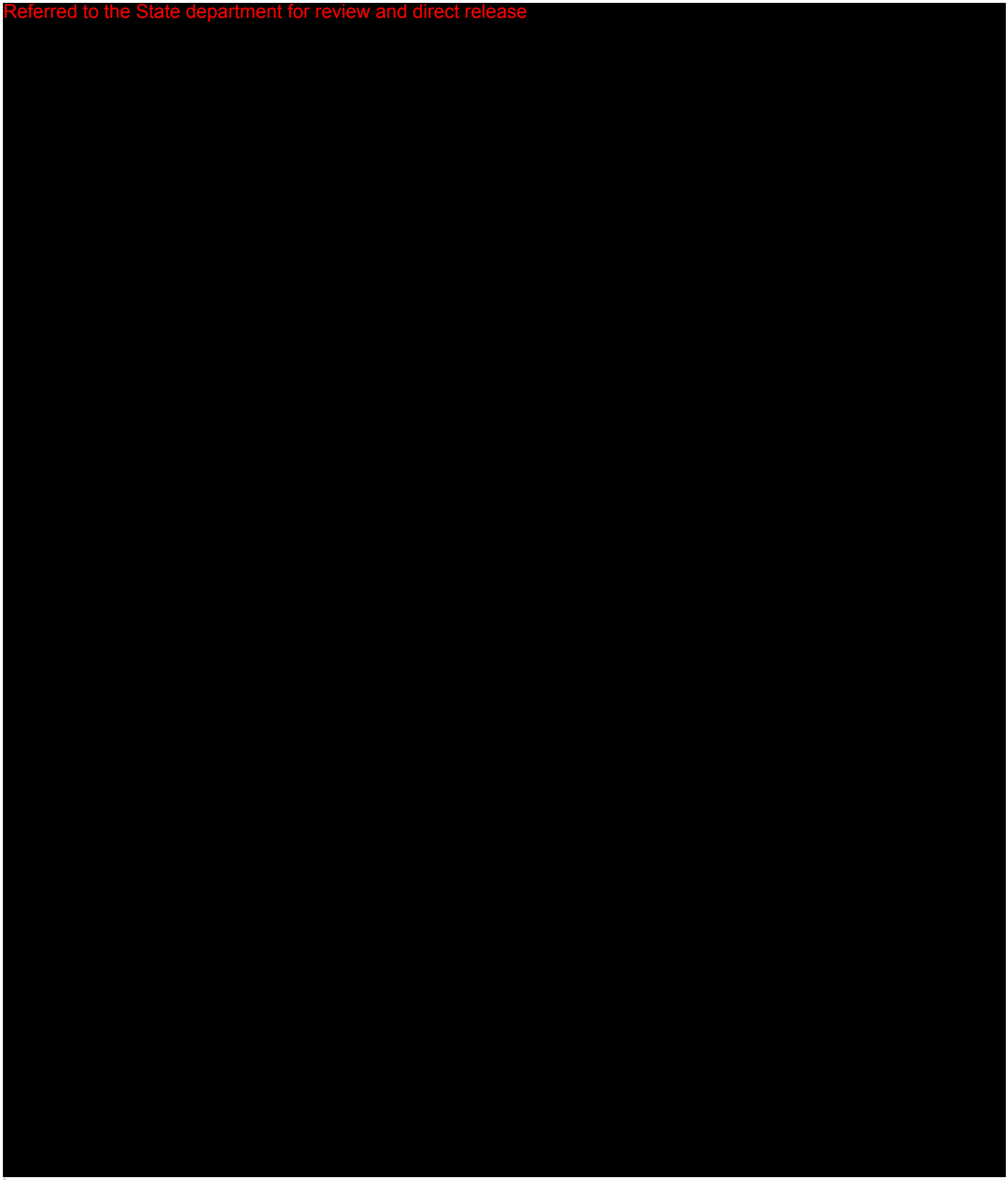
U.S. Fish and Wildlife Service - Office of Law Enforcement

United States Embassy - Gaborone, Botswana

Referred to the State department for review and direct release



Referred to the State department for review and direct release



--

Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

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Vargas, Darcy <darcy_vargas@fws.gov>

Fwd: Request for Information on Elephant in Zambia

Vannorman, Tim <tim_vannorman@fws.gov> Mon, Feb 1, 2016 at 1:53 PM
To: Darcy Vargas <darcy_vargas@fws.gov>

Darcy,

Additional information regarding Zambia.

Tim

------- Forwarded message -------
From: **Scruggs, Pamela** <pamela_scruggs@fws.gov>
Date: Thu, Apr 30, 2015 at 2:52 PM
Subject: Fwd: Request for Information on Elephant in Zambia
To: Rosemarie Gnam <rosemarie_gnam@fws.gov>, Craig Hoover <craig_hoover@fws.gov>, Tim Vannorman <Tim_Vannorman@fws.gov>, Mary Cogliano <mary_cogliano@fws.gov>, Mike Moore <mike_moore@fws.gov>, Laura Noguchi <laura_noguchi@fws.gov>

Response from Zambia
------- Forwarded message -------
From: **Chuma Simukonda** <chuma.simukonda@zawa.org.zm>
Date: Thu, Apr 30, 2015 at 2:50 PM
Subject: Request for Information on Elephant in Zambia
To: "Pamela_Scruggs@fws.gov" <Pamela_Scruggs@fws.gov>

Dear Madam,

Please find attached documents on the above subject.

Regards, Simukonda

DISCLAIMER: This Email and its attachment(s) are confidential and intended solely for the use of the addressed individuals or entities. If you have received this email in error please delete it from your system. Please check this email and any attachments for the presence of viruses. Zambia Wildlife Authority (ZAWA) accepts no liability for any damage caused by any virus transmitted by this email.

--
Pamela Hall Scruggs
Chief, Branch of Consultation and Monitoring
Division of Scientific Authority
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--
Timothy J. Van Norman, Chief
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---

3 attachments

leta to USFW.jpg
782K

NDF for African Elephant sport hunting in Zambia_draft 2015.doc
264K

Response to Questions on Elephant status and hunting Zambia.docx
29K

E-mail: zawaorg@zamnet.zm
All correspondence should be addressed to the Director General

28th April, 2015.

United States Department of Interior

Fish and Wildlife service

Washington, D.C 20240
Tel: 703-358-2498/703-358-2497
Email:Rosemarie_Gnam@fws.gov
Earl_Campbell@fws.gov

Dear Sir/Madam,

SPORT HUNTING OF AFRICAN ELEPHANT IN ZAMBIA

Kindly refer to the above caption. Also refer to your correspondence of 4th March 2015 addressed to the CITES Scientific Authority of Zambia, to furnish your office with Elephant management information.

Kindly note that:

a. Both the National Policy and Action Plan on Elephant Management in Zambia and Management Plan were concluded and adopted.
b. From the year 2013 to 2014, Elephant hunting had been suspended because the Zambian Government was interested in ascertaining the status of wildlife populations in the Game Management Areas where hunting is done.
c. The 2015 Elephant hunting quota has been declared to CITES and is; Tusks and other trophies from 80 animals.

See the attached document to this letter for the other extra information that was raised in your request.

Yours faithfully,

Kampamba A. Kombe
ACTING DIRECTOR GENERAL

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ENHANCEMENT AND NON DETRIMENT FINDINGS FOR AFRICAN ELEPHANT SPORT HUNTING IN ZAMBIA

Prepared by:

Zambia Wildlife Authority,

P/Bag 1 Chilanga

Tel: 00 260 1 278335, 278365

Fax: 00 260 1 278365, 278244

Email: info@zawa.org.zm

March 2015

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1.0 Introduction

The Zambia's annual elephant voluntary export quota is standing at 80 animals or 160 tusks. This follows the upward adjustment of the quota effective after CoP15 (Doha, 2010) from 20 animals or 40 tusks. The hunting area was consequently extended to all elephant range game management areas in Zambia. Proceeds raised from elephant safari contribute towards sustainable elephant conservation and supporting social economic needs of the local communities sharing the game management areas. Elephant safari was introduced as part of several management decisions taken by the Zambian government to sustain conservation of wildlife and other natural resources.

However, in the years 2013 to 2014, Elephant hunting was suspended due to the Government's demand for empirical evidence to guide its decision whether to continue or discontinue wildlife hunting in GMAs in preference to eco-tourism. The moratorium coincided with the expiry of hunting concessions in elephant range areas. The government decision to suspend hunting was timely as no civil litigations could arise due to lost business by concessionaires. In 2013 a large mammal survey was done in key elephant range ecosystems and recommended, from the animal populations and trends that hunting can resume for certain species including elephants.

In order to ensure that elephant sport hunting is sustainable the government of the Republic of Zambia has over the years enhanced conservation of elephants through implementation of the following measures:

(i) The enactment of the Zambia Wildlife Act No. 12 of 1998, which has enhanced Zambia's conservation programme. The Act is being reviewed in order to identify areas that need to be amended in order to make it more effective.

(ii) The establishment of Zambia Wildlife Authority (ZAWA) as an autonomous body supervised by a Board of Directors operating with a free hand to generate its own

funds by commercializing a number of its business components but without compromising its core function of biodiversity conservation;

(iii) The formulation and implementation of a five year-strategic (2008 to 2012) plan aimed at enhancing the conservation of biological diversity;

(iv) The formulation of an elephant policy with strategies and actions for effective elephant management: the policy and management strategy aims to stimulate a more focused approach to the management of the elephant and to provide policy guidance on how this could be carried out by all stake holders;

(v) Enhancing stricter domestic legislation on elephant sport hunting through Statutory Instrument (SI) number 107 of 2010 for elephant protection and SI number 61 of 2007 for the regulation of international trade in Endangered Species of Wild Fauna and flora, to cater for stringent penalties for illegal use of elephants and its products; and

(vi) Involvement of local communities.

ZAWA's overwhelming responsibilities for sustainable conservation requires increased funding to meet the current volumes of conservation task. In order to hasten elephant protection strategies there is need to increase revenue required to invest in ant poaching activities and other interventions. One way of obtaining additional financial resources is through sport hunting in Zambia's Game Management Areas (GMAs). The proceeds from elephant sport hunting are re-invested into elephant conservation and sustainable development in local communities for the benefit of the local people who share their rural frontier with the elephants. Legally, benefit sharing mechanism of revenue from sport hunting is on a 50% ratio between ZAWA and local communities while ZAWA retains 100% of hunting concessions fees.

Zambia manages elephant sport hunting with the following precautions and guiding principles:

(i) Only the approved quota of 160 tusks and other trophies per year are available for elephant sport hunting;

(ii) Hunting licenses are sold to existing safari outfitters, and certificate of ownership issued for trophies to the hunter with details of trophies obtained such as; ivory or skin which provides for stricter monitoring of hunting and movement of trophies;

(iii) All sport-hunted elephant ivories are punch-died in accordance with CITES Resolution Conf. 10.10;

(iv) Only trophies obtained following the process in (ii) above are allowed to be exported to countries of hunter's destination as personal items;

(v) Revenue from elephant sport hunting is used to enhance elephant conservation and community development programmes within Zambia;

(vi) Veterinary measures: Trade in wildlife products in Zambia is governed by veterinary regulations. All the individual ivory specimens are fumigated prior to shipment in compliance with veterinary regulations.

2.0 Rationale

2.1 Elephant conservation

The Zambia Wildlife Authority has a mandate to promote sustainable elephant conservation in all of its protected areas. To this effect, Zambia has made significant progress on African Elephant conservation through the production of a National Strategy for Elephant Management in Zambia in 2005 whose goal is "Conservation of elephants at population levels which promote conservation of biodiversity while providing for sustainable utilization."

The objectives of the National Strategy for Elephant Management among others include:

(i) Mitigate human – elephant conflicts;

(ii) Reduce poaching levels;

(iii) Provide adequate trained personnel;

(iv) Secure and allocate adequate financial resources;

(v) Establish and maintain a comprehensive ivory management system;

(vi) Provide favorable environment for resumption of sustainable elephant hunting;

(vii) Strengthen and maintain coordination of elephant conservation in transfrontier areas;

(viii) Develop and implement public awareness campaigns.

The Zambia National Strategy for Elephant Management and Conservation has been aligned to the African Elephant Action Plan prepared by African Elephant Range States at CITES CoP15 in 2010. Zambia believes this undertaking is therefore a necessity to build a strong foundation for down listing of Zambia´s elephant population to Appendix II of CITES and to build capacity of Zambia to monitor its elephant population on which sound management decisions for elephant utilization would be based. A final draft for the aligned Zambia National Strategy for Elephant Management and Conservation has since been completed and is awaiting adoption.

Over the years, it has been proved that protected areas alone are inadequate to secure the long-term survival of elephants especially areas such as the Lower Zambezi and South Luangwa, where competition with humans for resources is high. It is important, and makes ecological sense under such circumstances that elephants are allowed to roam freely between and across wild habitats on privately owned land, natural and customary land, yet it is in these areas where human-elephant conflicts are more pronounced. If Elephants are to survive in such instances there must be tangible economic benefits to landowners or communities sharing habitat with them without which elephant conservation will always be marginal to other land use forms. This means that elephants must simply have a strong commercial value, the value that is not only limited to eco-tourism which has serious limitations –such as seasonality and fluctuations in the number of visitors. Thus stated, elephant sport hunting is based on a quota that accommodates problem animals and cannot be overemphasized.

2.2 Support to local community

The primary concern for elephant sport hunting in Zambia's GMAs is to fight the injustice that elephants inflict on local people through destruction of their livelihood by loss of crops and human life. Since 1996, the elephant population in Zambia has continued to increase from an

estimated number of 22, 000 elephants to the current populations of about 27,000 elephants (ZAWA, 2009). By 2009, the number of human elephant reports had increased to 3,270 reports per annum from 288 reports per annum in 2002. The year 2012 recorded a decline in overall problem animal reports. During the same period however, the number of humans killed by elephants increased from 6 to 12. In 2013, 5 (five) people were killed by elephants out of the over 2400 problem elephant reports received. However, 20 elephants had to be controlled by killing because of the danger that they posed to human life. Out of the 2897 reports of problem animals threatened humans and destroyed crops and properties, received, a total of 1269 reports representing 44% involved elephants. 8 people were killed by Elephants during the same period.

The most affected areas by human elephant conflicts are the Luangwa and the mid Zambezi areas. In the case of Luangwa Valley, elephants caused damage exceeding 52.0% of the annual crop production and as was also reported in 2011, to be responsible for the largest number of human deaths than any other species.

The number of problem elephant reports is detailed in Table 1.

Table 1 Table of human animal conflict incident reports

Year	Crop, Property damage and human injury	Humans killed	Total
2002	285	3	288
2003	842	5	847
2004	1440	5	1445
2005	1942	11	1953
2006	1163	8	1171
2007	1979	7	1986
2008	2266	10	2276
2009	3225	45	3270
2010	1319	8	1327
2011	2038	6	2044
2012	1780	12	1792
2013	2400	5	2405
2014	1261	8	1269
Total	18279	120	18399

2.3 Preventive and Mitigation Measures for HEC

To mitigate human elephant conflict, traditional methods such as drumming, clapping, beating metals / stones, use of fire, watchtower and guarding are used. Other methods include blasting. Use of chili smoke is also getting widely used in some areas. In extreme cases, problem elephants have been destroyed (killing of problem elephants) and the ivory stockpiled.

Preventive countermeasures being implemented include use of alarm bells, physical barriers e.g. live fencing of crop fields and village areas, solar fencing and buffer fencing with chilli. Long term preventive measures being implemented are; information gathering, rural local

community sensitization and land use planning. Experience has shown that integrated elephant control approach is better that any single method.

2.4 Costs of Human – Elephant Conflicts

The cost of dealing with human elephant conflicts varies from one area to another and one optional method to another. Human - elephant conflicts occur in varying forms, which are associated with disproportional costs, including human life insecurity (death and injuries), food insecurity (crop and food store damages), damage to water points and properties including houses. In addition, the government and local communities incur indirect costs ranging from medical costs due to exposure to widespread malaria when guarding their crops while others forego employment and education for children who are involved in safeguarding crop fields.

The Zambian government further incurs costs related to logistics and man hours in addressing HEC. These include man days, costs of ammunition, transport and operational rations. The translocation option of problem elephant is unattainable as the cost of approximate US$1000 per animal for 1000km is prohibitive. Logistics to carry out most of the preventive and mitigation measures are therefore not within the means of the affected people in the impoverished rural areas let alone the government.

2.5 Local Community Perceptions and Publicity

In areas where HEC incidences are frequent, community perceptions are likely to be negative towards elephants, as losses incurred by communities can be enormous and traumatic. The sensation that arise from such loses often attract high political attention especially when human life is involved. While elephant has global and national significance, the cost is much felt by local communities whose life is affected on a near daily basis.

2.6 Perceived Benefits

While the communities take pride in sharing areas with elephants and other animals, no economic value is perceived from elephants killed on control except for meat that is distributed

to affected families or villages. Real economic value can only be realized through sustainable utilization of elephants which would not only help mitigate HEC but ensure the survival of elephants in Zambia. If, indeed the future of elephants is to be assured the international community should have an anthropogenic approach to the conservation which in any case it is the humans that are a decisive factor in that equation. Elephants should be seen to provide tangible benefits for communities to accept conservation of elephants as a viable land use alternative.

3.0 Sport Hunting Necessary for Conservation

Since its inception in Zambia in 2005, sport hunting has contributed to the survival of the elephant, given that resources are channeled towards conservation activities and improving rural livelihoods. Furthermore, a quota for elephant is an added incentive to the Safari Operators whose continued presence in the hunting areas provides extra security to the resources in the hunting areas, not to mention job creation for local communities and protein from harvested animals.

Benefits that flow back to communities through hunting will help to improve the local communities' appreciation for the conservation of wildlife in general especially elephants. In Zambia and most of Africa, it has been realized that communities are a very cardinal partners in the conservation of natural resources and thus should also benefit from the conservation thereof.

4.0 Political Imperatives for Sport hunting

Zambia as a party to the CITES has to abide by its requirements while at the same time addressing the many social and economic needs of its citizens in rural areas, that there are hardly any resources left from the central treasury to channel to elephant conservation. From pronouncements made by the CITES parties, it is assumed that elephants are a global resource, which puts Zambia at a great disadvantage as a third world country. This is so because conservation usually not always a funding priority by government which often has difficulties

explaining Zambia's obligations to CITES and the controversy surrounding the African elephant to local communities which is highly misunderstood, questioning morals and ethics of CITES authorities where they have been seen to place high value on elephants and less on humans.

In order for Zambia to promote the benefits of being a Party to CITES, principles that centre on people and environment should be an important part of the Convention hence the need to accommodate resource utilization pathways that will bring the best for both human life and wildlife. Trophy hunting of elephants will therefore, contribute to the cost of conservation in elephant range areas, as elephant conservation can no longer be subsidized by the Government.

5.0 Biological and species status

5.1 Historical Distribution

In Zambia elephants were widely distributed until the early 1970s.

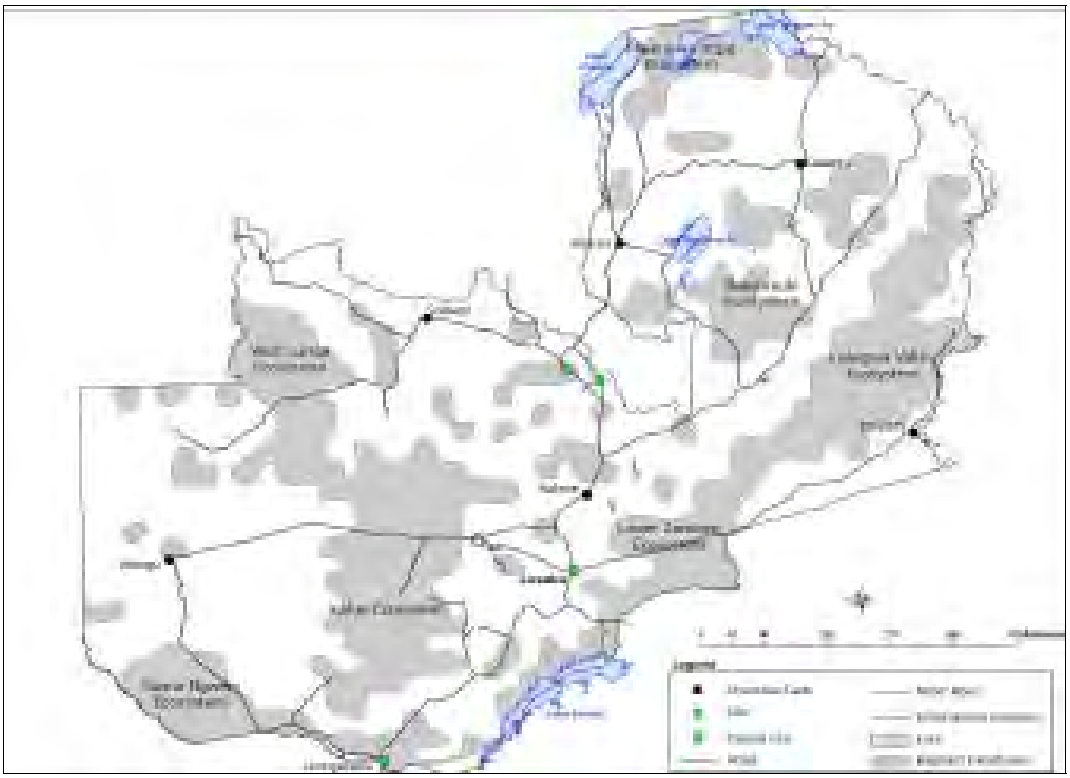


Figure 1 Map of Zambia showing elephant range areas in 1970s

The increase in human population, conversion of land for agricultural activities and excessive hunting for ivory during the pre-colonial and colonial era reduced elephant populations such that today they are mainly confined to protected areas. By 1989 for example, the numbers dwindled from about 200,000 before 1970 to about 18,000 animals. The species was upgraded to Appendix I of CITES in 1989 to save it from extermination from commercial poaching.

5.2 Current Distribution

The range for elephant in Zambia currently covers seven sub-regions as follows: Luangwa Valley system, Mid/Lower Zambezi system, Kafue system, Mosi-oa-Tunya, Sioma - upper Zambezi system, Bangweulu system, Nsumbu – Mweru waNtipa, Lusenga -Tanganyika system, and West Lunga system (Figure 3 and Table 2). Each of the sub regions is larger than 10,000km2 and a total area far exceeding 200,000 km2. From an ecosystems point of view, none of the subsystems is fragmented according to the biological criteria of Annex 5 of Resolution Conf. 9.24(Rev.CoP14). Furthermore, these elephant sub regions cover a diverse landscape and land tenure systems encompassing National Parks, Game Management Areas and some open areas creating an almost contiguous landscape in which elephants can roam between habitats. Still others form a continuum with the neighboring countries linking into the southern African sub-region population.

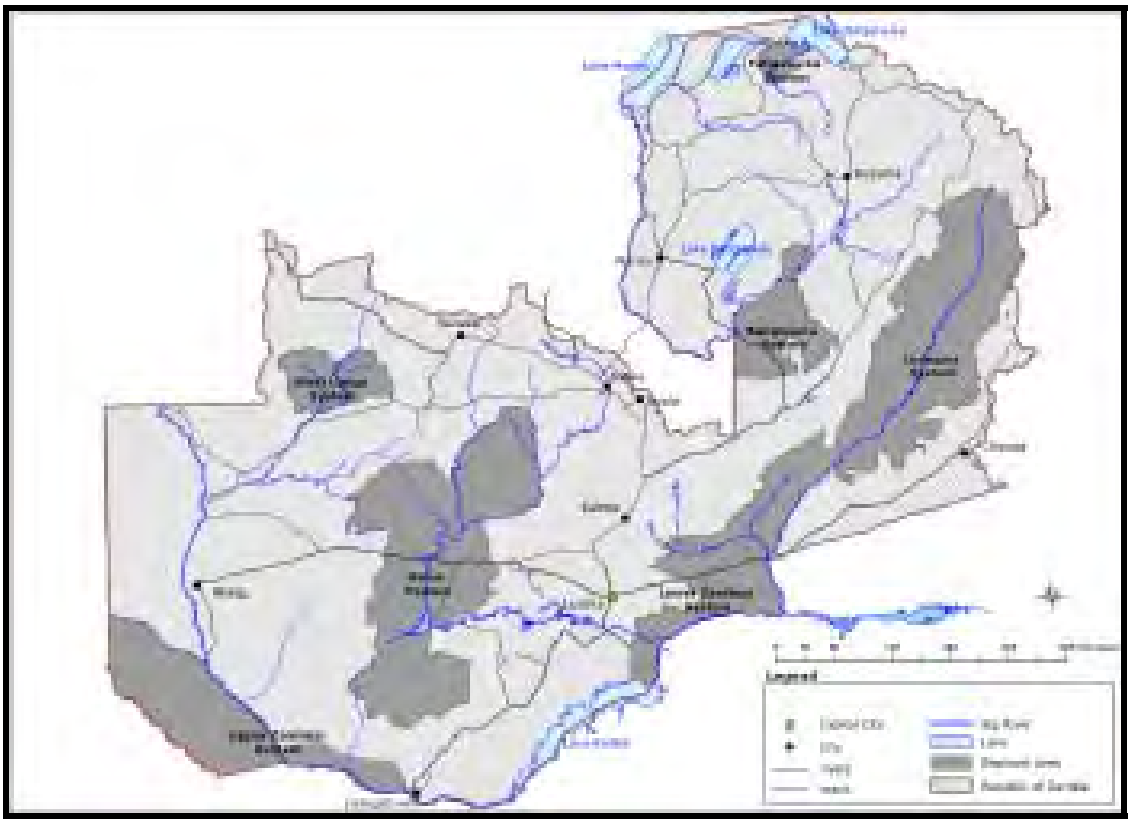


Figure 2 map of current elephant range areas

5.3 Population status

Zambia's elephant population numbers is based on the 2008 national survey which covered a total of 166,712.5 Km^2, which is 22 % of Zambia's land surface of which the surveyed area makes 69% of the wildlife protected areas system which constituted 17 National Parks; 25 GMAs. The 2008 survey ascertained with 95% confidence that the elephant population of Zambia is about 26,382 ± 4,405. Out of this estimate 72% is in the Luangwa system (18,634); Kafue system constitutes 13% (3348); Upper Zambezi comprises 9% (2464) of this estimate; and the Lower Zambezi makes 5% (1299).There are four major elephant ranges in Zambia; Luangwa system, Kafue, Lower Zambezi and the Mosi-oa-Tunya – Kazungula- Sioma areas. Out of the total estimate, 66% of the elephants were in National Parks, while 34% were in GMAs and no elephant was sighted in the open areas searched. All the ecosystems followed this pattern except the Lower Zambezi ecosystem which had more elephants in the GMAs than in the park. All the ecosystems showed positive trends - elephant populations were either stable or

increasing – except for the Lower Zambezi ecosystem. The Tanganyika, Bangweulu and Kariba showed small but stable populations.

A wet season survey of the Luangwa valley system was conducted in 2011 with the purpose of establishing the status of elephants and other large herbivores in the wet season. The population of elephants was estimated at 11, 095 and described as stable and increasing. The survey report recommended that there was need for improving surveillance in South Luangwa National Park as poaching was evidenced by the presence of a fresh carcass in the central part of the park. The results of the 2011 survey in the Luangwa ecosystem should be cautiously understood as cannot be compared to the 2008 survey due to survey season differences. Results of the recent surveys of 2013 are attached.

5.4 Population monitoring

Population monitoring is carried out through regular census methods approved by MIKE. Three methods have been employed to determine the elephant population in Zambia namely; aerial transects sampling techniques, aerial total counts and ground counts/field observations. Sampling intensities have varied between 4% and 50% depending on the size of area being surveyed. In areas where visibility from the area is poor such as Nsumbu and West Lunga National Parks, ground methods, particularly the dung count method has been introduced.

Zambia is fully involved in the CITES Monitoring of Illegal Killing of Elephants (MIKE) programme which has been operational in the South Luangwa National Park since 2000. More effort has been put by introducing similar monitoring programmes in all key elephant areas including; North Luangwa, Sioma Ngwezi, Lower Zambezi, Kafue National Parks and their surrounding GMAs in order to obtain a national status on the illegal activities on the African elephant in Zambia. These satellite areas have been monitored according to the requirements of MIKE since 2002 and the office of the CITES MIKE National Coordinator stores data from these areas.

Zambia proposed to MIKE CITES to include Lower Zambezi National Park to Minimising the Illegal Killing of Elephants and other Endangered Species (MIKES) site. This will help improve the monitoring and management of the Elephant population in the area.

5.5 Habitat availability

The habitat currently available to elephants in Zambia is about 30% of the total land mass which is set aside as Protected Areas in form of National Parks and Game Management Areas. Most of the elephants in Zambia are found in the following areas; Luangwa valley (in National Parks and Game Management Areas) dominated by *mopane* woodlands on the valley floor and *miombo* woodlands on the plateau; Mid Zambezi Valley (National Park and GMAs), dominated by Acacia woodlands, *mopane* and *miombo* woodlands; Kafue areas (National Park and GMAs) dominated by miombo woodlands and some *Baikea plurijuga* woodlands on Kalahari sands in the southern parts; Sioma Ngwezi and West Zambezi GMA and other areas put together, mainly *miombo* and some *Baikea plurijuga* woodland and flood plains; Bangweulu and Nsumbu are mainly covered by miombo and thickets. Minor elephant areas include; the West Lunga National Park, and Mweru wa Ntipa areas (Figure 3).

5.6 Threats

The major threats to the elephant population are the increasing human-elephant conflicts as the population recovers from the heavy poaching scourge of the early 1970s. As elephant populations start to increase country wide, more range is reclaimed and most of the elephant's traditional movement routes that have been over taken by human settlements become focal areas of conflict. Damage to various crops caused by feeding and trampling as well as being a threat to human life are problems that cannot be ignored particularly in areas with high elephant densities such as the Luangwa Valley.

6.0 Elephant Management Measures

6.1 Zambia Wildlife Act No. 12 of 1998

In enforcing the law, ZAWA has adopted zero tolerance policy to all incidences of poaching. Under this new policy, violation of the Zambia Wildlife Act is prosecuted to the fullest extent of the law including the confiscation of any equipment used in the commission of an offence. Currently anyone convicted of killing or possessing any elephant product under this Act is sentenced to a minimum of 5 years and a maximum of 7 years imprisonment without an option of a fine. For repeat offenders, the minimum sentence is 7 years imprisonment without option of a fine.

6.2 The Elephant Policy

Zambia formulated an elephant Conservation Management Plan in 2005. This was a product of consultative meetings among stakeholders in the wildlife industry, including local communities and government agencies that met to discuss the way forward for the African elephant in terms of policy, management strategies, actions and legislation. The Elephant Conservation Management Plan has been aligned to the African Elephant Action Plan formulated by African Elephant range States in 2010 under the MIKE programme.

The policy and conservation plan constitutes the first effort to develop specific guidelines on how the elephant will be managed in Zambia and was issued for reasons as follows:

- That the Government of the Republic of Zambia considers elephant as an economic asset in terms of non-consumptive and consumptive tourism,
- Proper management of the species is critical so that it realizes its full potential to generate significant income for the nation and local community in particular.
- As a keystone species in the environment and critical to the maintenance of biodiversity.

6.3 Statutory Instrument for elephant protection

Currently, the Zambia Wildlife Act No. 12 of 1998, part XIV *Section 131,* provides general penalties ranging from fines to imprisonment. The Statutory Instrument for elephant sport

hunting number 107 of 2010 and the Statutory Instrument for International trade in Endangered Species of Wild Fauna and Flora number 61 of 2007 provides stricter domestic measures on the conservation and management of the African elephant. This instrument has in the past been used to discipline professional hunters who have hunted Elephants below the prescribed minimum required weight of 15kg for legal hunted Ivory.

6.4 On-going and planned elephant research and monitoring Programmes

Zambia has been working with various organizations in the conservation of the African elephant. Given the scarcity of resources suffered by the Zambia Wildlife Authority, research has been focused on surveys to estimate population size of elephants in the country as a basis for the creation of trend patterns. These surveys have focused on key elephant range ecosystems of Luangwa, Lower Zambezi, Upper Zambezi, Kafue and the Nsumbu Systems, and have been largely been funded by the Government of the Republic of Zambia with occasional aid from other cooperating partners such as WWF and Norwegian Agency for International Development (NORAD).

In the Lower Zambezi landscape, there is an on-going collaborative Elephant Research and Conservation Project, an initiative of the African Wildlife Foundation (AWF) working in conjunction with the Zambia wildlife Authority. The project's overall goal is to contribute to the conservation of a viable population of elephants in the lower Zambezi landscape through the provision of accurate scientific data on which management decisions can be made.

The project documents population, locations and movement patterns of elephants in Zimbabwe and Zambia's Lower Zambezi landscape, which includes Lower Zambezi National Park, Chiawa and Rufunsa GMAs. The United States Fish and Wildlife Service together with Safari Club International have also donated equipment ranging from GPS sets, camping equipment and service to vehicles, to the conservation programmes in the same area.

In order to monitor data on elephant movements, sightings and mortality, a Ranger Based Monitoring System (SMART Database) has been implemented as an initiative of the Monitoring

of Illegal Killing of Elephant (MIKE) programme. This programme is fully operational in South Luangwa Area Management Unit while similar monitoring activities are on-going in Kafue, North Luangwa and Lower Zambezi and Nyika ecosystems.

6.5 Monitoring trophy quality

ZAWA records trophy measurements of tusks for analysis of trophy quality of the sport hunted elephants. Analysis of trophy quality is used as an indicator of sustainability of hunting. There was a slight improvement on the trophy quality from 17 kg in 2011 to 17.2 kg in 2012 (figure 4). To mitigate this, Zambia is considering introducing hunting of tuskless elephants as a management measure to minimize the impact on large tuskers. Whilst serving as a management tool to minimize the impact on trophy bulls, the measure will also result in an increase in revenue to ZAWA and the communities.

As stated above, ZAWA will gradually expand hunting areas and will include tusk-less elephants in the quota with close monitoring as a precautionary measure. To this effect, even though, Zambia is allowed to export tusks and trophies from 80 elephants since 2011 as personal effects, it maintained a precautionary harvest quota of 20 elephants in 2011 and increased the harvest quota to 39 elephants in 2012 and 36 have been included for 2015 hunting year.

The government of Zambia is still reviewing hunting in general in Zambia; to that effect the government imposed a two year moratorium on hunting in 2013 and 2014 in hunting blocks where concessions had expired in 2012. Elephant was removed on the 2013 and 2014 hunting quotas and has been resumed in 2015. The 2013 game count affirms that hunting of elephants may continue as populations were found stable and growing. The hunting quota of 80 animals per year is within standing population guidelines, and is necessary to allow for the harvesting of trophy quality elephant bulls and will not in any way threaten the survival of the species in Zambia.

In addition, professional hunters who hunt below minimum requirement of trophy ivory are penalized by ZAWA. In 2013 all hunters involved in hunting undersized elephants were fined and hunting licenses suspended for three years. This measure is aimed at preventing hunting of young elephants by licensed hunters.

7.0 Utilization

7.1 National utilization

Zambia banned elephant sport hunting in 1989 but local trade in elephant products continued until 1992 when the species was up lifted to Appendix I of CITES. Since 1989 Zambia has not exploited its elephant population for commercial trade or domestic consumption. However, elephants originating from Zimbabwe were imported into Zambia's Victoria Falls area for elephant back-ride safaris.

7.2 Legal International Trade

Elephants in Zambia are in Appendix I of the CITES Listing, prohibiting commercial trade in elephant and elephant products. Since the listing in 1989, Zambia has not had any commercial trade activities.

7.3 Sport hunting

Zambia initiated sport hunting of elephants in 2005. A voluntary annual export quota of 40 tusks and other trophies from 20 individual elephants was approved for export as personal effects. However, from 2011, Zambia has increased its annual elephant trophy voluntary quota for non-commercial hunting purposes of tusks and trophies from 20 to 80 elephants per year. The elephant quota is largely determined by the 0.5- 1% of standing population guideline (Martin 1986), which implies that the maximum annual adult male off-take through sport hunting at present should not exceed 260 individuals at current population size.

Between 2010 and 2012 the USA allowed the import of tusks and other trophies for non-commercial purposes from Zambia. This resulted into an increase in the number of elephants hunted and subsequent revenues generated for ZAWA and the communities.

7.4 Hunted trophies

The ZAWA CITES office maintains a register of all sport hunted ivory. All sport hunted ivory is stored by ZAWA and measurements of all ivory are recorded in the ivory dispatch vouchers and are punch dyed in readiness for export with indelible ink, using the following formula: country-of-origin two-letter ISO code, the last two digits of the year / the serial number for the year in question / and the weight in kilograms, according to Res Conf. 10. 10 (Rev. CoP12). Thereafter, a certificate of ownership, bearing details of the client and the trophy is granted to the owner of the trophy. On production of CITES import permit of the importing country, the export permit is processed in readiness for export. The statutory instrument No. 61 of 2010 on Elephants Sport hunting stipulates a weight of not less than 15 kg of ivory can be hunted which prevents the hunting of underage elephants. At least 50% of all meat from elephants hunted during sport hunting is given to the local communities in the Game Management Area in which the hunting takes place as a much needed source of protein.

7.5 Benefit sharing

As already stated, benefit sharing mechanisms of revenue from sustainable consumptive utilization in Zambia exist where animal fees is shared between ZAWA and the local communities on a 50% ratio. During the last hunting in 2012, a total of ZMK 1,820,008.60 was raised from 29 elephants hunted on sport hunting in selected hunting blocks as indicated in table 2 below.

Table 2 Table of revenue disbursements to Community Resource Boards

Hunting block	Elephants Hunted	Revenue (ZMK)
Chiawa	4	285,120
Chifunda	1	71,280
Luembe - West Petauke	1	71,280
Lupande Lower	8	570,240
Mulobezi	1	71,280
Mumbwa West	3	213,840
Munyamadzi - Luwawata	1	71,280
Mwanya - Lumimba	3	213,840
Nyakolwe GR	1	71,280
Nyampala - Munyamadzi	1	71,280
Nyamvu GR	1	71,280
Rufunsa	2	142,560
West Musalangu	2	142,560
Total	29	2,067,120

Income generated through elephant sport hunting formed part of the wildlife revenue realized in 2012 and shared between ZAWA and local communities falling in hunting blocks where hunting licenses were sold. Due to suspension of elephant hunting in 2013 and 2014, communities lost critical revenue which could have been ploughed back into conservation and community projects including local conservation initiatives.

8.0 Law Enforcement units

To enhance its law enforcement capacity, the Zambia Wildlife Authority has split its law enforcement section into 3 units. The Operations department dealing with field patrols and

acting as the armed response wing of the organization, the Intelligence and Investigations Unit dealing with providing intelligence data to the operations wing and investigating any suspicious activities within the Wildlife Act and the Firearms Act, and the Legal and Prosecutions unit that makes sure that offenders are brought before court and prosecuted accordingly, give legal advice to the organization and also help the organization with forfeiture procedures for all items involved in illegal activities.

ZAWA's elephant protection strategies were enhanced through law enforcement and human elephant conflict operation funding to elephant range area management units. The elephant fund distribution criteria was based on operational needs that aimed at holistic ecosystems protection rather than single species protection. Range areas with alternative operational funding received relatively lower funding than those entirely dependent on ZAWA central funding. The source of funds was not limited to elephant fund only, but other safari and photographic activities.

8.1 Law enforcement operations

The capacity of the Authority to enforce the law has been improving by year. Wildlife law enforcement, unlike civil policing is a dynamic field that needs constant adaptive management. This is achieved through constant analysis and ongoing capacity building and placement of the correct individuals to drive operations. The research and monitoring unit of ZAWA analyses law enforcement data from the field and advise the operations unit on preferable areas of adaptation.

Often times, wildlife police officers have to deal with and arrest armed gangs of poachers in National Parks and Game Management Areas. This requires specialized training and endurance for the personnel to be able to do their job efficiently. The Zambia wildlife Authority provides equipment and ration to the staff on a regular basis to keep operations going. During the year 2014 a total of 10 312 field patrols, 2516 intelligence operations and 524 road blocks where

conducted by the Law enforcement units of ZAWA. On average, each of the at least 1100 law enforcement staff conducted 10 patrols in 2014.

Year	Patrols	Home search and Recovery operations	Investigation and investigations	Roadblocks	Total
2013	10,590	304	715	771	13,202
2014	10 312		2516	524	13352

The minimum required patrol man day for field officers is 15 days per month. On average a wildlife police officer is out on patrol for at least 10 (Ten) days during each patrol.

8.2 Arresting of offenders

The law enforcement efforts resulted into the encounter and subsequent arrests of 1671 suspects and 1912 Suspects from the field in 2013 and 2014 respectively. The number of arrests was increasing due to the increased enforcement and investigation efficiency and capabilities of the various law enforcement units within ZAWA.

8.3 Recoveries of items used in illegal activities

Increased arrests thus results in increased forfeitures and recoveries of items used for illegal purposes. 580 firearms were recovered in 2014; this is the main poaching weapon used against elephants by poachers. Removing this quantity of weapons in circulation will greatly reduce the poaching of elephants in the country.

The authority also has the capacity to detect illegal Ivory and Elephant products traded on the black market as can be seen from the recovery of 226 pieces of Ivory during 2014 and 135 pieces in 2013. As can be seen recoveries of both ivory and other items increased in 2014 due to the improved capacity building and operational funding provided by the Central Government The following is a summary of various items recovered from law enforcement operations:

No	Items recovered	Number/quantity	
		2013	2014
01	Fire Arms	524	580
02	wire snares	8,406	9885
03	Ivories	135	226 piece
04	Game meat (various)	13,542.70	22,834 kg
05	bicycles	17	144
06	motor vehicles	0	14
07	motorbikes	4	12

8.4 Prosecution of offenders

Below is a summary of prosecution data for the years 2013 and 2014. All the prosecutions are done by the Zambia Wildlife Authority prosecutions unit. Suspects are charged and arrested by the intelligence and investigations unit.

	Description	2013	2014
01	Number of persons indicted	1,323	1607
02	Number convicted	1,338	1316
03	Number of individual fined	465	749
04	Amount realized from fines imposed on convicts in Zambia Kwacha	K766,207	K1 053,826
05	Cases pending as at 31 December	280	441

With money realized from the hunting of Elephant taken back into conservation and law enforcement, ZAWA would likely see a further improvement in its law enforcement capacity

and general illegal Ivory detection. Trends currently show an increase in general aspects of enforcement for the wildlife sector in the country.

8.0 References

Aerial survey report 2013, Zambia Wildlife Authority (2014)

Chansa, W, & Kampamba, G. (2005). National Elephant Conservation Plan. Zambia Wildlife Authority.Chilanga, Zambia.

Chomba C. et. al (2012). Population status of African elephant in Zambia. Journal of Ecology and Natural Environment, vol. 4 (7), pp. 186 -193.

CITES (2002).Report of the Panel of Experts on the African Elephant on the review of the proposal submitted by Zambia to transfer its national population of *Loxodonta africana* from Appendix I to Appendix II. Document CoP12 Doc. 66 Annex 4 (http://www.cites.org/eng/cop/12/doc/E12-66A4.pdf)

CITES (2010). Document CoP15 Doc. 68 Annex 6b - Report of the Panel of Experts on the African Elephant on the review of the proposal submitted by Zambia to transfer its national population of *Loxodonta africana* from Appendix I to Appendix II. (http://www.cites.org/eng/cop/15/doc/E15-68A06b).pdf)

CITES (2010). Document CoP15 Info 68 – African Elephant Action Plan. Submitted by African Range State (http://www.cites.org/common/cop/15/inf/E15i-68.pdf)

CITES (2010).Proposals to amend Appendices I and II Cop15 Prop. 5. (http://www.cites.org/eng/cop/15/prop/E-15-Prop-05.pdf)

Douglas-Hamilton I, Hillma AKK (1981). Elephant carcasses and skeleton as indicators of population trends. From low-level aerial survey techniques workshop. African Monograph No. 4, Addis Ababa,

Frederick, H. (2011). Aerial survey: Kafue Ecosystem 2011. Zambia Wildlife Authority, Chilanga, Zambia

Martin, R.B. (1986). Establishment of African ivory export quotas and associated control procedures. Report to CITES Secretariat.

Simukonda, C. (2011).Wet season Survey of the African Elephant and other Large Mammals in selected Areas of Luangwa Valley. Zambia Wildlife Authority supported by World Wide Fund for Nature.

Report on the 2013 Dry Season Survey of Large Herbivores for Kafue and Luangwa Ecosystems, Zambia Wildlife Authority

Zambia Wildlife Authority (2009). Elephant Aerial Survey – A country Report, 2008.Zambia Wildlife Authority Chilanga, Zambia.

Zambia Wildlife Authority (2013). Director – Conservation & Management 2012 Annual Report, Zambia Wildlife Authority, Chilanga, Zambia

Zambia Wildlife Authority (2015). Director – Conservation & Management 2014 Annual Report, Zambia Wildlife Authority, Chilanga, Zambia

Zambia Wildlife Authority (2012). Enhancement and Non detriment findings for African Elephant sport hunting in Zambia, Zambia Wildlife Authority, Chilanga, Zambia

RESPONSE TO USFWS/EU QUESTIONS ON ZAMBIAN ELEPHANT HUNTING 2015

A. Conservation and Management of Elephants in Zambia

1. The government of Zambia wanted empirical evidence on the population of Zambian animals' species, particularly elephants and cats before awarding the new ten year hunting concessions to safari operators in the twenty-three hunting blocks where concessions had expired. To that effect the government partnered with cooperating partners to undertake a survey in key elephant range areas. Results indicated that it was safe for Zambia to continue elephant hunting. Consequently Zambia provided a quota for 2015 hunting year for elephants.
2. The sport hunting activities in Zambia starts in the month of May. Zambia is using the Statutory Instrument Number 107 of 2010 of the Zambia Wildlife Act No 12 of 1998 to regulate sport hunting for elephants.
3. See paragraph 2 above
4. The ZAWA Board of Directors is not in place and the Zambian government is transforming ZAWA to a Department under the Ministry of Tourism & Arts. There will be a Director of Parks and Wildlife responsible for the new Department of Parks and Wildlife. The government took a decision to transform the wildlife sector in order to overcome operational challenges ZAWA is facing.
5. Zambia is managing the elephant population using the National Strategy for Elephant Management in Zambia of 2005.
6. Since the formulation of the national Elephant conservation strategy, the Zambia Wildlife authority has implemented the following action points in order to achieve effective management of the African elephant:

   Mitigate human – elephant conflicts

   - ZAWA has developed land use plans in most Game Management Areas and National Parks. A few protected areas are remaining but efforts are being made to ensure that even in these areas Management Zone Plans could be developed so that there is a management guide. This has prevented human encroachment in into wildlife areas and hence reduced human –wildlife conflict.

- In the event of elephant –human conflict the area Warden is able to make a decision to control it without having to call the headquarters. This has speeded up reaction time and prevented damage to property and threat to human life. Camps and offices have been established in elephant conflict hot spots so that there is rapid response to situations. This has also built a positive image about ZAWA.
- Ivory that is coming from GMAs and open areas is identified and labeled and stored in the Ivory Strong room. Ivory from different mortalities is also categorized and labeled as such. This helps us establish areas of frequent conflicts and management can be alerted about frequency of cases coming through.
- Share revenue with communities from the sale of ivory and other by-products obtained from elephant control operations in GMAs and open areas.
- We have initiated negotiations with the relevant organs of the state responsible for resettlements so that where practicable, human settlements which have encroached upon or have taken away or altered elephant habitat or blocked elephant movement and migratory routes can be removed or alleviated in a humane and appropriate manner.
- We also have established human –wildlife conflict resolution protocol which sets out procedures on how to Monitor and document all elephant / human conflicts and effectiveness control measures.

Reduce poaching levels

- Conduct regular and consistent field patrols. Surveilance of protected areas has been increased all elephant range protected areas; Luangwa, Kafue, Lower Zambezi, and the Sioma Ngwezi areas.
- Develop and implement proactive law enforcement by using strike force units. This has been effected in the Kafue and Luangwa systems.
- Use specialized law enforcement techniques (ground-air communication, use of GPS sets, night vision binoculars).
- Improve on intelligence, surveillance, investigation and prosecution skills.

- Develop and implement forensic techniques in examining elephant specimens to improve handling of court cases to deter potential poachers.
- Improve local community involvement in co-management and benefit sharing.
- Strengthen use of informers.

Provide adequate trained personnel

- Recruit and train additional law e enforcement staff
- Deploy optimum levels of to maximize area coverage.
- Implement in-service training to upgrade skills.

Secure and allocate adequate financial resources

- Secure Government financial support. Government has significantly supported ZAWA in areas of capitalizing the institution so that it is can be self-sustaining. It also has supported countrywide aerial surveys of the African elephant so that its status can be understood better
- Open an elephant conservation account and attract funding. ZAWA has been using resources from safari hunting without distinguishing sources from different species. Protected has been on an ecosystem scale so that it is biodiversity that ultimately that is protected. However, the institution is considering a mechanism of enhancing the protection of certain species like, lion and elephant because of their status.
- Lobby and prepare project proposals to cooperating partners for funding. The Zambia Wildlife Authority has established an office that is solely for lobbying, writing of project proposals and formation of partnerships with NGOs, Private sector, Universities and other relevant institutions in order to establish a larger constituency of supporters in conservation.

Establish and maintain a comprehensive ivory management system.

- Construct a modern ivory strong room.
- Procure equipment and facilities for efficient ivory management system in compliance with CITES.
- Train personnel in ivory management skills.
- Establish and maintain a database.

- Conduct regular auditing of the stock.

Provide a favourable environment for resumption of sustainable elephant hunting

- Monitor elephant populations (including status, trends, sex ratios and age structure).
- Establish database for monitoring internal and external trade controls.
- Comply with CITES where international trade is permissible.

Strengthen and maintain coordination of elephant conservation in trasnfrontier areas

- Where possible harmonise land use practices
- Participate in the establishment of cross border/trans-frontier parks.
- Conduct joint elephant research and monitoring
- Attend consultative meetings through the diplomatic relations, agreements, and protocols.
- Strengthen links with INTERPOL for intelligence information sharing and monitoring of illegal trade between countries and ensure elephant surveillance throughout the range in the sub region.

7. Conservation of elephant through sport hunting. The population status of the African elephant in Zambia is stable to growing in in most areas. This can be seen from the age structure and population trends of the meta-populations. Whilst the elephant populations are growing, the human population is also growing and this has narrowed the area of interface prompting conflict in most elephant ranges. Conflict can however be reduced in most areas if and when people in those areas become more tolerant to the existence of elephant in their areas.

To increase support and cooperation and also generate income for conservation of the same species and the areas in general, elephant sport hunting is conducted in community areas of high conflict incidence and in populations which are growing in numbers.

The revenue generated from hunting is shared with local communities on a 50:50 ratio. ZAWA uses this income to manage resources in those areas and communities also take part of their share to manage wildlife resources in their

areas through community Resources Boards (CRBs) and the other part is used for improvement of their livelihoods.

8. Revenue realised from wildlife activities including elephant sport hunting is shared between the Zambia Wildlife Authority and the local communities. This practice will continue in order to support local community appreciation of wildlife and complement their participation in conservation. Communities use part of the revenue to manage the community based scout programme for law enforcement operations in hunting blocks and to provide for their social economic needs such as water provision, school and health care. On the other hand, ZAWA uses the remainder of the share to support law enforcement and human animal conflict mitigation activities. The last hunting in 2012, ZMK 2, 0167, 120.00 was disbursed to the thirteen Community Resource Boards as elephant revenue share. The remainder of elephant revenue was used to support ZAWA law enforcement operations in conservation areas where hunting of elephants took place. It should however be noted that monies distributed to concerned communities is a fraction of total revenues due to communities.

9. Zambia has allocated 36 elephants on the 2015 hunting quota. If 100% sale is achieved US$ 486,000.00. The client pays US$ 10,000.00 and Concession fee US$ 3,500.00 for each animal. The sharing mechanism is same as in paragraph 8 above. The law enforcement budget for all operations activities for 2015 is ZMK 28, 053, 311.00.

10. Through the licensing and permit system, Zambia keeps records of all clients including Americans for personal details as well as fees they pay. All revenues from wildlife are receipted and administered by ZAWA. The Central Treasury does not get license fees; however, once transformation is complete new measures will be put in place.

11. There is no private hunting concession done by local communities in Zambia. However, local communities through Community Resource Boards and Chiefs who are patrons are involved during the entire process of tendering concessions. ZAWA has the Section of Extension Service which is responsible for ensuring community awareness and participation in decision making on wildlife matters. Communities make decisions regarding the revenue in public meetings where

proposals are made in budgeting and use. It is a requirement to give financial report to community members for previous funding before new projects are adopted. These meetings are undertaken at grass root level structures called Village Action Group.

12. The Government has a robust ant poaching program. Wildlife in Zambia is managed through a cluster of Area Management Units. These management units encompass national parks, Game Management Areas and open areas. Safari Hunting takes place in Hunting Blocks which are sub-units of GMAs, Wildlife Wardens are responsible for AMU wildlife Security. Parks and GMAs are managed in management sectors which are under Wildlife Rangers with patrol teams responsible for law enforcement operations. Apart from ant poaching teams, there are Intelligence and Investigations teams as well as Prosecutions Unit at each Area Management Unit. The Director of Public Prosecutions of Zambia appoints ZAWA Prosecutors to prosecute wildlife offences thereby ensuring timely disposal of wildlife cases.

13. It is ZAWAs policy to undertake countrywide elephant and other large mammals survey every two to three years. However, due to resource constraints surveys are not always consistent with the policy. In the past ZAWA has collaborated with other partners to undertake surveys. Apart from government funds, ZAWA has partnered with Wildlife Conservation Society, WWF, and The Nature Conservancy among others to finance surveys. ZAWA will endeavour to undertake surveys as planned within resource constraints.

B. <u>Elephant Population Distribution, Status, and Trends in Zambia</u>

Zambia is part of the planned Pan African Elephant surveys supported by the Vulcan Ltd. Most southern African countries had their surveys in 2014 but Zambia will conduct these surveys this year 2015 because ZAWA had just conducted surveys for the same objectives in 2013.

The draft report for the 2013 surveys is available and about to be released through the Ministry of Tourism and Arts. It is hoped that the report for the Pan African Elephant surveys for this year will be ready in January 2016. The methodologies to be used will be as prescribed by MIKE standards and as described by Norton and

Griffiths (2006). The draft report for the 2013 surveys is here attached to this document.

C. Sustainability of Offtake

14. Zambia's elephant annual export quota is currently at specimens from 80 animals taken from the wild. The Zambian Government has allocated 36 elephants on the 2015 hunting quota. Zambia's wildlife is conserved in National Parks, Game Management Areas (GMAs), Open Areas and Private Wildlife Estates such as ranches. National Parks are exclusively for wildlife habitation with exception only of tourist lodges and camps and is exclusively for non-consumptive use. Game Management Areas, are multiple use areas buffering the parks where humans and animals co-exists while Open Areas are areas for human habitation but animal can exist.

Safari Hunting is popular in hunting blocks falling within GMAs while no consumptive wildlife use is permitted in national parks. Resident hunting takes place in both GMAs and Open Areas. Hunting activities also take place in private wildlife estates and hunting quotas are approved by ZAWA. The quota and its distribution among hunting blocks is determined by information on population distribution and status within each of the blocks based on survey results. The quota distribution in GMAs for 2015 is as follows;

Zambezi Upper West (1), Sandwe (1), Tondwa (2), Mufunta (1), Nyamvu (1), Nyakolwe (1), Sichifulo (1), Busanga (1), Munyamazi (1), Nkala (1), Lower Luapnde (3), Mulobezi (1), Luembe Petauke West (2) Nyalugwe Petauke West (1), Nyaminga Lumimba (2), Chifunda Musalangu (1) Chikwa Musalangu (1), Musalangu West-Fulaza (1), Musalangu East (2), Kaindu (1), Chiawa (4) and Rufunsa (2).

15. Elephant quota:

All quotas are set by using information from population censuses and also scientific information from index- techniques. The index techniques are categorized into indicator trends (trophy quality, hunting effort and hunting success), poaching levels and availability of data on trophy animals. Community perceptions are also taken into account. The quotas are therefore based on qualitative and quantitative information available.

16. As in 15.

17. The hunting quota does not include problem elephants shot during the year. The numbers of killed problem elephants is 25, 20 and 27 in 2012, 2013 and 2014 respectively. Also note that there were 1780, 2405 and 1269 reports of problem elephants in the years 2012, 2013 and 2014 respectively. The number of people killed by elephants during the same period is 12, 5 and 8 respectively. Tusks from these control operations are held at the Central Ivory Stores at ZAWA Head Office.

18. Zambia is monitoring the illegal killing of elephants in all the protected areas. South Luangwa National Park is a MIKE site and elephant killing records are shared with MIKE/ IUCN Southern Africa Sub-regional office. Between 2012 and 2014, 381 elephants were poached across the country. 110, 135 and 136 elephants were poached in the years 2012, 2013 and 2014 respectively. Zambia will actively continue monitoring the illegal killing of elephants in order to take corrective measures to curb the vice.

19. As mentioned in paragraph 19 above, poaching is real in Zambia hence Zambia's continued efforts to curb it. Poaching is rampant in key elephant ranges, i.e. South Luangwa, North Luangwa, Lupande and Lumimba GMAs. Other Areas are in Musalangu and Munyamazi GMAs. Zambia is also facing elephant poaching in Kafue system as well as Lower and Upper Zambezi systems. Zambia is rolling out Spatial Monitoring and Reporting Tool (SMART), a toll to be used for law enforcement monitoring in Zambia's protected areas.

DRY SEASON SURVEY OF LARGE HERBIVORES FOR KAFUE AND LUANGWA ECOSYSTEMS

ZAMBIA WILDLIFE AUTHORITY

2013

INTRODUCTION

The dry season aerial survey of large herbivores in 2013 was meant to cover the whole country but for the limitation of funds. The government of the republic of Zambia fully sponsored surveys in the Kafue and Luangwa Ecosystems. The Bangweulu and Lower Zambezi systems were surveyed with the kind support of the African Parks (AP) and Conservation Lower Zambezi respectively. WWF supported the provision of a consultant to supervise the surveys in Kafue and Luangwa areas.

What prompted the surveys was the need to have fresh information about the status of wildlife in Zambia so that a better decision would be made whether to conduct hunting in Zambia or completely go the non-consumptive route. A similar survey was conducted in 2008, though the reporting for Lower Zambezi and Bangweulu systems were done independently. This report covers surveys which were conducted in the Kafue and Luangwa Systems.

SURVEY AREAS

Zambia's largest populations of most species are either in the Luangwa or the Kafue systems. These two systems are the main wildlife areas which support consumptive and non-consumptive tourism.

The Kafue System

In these surveys the Kafue Flats and the two National Parks in it were taken to be part of the Kafue system. Because of the nature of landscape and vegetation Kafue National Park and the surrounding GMAs will be treated separately from the protected areas in Kafue Flats.

The GMAs surrounding the Kafue National Park are: Mufunta(5417 Km^2), Kasonso Busanga(6686 Km^2); Lunga Luswishi (13340 Km^2);Mumbwa (3274 Km^2); Namwala (2540 Km^2); Nkala(194.Km^2); Bilili (3080.Km^2); Mulobezi (3570.Km^2); and Sichifulo (3450.Km^2). The maps below show the strata and the transects arrangement of the survey areas.

The Kafue Flats has two GMAs Kafue North and South with two National Parks Blue Lagoon and Lochnivar respectively. The map below shows the strata and transects arrangements in this survey area.

Chete and Sekula islands and Mosi-oa-Tunya were not surveyed.

The Luangwa System

The total size of the Luangwa protected areas systems is …… Km² constituting Lupande, Lumimba; Sandwe; West Petauke; Chisomo, Mukungule Munyamadzi and Musalangu Game Management Areas. The National Parks in the area include South Luangwa, Lukusuzi, Luambe, North Luangwa. The Map below shows the Luangwa Valley Protected areas system as surveyed. It shows the strata and transects arrangement

OBJECTIVES OF THE SURVEY

The objectives of this survey were:

1. To establish the population estimates of large herbivore in the Luangwa and Kafue systems in order to ascertain possible levels of consumption.
2. To establish the distribution of wildlife animals in the two main wildlife areas; Kafue and Luangwa.
3. To establish population trends for key animal species to alert management about species which consumption levels need to be checked.
4. To relate the spatial effects of human activities on wildlife distribution

METHODOLOGY

The survey was conducted by a systematic Reconnaissance Flight sampling method as described by Norton-Griffiths (Counting animals, 1996). This includes a pilot, a Front-seat Observer (Recorder), and two rear observers; one behind the pilot and the other behind the Recorder.

Survey Design

The survey design depended on the nature of the landscape, terrain and the size of the survey area. Transect sample counts were used in generally flat areas while block counts were used for mountainous areas.

National Parks and the surrounding Game Management Areas, in both systems, were divided into different strata and transects were set based on environmental features like rivers, mountains, vegetation types, terrain and other physical factors that would affect flight and visibility.

Transects were arranged systematically parallel to each other in either an east west or north south direction depending on the orientation of a stratum. Transects were regularly spaced at equal distances in each stratum and were placed at right angles to rivers. The sampling intensity varied depending on the past observed densities of animals. Areas of high densities were assigned higher sampling intensities than those with lower densities. The sampling intensity gradient was from high density areas to Low density areas.

Areas of rough terrain like Sandwe, and parts of Lupande and West Petauke were surveyed by block counts. Small blocks of uniform size (3.5 Km^2) were arranged systematically in straight lines parallel to each other, in strata to be surveyed by block counts. Total counts were conducted in each block by circling round it. The map below shows areas which were surveyed by block counts and how the blocks were arranged.

Flight Procedures

The coordinates of start and end points of transects were uploaded on a GPS mounted on the dash board of a Cessna 206 plane for the pilot to track through during flight. The plane was also fitted with a Radar altimeter.

During the survey the plane was flown at a speed of 160km per hour at approximately 350ft above ground. The actual height was however, obtained from the Radar altimeter and recorded every 30 seconds while flying along transects.

Counting Procedures

A pair of streamers was fixed on strut of each side of the plane. Observations were made in subunits which were 30 seconds apart. All animals seen by the observer were called out to the recorder who recorded the species name, and the number of animals seen by the observer. All the crew members had intercom headsets to easily communicate with each other.

DATA ANALYSIS

Analysis of Transect Sample Counts

Census data was analyzed using an Excel-based application based on provided Jolly's Method 2 for unequal sized sample units (Jolly, 1969). Population estimates were calculated using this application. This method is based on the calculation of the ratio between the *animals counted* and the *area searched.* The estimate was thus based on the density of animals per sample unit (Norton-Griffiths, 1996). The estimate of animals was the product of density and the area of the stratum.

Analysis of Block Sample Counts

Using a similar spreadsheet, data from block counts was analyzed using jolly's Method 1 for equal sized sampling units. The reason for using this method is that all the blocks were almost of the same size except for those on the edges of strata. The population estimate was calculated from the product of the average number of animals counted (sum of observations divided by in the sampling units and the total number of sample blocks possible (N) in the stratum.

Determination of elephant Carcass Ratio

Douglas-Hamilton and Hillman (1981) indicated that stable or expanding populations show elephant-carcass ratio ranging from 2-8% while decreasing populations have ratios greater than 8%. The elephant carcass ratio was calculated for each system as: estimated carcasses divided by the sum of all carcasses and the estimated population of elephants. Elephant carcasses were recorded in four categories as required by MIKE under CITES (1998). The following definitions were used:

Carcass Category	Description
Carcass 1	Fresh; Still has flesh giving the body a rounded appearance. Vultures probably still present and ground still moist from body fluids. Vegetation trampled. Carcass; probably less than 1 month old.
Carcass 2	Rot patch and skin still present. Skeleton not scattered. No Vulture droppings, no trampled vegetation. Less the 1 year old. Probably 3 to 8 months since death.
Carcass 3	Clean bones, skin usually absent, and vegetation re-grown in rot patch. More than 1 year old.
Carcass 4	Very old, bones scattered and turning grey. Very old; carcass could be up to 10 years old.

SURVEY RESULTS

LUANGWA ECOSYSTEM

NATIONAL PARKS

South Luangwa

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	3239	18.107	14966	151381068	12304	23377	156
Bush Buck	188	0.696	859	195646	442	840	98
Common duiker	197	0.721	902	66643	258	490	54
Eland	62	0.280	283	176671	420	799	282
Elephant	1337	7.221	6168	2763072	1662	3158	51
Elephant Carcass 3	2	0.043	9				
Elephant Carcass 4	25	0.098	114	135	12	22	19
Giraffe	61	0.358	278	120133	347	659	237
Ground Hornbill	126	0.747	581	4067	64	121	21
Grysbok	2	0.007	9				
Hartebeest	666	2.314	3073	1632405	1278	2428	79
Impala	2898	20.400	13339	9704638	3115	5919	44
Kudu	537	2.140	2444	1016041	1008	1915	78
Puku	2076	12.819	9581	528184	727	1381	14
Reedbuck	83	0.410	387	179423	424	805	208
Roan antelope	1308	4.881	5984	5497169	2345	4455	74
Waterbuck. C	660	2.944	3011	39141	198	376	12
Warthog	1072	4.394	4904	1398530	1183	2247	46
Wildebeest	421	3.598	1968	7744211	2783	5287	269
Zebra	2196	10.099	10096	5805923	2410	4578	45

Seventeen (17) animal species were observed during the surveys. Impala has the highest density with 20.400 impala/Km². Common species in the park are Impala, Puku, buffalo, Zebra and Elephant. The estimated elephant population is 6168±3158. Elephant carcass ratio is 2.0 %. Carcasses seen were class 3 and 4. The general density of animals is 92.388 animals /Km².

Luambe

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	252	3.685	1263				
Bush pig	3	0.044	15				
Elephant	69	1.009	346	52416	229	479	139
Elephant Carcass 4	2	0.029	10	1	1	2	21
Ground Hornbill	13	0.190	65	1012	32	67	102
Impala	117	1.711	587	78531	280	587	100
Kudu	14	0.205	70	3555	60	125	178
Puku	237	3.466	1188	246509	496	1039	87
Roan antelope	12	0.175	60				
Waterbuck. C	8	0.117	40				
Warthog	23	0.336	115	8361	91	191	166
Wildebeest. C	3	0.044	15				
Zebra	31	0.453	155	56652	238	498	321

Eleven species of animals were observed. Buffalo has the highest density (3.282 buffalo/Km²) in the park with a population estimate of 1263 buffaloes. The overall animal density is 29.92animals /Km².

Two carcasses, of class four (4) were seen giving a carcass ratio of 2.8%. Below is the carcass ratio trends in Luambe national Park.

Lukusuzi

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	11	0.017	47	4990	71	142	299
Bush Buck	78	0.124	337	35076	187	377	112
Common duiker	240	0.381	1036	252713	503	1011	98
Eland	8	0.013	35	15421	124	250	723
Ground Hornbill	2	0.003	9				
Hartebeest	158	0.251	682	208387	456	918	135
Klipspringer	48	0.076	207	18425	136	273	132
Kudu	209	0.332	902	262644	512	1031	114
Roan antelope	535	0.849	2309	1674717	1294	2603	113
Sable antelope	29	0.046	125				
Waterbuck. C	17	0.027	73	109894	332	667	909
Warthog	206	0.327	889	244446	494	995	112
Zebra	166	0.263	717	273166	523	1051	147
Cattle	53	0.084	229	433767	659	1325	579
Cultivation	26	0.041	112	2597	51	103	91
Encroachment	12	0.019	52	1984	45	90	173
Hut	22	0.035	95	1859	43	87	91
Settlement	2	0.003	9	15	4	8	91
Shoats	22	0.035	95	66244	257	518	545

Twelve (12) species of animals were seen in the park. The highest density is Roan antelope (0.849) which was observed 40 times with average of 14 animals per sighting. One herd of 29 Sable antelopes was also observed. The general animal density was 2.71 animals /Km². No elephant or elephant carcasses were seen in the park. Human activities include settlements with some areas of encroachment. Cattle and goats are the most common domestic animals. Surprisingly no mining activities were observed.

North Luangwa

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL %
Buffalo	798	3.576	2349	13811995	3716	7284	310
Bush Buck	66	0.199	177	13582	117	228	129
Common duiker	114	0.284	455	13372	116	227	50
Eland	6	0.052	29	715	27	52	182
Elephant	1544	4.507	5097	495604	704	1380	27
Ele. Carcas 3	3	0.007	13				
Ele. Carcass 4	1	0.003	1				
Giraffe	1	0.002	4				
Ground Hornbil	13	0.042	24	787	28	55	228
Hartebeest	59	0.201	249	4569	68	132	53
Impala	1482	4.436	3854	1377429	1174	2300	60
Klipspringer	23	0.055	99	508	23	44	45
Kudu	207	0.535	766	22626	150	295	39
Puku	557	1.795	990	850011	922	1807	183
Reedbuck	13	0.069	59	532	23	45	77
Roan antelope	227	0.630	983	19350	139	273	28
Waterbuck. C	236	0.605	887	80509	284	556	63
Warthog	565	1.752	2114	47626	218	428	20
Wildebeest	160	0.476	541	2000698	1414	2772	512
Zebra	847	2.286	3078	102843	321	629	20
Bush pig	3	0.010	4	0	0	0	0
Hyaena	1	0.002	4	0	0	0	0

Eighteen (18) species of animals were seen in North Luangwa National Park. Impala has the highest Sample density of 11.05 animals /Km² and is wide spread (It was observed in most of the transects). Giraffe was observed two times, which is relatively a new species in the park: likely to be spreading from South Luangwa National Park. The estimated elephant population in the park is 8807± 1718 (α=0.05). Elephant carcass ratio which comprised carcasses of class 3 and 4 was 0.45%. The overall animal density is 40.306 animals/Km². Other species observed that could not be included in the estimates are Bushpig, and Hyaena

GAME MANAGEMENT AREAS

Lupande

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	156	0.0303	1756	279915	529	1037	59
Bush Buck	66	0.0128	759	10583	103	202	27
Common duiker	73	0.0142	792	8090	90	176	22
Elephant	209	0.0406	2263	223243	472	926	41
Elephant Carcas 1	1	0.0002	9	0	0	0	0
Elephant Carcas 3	2	0.0004	20	0	0	0	0
Elephant Carcas 4	9	0.0017	97	492	22	43	45
Giraffe	9	0.0017	92	0	0	0	0
Ground Hornbill	17	0.0033	176	5298	73	143	81
Grysbok	19	0.0037	274	19115	138	271	99
Hartebeest	94	0.0183	1354	837042	915	1793	132
Impala	131	0.0255	1658	356419	597	1170	71
Klipspringer	17	0.0033	156	4171	65	127	81
Kudu	83	0.0161	756	64311	254	497	66
Oribi	89	0.0173	1282	229623	479	939	73
Puku	126	0.0245	1145	548444	741	1452	127
Reedbuck	10	0.0019	144	18826	137	269	187
Roan antelope	44	0.0085	396	23117	152	298	75
Sable antelope	15	0.0029	216	126084	355	696	322
Waterbuck. C	107	0.0208	1408	129121	359	704	50
Warthog	80	0.0155	724	27933	167	328	45
Wildebeest	92	0.0179	1325	99624	316	619	47
Zebra	66	0.0128	596	28512	169	331	56

Nineteen animal species were seen in the GMA. Elephant has the highest density of 0.04 elephants/km² which means that 4 elephants occupy 100 Km². Other animal species common in the area are buffalo and Impala.

The estimated elephant population is 2263±926 with a carcass ratio of 5.27%. A total of twelve carcasses were seen. One was a fresh carcass; two were class 3 and the rest were class 4. It is worth noting the presence of giraffe and sable antelope in the area.

Sandwe

Species	Seen	Estimates	Density	Variance	SE	95% CL	CL%
Buffalo	15	128	0.805	34958	187	389	304
Bush Buck	34	290	1.824	3934	63	130	45
Bushpig	2	17	0.107	3	2	3	20
Common duiker	24	205	1.287	785	28	58	28
Elephant	7	60	0.375	871	30	61	103
Ground Hornbill	2	17	0.107				
Hartebeest	1	8	0.053				
Impala	13	111	0.697				
Kudu	45	383	2.414	27097	165	342	89
Puku	2	17	0.107				
Roan antelope	99	844	5.310	26520	163	339	40
Waterbuck. C	1	9	0.054				
Warthog	11	94	0.590	2800	53	110	117
Zebra	4	34	0.215				

Thirteen animal species were seen in Sandwe GMA. Roan antelope had the highest density of 1.193 followed by Kudu. Roan is wide spread; it was seen in 14 out of 22 sample units.

Munyamadzi

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	1121	3.313	10767	47291295	6877	13921	129
Bush Buck	6	0.018	58	1250	35	72	124
Common duiker	11	0.033	106	4692	68	139	131
Elephant	274	0.810	2632	1305993	1143	2313	88
Elephant Carcass 1	1	0.003	10				
Giraffe	2	0.006	19	22	5	10	50
Ground Hornbill	24	0.071	231	6282	79	160	70
Hartebeest	5	0.015	48	1766	42	85	177
Impala	298	0.881	2862	2280816	1510	3057	107
Kudu	15	0.044	144	23474	153	310	215
Puku	166	0.491	1594	1036041	1018	2061	129
Reedbuck	18	0.053	173	45277	213	431	249
Roan antelope	49	0.145	471	383399	619	1253	266
Waterbuck. C	21	0.062	202	44490	211	427	212
Warthog	39	0.115	375	35069	187	379	101
Wildebeest	233	0.689	2238	1702550	1305	2641	118
Zebra	131	0.387	1258	517143	719	1456	116

Domestic dog	2	0.006

Sixteen animal species were seen. Buffalo had the highest density of 3.3 buffalo/Km². It was seen in large herds of 100(x2), 200(x2) and 300. The estimated elephant population is 2632. The elephant carcass ratio is 0.36%. Two giraffes were seen in Munyamadzi GMA.

Mukungule

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	300						
Bush pig	5	0.03	65				
Common duiker	3	0.02	39	13	4	7	19
Elephant	11	0.06	142				
Zebra	1	0.01	13				
Shoats	47	0.25					

Only five animal species were seen in Mukungule GMA. A herd of 300 buffaloes was seen in the GMA. Elephant was observed in two places which were to each other. Mukungule is heavily encroached with a lot of human activities.

West Musalangu

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	210	0.479	1973	1245850	1116	2188	111
Bush Buck	49	0.112	460	2944	54	106	23
Common duiker	85	0.194	799	5277	73	142	18
Eland	170	0.388	1597	89948	300	588	37
Elephant	160	0.365	1503	296860	545	1068	71
Elephant Carcass 4	1	0.002	9	0	0	0	0
Ground Hornbill	29	0.066	272	8349	91	179	66
Grysbok	20	0.046	188	1640	40	79	42
Hartebeest	126	0.288	1184	173104	416	815	69
Impala	266	0.607	2499	387784	623	1221	49
Klipspringer	4	0.009	38	1153	34	67	177
Kudu	245	0.559	2302	67281	259	508	22
Puku	62	0.142	583	239826	490	960	165
Reedbuck	30	0.068	282	13329	115	226	80
Roan antelope	257	0.587	2415	146410	383	750	31
Waterbuck. C	70	0.160	658	27677	166	326	50
Warthog	209	0.477	1964	100366	317	621	32
Wildebeest	202	0.461	1898	164268	405	794	42
Zebra	306	0.699	2875	238411	488	957	33

Eighteen (18) animal species were observed, mostly in the valley floor. Zebra has the highest density (0.669 animals/Km^2. Common animal species in the GMA are Zebra, Impala, Roan antelope, Kudu, buffalo, warthog and Wildebeest Cookson's. The estimated elephant population is 1503±1068 with a carcass ratio of 0.62%. Only one carcass (class 4) was seen.

East Musalangu

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Baboon	37	0.070	351	93.226	9.655	19.350	5.510
Buffalo	102	0.194	968	1047111.831	1023.285	2050.709	211.815
Bush Buck	7	0.013	66	4619.822	67.969	136.213	205.010
Common duiker	17	0.032	161	1523.939	39.038	78.233	48.484
Eland	12	0.023	114	9.806	3.131	6.276	5.510
Elephant	218	0.414	2069	2582363.314	1606.973	3220.447	155.637
Ground Hornbill	35	0.066	332	38569.627	196.392	393.577	118.472
Hartebeest	4	0.008	38				
Impala	179	0.340	1699	374569.575	612.021	1226.517	72.189
Kudu	35	0.066	332	18673.849	136.652	273.857	82.434
Puku	71	0.135	674	590876.210	768.685	1540.479	228.586
Roan antelope	34	0.065	323	97602.295	312.414	626.091	194.004
Waterbuck. C	9	0.017	85	18384.333	135.589	271.726	318.084
Warthog	18	0.034	171	3665.765	60.546	121.336	71.018
Wildebeest	217	0.412	2060	1748300.671	1322.233	2649.815	128.649
Zebra	20	0.038	190	12003.755	109.562	219.566	115.661

Sixteen animal species were seen in the GMA. Density of animals is quite low compared to other GMAs like Lumimba, and Lupande; the highest density was that of elephant (0.44 elephants/Km^2).

Elephant was observed in 13 out 56 transects with an average group size of 17 elephants per sighting. The carcass ratio is 0.44%. One fresh carcass was seen in the GMA.

Lumimba

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	169	1.409	1664	248983	499	978	59
Bush Buck	35	0.337	339	3624	60	118	35
Common duiker	90	0.893	870	10049	100	196	23
Eland	44	0.426	407	140452	375	735	180
Elephant	90	0.783	895	211321	460	901	101
Elephant Carcass 4	1	0.008	9				
Giraffe	2	0.025	20				
Ground Hornbill	17	0.106	226				
Hartebeest	43	0.350	465	97285	312	611	131
Impala	559	4.854	5270	3295671	1815	3558	68
Klipspringer	4	0.040	37	5	2	4	12
Kudu	202	1.988	1883	66548	258	506	27
Puku	443	3.734	4218	2431821	1559	3056	72
Reedbuck	4	0.024	54	10184	101	198	364
Roan antelope	202	1.909	1978	251885	502	984	50
Waterbuck. C	125	1.185	1151	78437	280	549	48
Warthog	258	2.461	2447	154228	393	770	31
Wildebeest	29	0.195	383	97613	312	612	160
Zebra	442	4.268	4110	597469	773	1515	37
Shoats	11	0.122	106	37568	194	380	360

Eighteen animal species were seen in Lumimba GMA. Impala had the highest density, 4.854 followed by Zebra; 4.268. Other species common in the area are Puku, warthog, kudu, roan antelope, buffalo and waterbuck deffassa

Chisomo

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Bush Buck	2	0.005	19	101	10	20	110
Common duiker	7	0.018	65	1487	39	78	121
Ground Hornbill	14	0.036	130	16327	128	259	200
Hartebeest	1	0.003	9				
Roan antelope	20	0.051	185	25568	160	325	175
Waterbuck. C	1	0.003	9				
Warthog	1	0.003	9				
Zebra	10	0.026	93	1956	44	90	97
Cultivation	14	0.036	130	3979	63	128	99
Village	3	0.008	28	206	14	29	105
Settlement	4	0.010	37	347	19	38	102
Shoats	27	0.069	250				
Hut	12	0.031	111	2783	53	107	96
Domestic dog	2	0.005	19	101	10	20	110

Eight (8) animal species were seen in Chisomo GMA with Roan antelope as the most frequently observed animal. Human activity in the area included settlements and keeping domestic animals like goats and sheep.

West Petauke

SPECIES	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	62	0.8	602	18792	137	269	45
Bush Buck	29	0.52	282				
Common duiker	18	0.31	175				
Elephant	34	2.59	334				
Giraffe	7	0.09	68				
Ground Hornbill	13	0.17	126				
Impala	124	2.54	1205				
Kudu	57	0.74	553				
Roan antelope	26	0.41	252				
Waterbuck. C	36	0.9	350				
Warthog	54	0.84	524				
Zebra	71	2.43	692	54647	234	458	66
Shoats	16	0.21	155.26				

Eleven animal species were seen in West Petauke GMA. Elephant had the highest density of 2.59 followed by Impala (2.54) and then Zebra : 2.43. It is worth noting the presence of Roan and giraffe in the area.

LUANGWA SYSTEM SUMMARY

SPECIES	Luangwa NP	Luangwa NP	Lukusuzi NP	Luambe NP	Lupande	Lumimba	Musalangu East	Musalangu West	Munyamadzi	Mukungule	Chisomo	Sandwe	West Petauke	System Total
Buffalo	2349	14966	47	1263	1756	1664	968	1970	10767	300		128	602	36780
Common Duiker	590	902	902		792	870	207	799	106	39	65	205	602	6079
Eland	29	283	35			407	114	1597						2465
Elephant	5097	6168		349	2263	895	2669	1503	2632	142		60	334	22112
Ele. Carcass 1					9		9		10					28
Ele. Carcass 3	22	9			20									51
Ele. Carcass 4	18	114		10	97	29		9					9	286
Giraffe	4	278			92	20			19				68	481
Hartebeest	249	3073	682		1354	465	38	1184	48		9	8		7110
Impala	3854	13339		587	1658	5270	1699	2499	2862			111	1205	33084
Kudu	766	2444	902	70	756	1893		2302	144			383	553	10213
Puku	990	9581		1188	1145	4218	674	583	1595			17		19991
Roan Antelope	983	5984	2309	60	396	1978	323	2415	471		185	844	252	16200
Sable Antelope			125		216									341
Waterbuck	887	3011	73	40	1408	1151	85	658	202		9	9	350	7883
Warthog	2114	4904	889	115	724	2447	171	1964	375		9	94	524	14330
Wildebeest C	541	1968		15	1325	383	2060	1898	2237					10427
Zebra	3078	10096	717	155	596	4110	190	2875	1258	13	93	34	692	23907
Ele. Carc ratio														1.62

KAFUE SYSTEM

NATIONAL PARKS

Kafue National Park

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	2962	7.190	28094	893431089	29890	58585	189458
Bush Buck	26	0.092	163	5057	71	139	85
Common duiker	116	0.739	818	128974	359	704	86
Eland	100	0.367	900	10832263	3291	6451	716
Elephant	1174	4.040	9148	32496511	5701	11173	122
Elephant Carcass 3	7	0.010	57	6	2	5	8
Grysbok	8	0.021	61	793	28	55	91
Ground Hornbill	241	0.713	2112	406374	637	1249	59
Hartebeest	744	2.394	6118	1932250	1390	2725	45
Impala	6762	13.416	33132	905287026	30088	58972	178
Kudu	32	0.102	250	318962	565	1107	443
Oribi	28	0.083	291	23002	152	297	102
Puku	1670	5.220	11306	4440053	2107	4130	37
Reedbuck	153	0.362	1392	85103	292	572	41
Roan antelope	446	1.312	4243	3761571	1939	3801	90
Sable antelope	1376	3.943	11359	7736947	2782	5452	48
Waterbuck. D	270	0.876	1741	799396	894	1752	101
Warthog	1103	2.604	8690	1091083	1045	2047	24
Wildebeest	238	0.568	1533	11524508	3395	6654	434
Zebra	167	0.554	1122	158178	398	780	69
Red Lechwe	2221	3.457	15781	115209727	10734	21038	133

Bush pig	14	0.028
Hippo	373	1.015
Jackal	1	0.002
Lion	3	0.019
Marabou Stork	4	0.006
Wattled Crane	127	0.203

Twenty three animal species were seen in Kafue National Park. The most abundant species is Impala with a population estimate of 33132 and a sample unit density of 13.416 impala /Km². Species that could not be estimated by this survey method include lion (3), Hippo(373) Bushpig (14) and Jackal(1). Elephant was seen in all the strata of the park but with low numbers in strata 4 and 8 where only 7 and 11 elephants were sighted respectively. The elephant carcass ratio is 0.62% of class 3.

Blue Lagoon

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL %
Buffalo	50	1.00	317				
Bush Buck	1	0.01	6				
Lechwe.K	5903	83.00	37413	505138250	22475	46039	123
Zebra	92	1.30	583	1898372	1378	2822	484
Sitatunga	3	0.04					
Wattled crane	479	6.74	3036	6491145	2548	5219	172
cattle	1005	14.00	6370	17490466	4182	8567	134
Cultivation	11	0.16					
Iron Sheets	5	0.07					
Huts	8	0.11					
Settlement	1	0.01					
Shoats	36	0.51					
Village	1	0.01					

Five species of animals were observed in Blue Lagoon National Park with Kafue Lechwe as the most abundant species though the estimate is on the higher side. One herd of 50 Buffalo was seen in the park. Human activities in the area include cultivation and keeping of domestic animals like cattle, sheep and Goats. The north western end of the part has been under encroachment for a long time now.

Lochinvar

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	350	5.169	2097				
Impala	9	0.133	54	16111	127	264	489
Kafue lechwe	3944	58.247	23634	278781158	16697	34723	147
Kudu	5	0.074	30	880	30	62	206
Reedbuck	1	0.015	6				
Wattled crane	7	0.103	42	246	16	33	78
Zebra	49	0.724	294	3100	56	116	39
Cattle	915	13.513	5483	40211952	6341	13187	241

Six animal species were seen in Lochinvar National Park with Kafue Lechwe as the most abundant. Kafue Lechwe was sighted 8 times during the survey with an average of 493 per sighting. The

maximum sighting was 1791. One big herd of 350 buffalo was seen in the park. This is likely to be the only herd of buffalo in the park.

GAME MANAGEMENT AREAS

Kafue Flats

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Common duiker	1	0.004	11				
Impala	11	0.073	125				
Lechwe.K	8937	48.817	99,787	25452,14,191	50,450	98,882	99
Reedbuck	2	0.013	23				
Sitatunga	1	0.004					
Wattled Crane	1314	5.091	14,351	3656,14,582	19,121	37,477	261
Cattle	32310	139.484	3,55,078				
Shoats	157	0.827	1,748				

Five species of wild animals were seen in the Kafue flats game management area. Kafue Lechwe is the main species. It had a sample unit density of 48.817 Lechwe/Km². Zebra was not observed during the survey. The Wattled crane is wide spread in the Kafue flats. It was observed 22 times during the survey with an average of 14 cranes per sighting. One sighting had 1109 cranes.

Mufunta

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL %
Buffalo	7	0.010	62				
Bush pig	6	0.008	53				
Common duiker	26	0.035	228	12461	112	223	98
Hartebeest	43	0.059	378	357955	598	1196	316
Impala	8	0.011	70	3186	56	113	161
Kudu	2	0.003	18				
Reedbuck	2	0.003	18				
Roan Antelope	62	0.085	545	293725	542	1083	199
Warthog	26	0.036	228	255514	505	1010	442
Ground Hornbill	41	0.056	360	24457	156	313	87

Nine (9) species of animals were seen in the GMA. Buffalo, bush pig, hartebeest and kudu were all seen once in numbers of 7, 6, 21 and 2. Roan antelope and common duiker were well distributed and the most abundant is roan antelope with an estimate of 545. The average number of roan antelope per sighting was 7 and was seen 9 times in the GMA during the survey.

Kasonso Busanga

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL %
Buffalo	10	0.027	128				
Common duiker	24	0.080	269	7382	116	237	178
Grysbok	2	0.005	26	1	1	2	9
Hartebeest	49	0.134	628	130296	361	738	118
Impala	22	0.080	228	6684	82	167	133
Kudu	15	0.061	139	27960	167	341	271
Oribi	2	0.005	26				
Red Lechwe	5	0.021	45				
Reedbuck	1	0.003	13				
Roan antelope	9	0.025	115	56336	237	485	421
Sable antelope	111	0.307	1414	890220	944	1930	138
Warthog	20	0.055	256	52284	229	468	183
Wildebeest	20	0.055	256				
Cheetah	1	0.003	13				
Jackal	1	0.003	13				
Ground Hornbill	20	0.058	248	12011	114	233	148
Wattle Crane	21	0.083	200	21843	148	301	186

Thirteen species of animals were seen with buffalo, oribi, red lewchwe, reedbuck, and wildebeest seen only once. The most abundant animal species was sable antelope; seen 9 times during the survey with an average number of 13 sables per sighting. The estimated population of sable antelope in the GMA is 1414. Note the presence of Cheetah in Kasonso Busanga GMA.

Lunga Luswishi

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	22	0.038	266				
Bushpig	10	0.017	121	68482	262	513	425
Bush Buck	2	0.006	19	2	1	3	15
Common duiker	11	0.019	133	9656	98	193	145
Elephant	19	0.033	229				
Hartebeest	19	0.033	229	39034	198	387	169
Impala	97	0.168	1171	1558203	1248	2447	209
Puku	93	0.161	1123	4175647	2043	4005	357
Reedbuck	2	0.003	24	3	2	3	14
Sable antelope	205	0.366	2429	2219865	1490	2920	120
Warthog	171	0.296	2064	3395910	1843	3612	175
Zebra	22	0.038	266	69401	263	516	194
Wattled Crane	10	0.023	101				
Ground Hornbill	115	0.262	1130	170263	413	809	72
Cattle	123	0.326	1018	535830	732	1502	147
Shoats	41	0.109	339	70962	266	547	161

There were twelve (12) species of animals observed during the survey of Lunga Luswishi GMA. The most abundant was sable antelope which was seen (22 times) mostly in stratum 1 out of the three strata and the population estimate is 2429. Buffalo and elephant were only seen once during the survey. Stratum 2 and 3 were largely cattle and Shoats and settlements.

Machiya-Fungulwe

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL %
Cattle	289	1.70	2650	889717	943	1921	72
Ground Hornbill	17	0.10	156	18300	135	276	177
Wattled crane	4	0.02	37				

No wild animal was seen in the GMA, much of the north western section of the GMA is settled.

Namwala

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL %
Buffalo	20	0.075	237				
Bushbuck	1	0.004	12				
Common duiker	1	0.004	12				
Elephant	2	0.007	24				
Ground hornbill	7	0.026	83	55098	235	478	576
Kudu	4	0.015	47	8696	93	190	400
Reedbuck	5	0.019	59	1480	38	78	132
Sable antelope	15	0.056	178	158658	398	810	456
Warthog	8	0.030	95	66	8	16	17

Eight animal species were seen in Namwala GMA. Buffalo(20), Bush buck(1), Common duiker(1), and elephant(2) were each seen only once. All the species were seen in low numbers. There was a lot of wide spread cattle and Shoats observed in the GMA.

Mumbwa West

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL %
Baboon	22	0.136	196				
Common duiker	4	0.025	36	3336	58	120	336
Elephant	45	0.279	401	476054	690	1431	356
Hartebeest	39	0.241	348	60700	246	511	147
Impala	255	1.579	2275	916505	957	1985	87
Puku	92	0.570	821	297911	546	1132	138
Roan antelope	11	0.068	98				
Waterbuck def	16	0.099	143	50701	225	467	327
Warthog	17	0.105	152	5726	76	157	103

Nine species of animals were observed in Mumbwa West GMA. Impala was the most abundant with an estimate of 2275 and well spread; it was sighted 13 times in the survey of the GMA. Puku is the second highest animal species. It is worth noting that roan antelope was only seen once. Elephant was seen twice in transects which were next to each.

Mumbwa East

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Shoats	103	0.500	977	464732	682	1414	145
Cattle	959	4.651	9095	3330800	1825	3785	42
Ground Hornbill	1	0.005	9				

There was no wild animal observed during the survey of Mumbwa East GMA. Only one hornbill was seen. Much of the GMA is covered by settlements.

Mulobezi

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Buffalo	52	0.291	547				
Bush Buck	3	0.018	32	9	3	6	18
Common duiker	25	0.152	270	7469	86	169	63
Eland	60	0.370	649	303850	551	1080	166
Elephant	61	0.342	642	3243342	1801	3530	550
Hartebeest	420	2.485	4489	4894339	2212	4336	97
Impala	149	0.931	1618	340198	583	1143	71
Kudu	45	0.264	480	70110	265	519	108
Oribi	1	0.006	11				
Reedbuck	5	0.029	53	35	6	12	22
Roan antelope	61	0.357	650	330333	575	1127	173
Sable antelope	136	0.846	1475	603660	777	1523	103
Waterbuck. C	40	0.246	433	245480	495	971	225
Warthog	81	0.491	872	50505	225	440	51
Cookson Wildebeest	4	0.026	44				
Zebra	51	0.295	541	389780	624	1224	226
Cattle	226	1.337					
Ground Hornbill	36	0.214	385	27574	166	325	84
Wattled crane	6	0.036	64	1710	41	81	126

Sixteen animal species were observed in mulobezi GMA. Hartebeest is the most abundant species with an estimate of 4489 and an overall density in the GMA of 1.252hartebeest/Km². Elephant was only seen only twice 1 and 60. Impala and sable are well distributed in the GMA.

Sichifulo

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL%
Common duiker	18	0.058	207	1484	39	78	38
Elephant	2	0.006	23	2	1	3	12
Ground Hornbill	7	0.023	81	1360	37	75	93
Grysbok	2	0.006	23	2	1	3	12
Hartebeest	7	0.023	81				
Impala	2	0.006	23				
Kudu	11	0.036	127	62109	249	504	398
Puku	6	0.019	69	38749	197	398	576

Sable antelope	36	0.117	414	498570	706	1427	344
Warthog	4	0.013	46	9954	100	202	438

Sable antelope (414) was the most abundant out the nine species of animals seen in the Game Management Area. Common duiker, observed 13 times, was the most widely spread species. There were a lot of fields for agriculture, cattle and settlements in the area.

Nkala

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL %
Common duiker	1	0.035	7				
Elephant	1	0.030	8				
Hartebeest	10	0.300	67				
Impala	1	0.030	8				
Waterbuck	18	0.600	121				
Wildebeest	9	0.300	61	1645	41	88	145
Zebra	22	0.800	148	8399	92	200	134
Ground hornbill	1	0.030	8				

Seven animal species were observed and five species of these were seen only once during the survey. Zebra was seen twice (2) and Wildebeest was seen four (4) times. Zebra is the most abundant. No elephant carcass was seen in the area.

Bilili

Species	Seen	Density	Estimate	Variance	SE	95% CL	CL %
Ground Hornbill	1	0.005	9				

This is a heavily settled area with a lot of farms and domestic animals. Habitat for wild animals has been lost.

KAFUE SYSTEM SUMMARY

SPECIES	Kafue NP	Blue Lagoon NP	Lochinvar NP	Kafue flats	Mufunta	Kasonso busanga	Lunga Luswishi	Machiya Fungulwe	Mumbwa West	Mumbwa East	Namwala	Nkala	Bilili	Mulobezi	Sichifulo	System Total
Buffalo	28094	50	350		7	128	22				20			547		29,218
Common Duiker	818				228	269	133		35		12	7		270	207	1,979
Eland	900													649		1,549
Elephant	9148						19		401		2	1			23	9,594
Ele. Carcass 3	57															57
Lechwe Red	15781					5										15,786
Hartebeest	6118				378	628	229		348			67		4489	7	12,264
Impala	33132		54	125	70	228	1171		2275			1		1618	2	38,676
Kudu	250		30		2	139					47			48	127	643
Puku	11306						1123		821						69	13,319
Roan Antelope	4243				545	115			98					650		5,651
Sable Antelope	11359					1414	2429				178			1475	414	17,269
Waterbuck	1741								143			121		433		2,438
Warthog	8690				228	256	2064		152		95			872	46	12,403
Wildebeest	1533					20						61		44		1,658
Zebra	1122	583	294				266					148		624		3,037
Ele.Carcass Ratio																0.576

DISCUSSION

In the two ecosystems surveyed Luangwa and Kafue, 15 animal species were observed in Luangwa and 16 species were seen in the Kafue system. In addition to these, other animal species which are normally not surveyed by methods used in this survey, were observed and these include; bushpig, sitatunga, hippopotamus,jackal, lion and cheetah. These animal species are shown on the species maps presented in the appendices. In assessing the status of the animal species, three aspects are discussed;

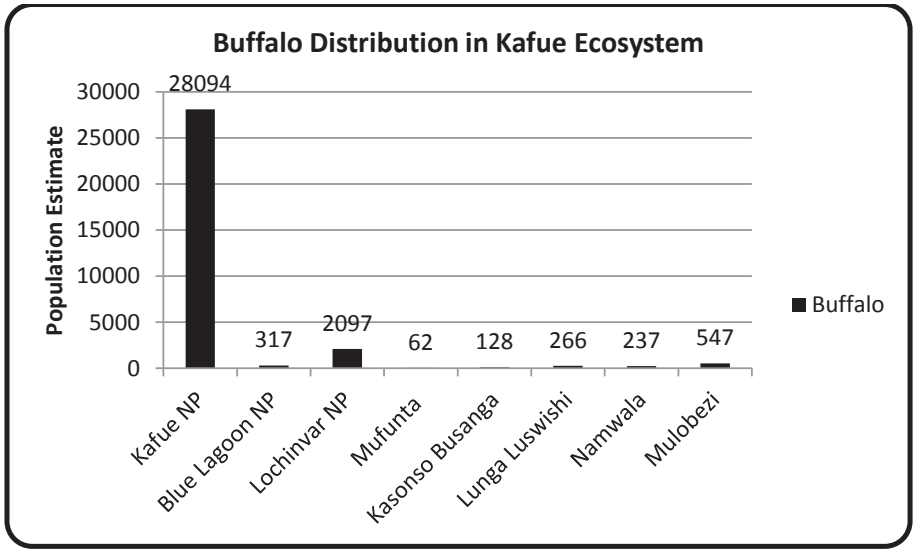
i) abundance
ii) distribution and
iii) trend analysis of the animal species.

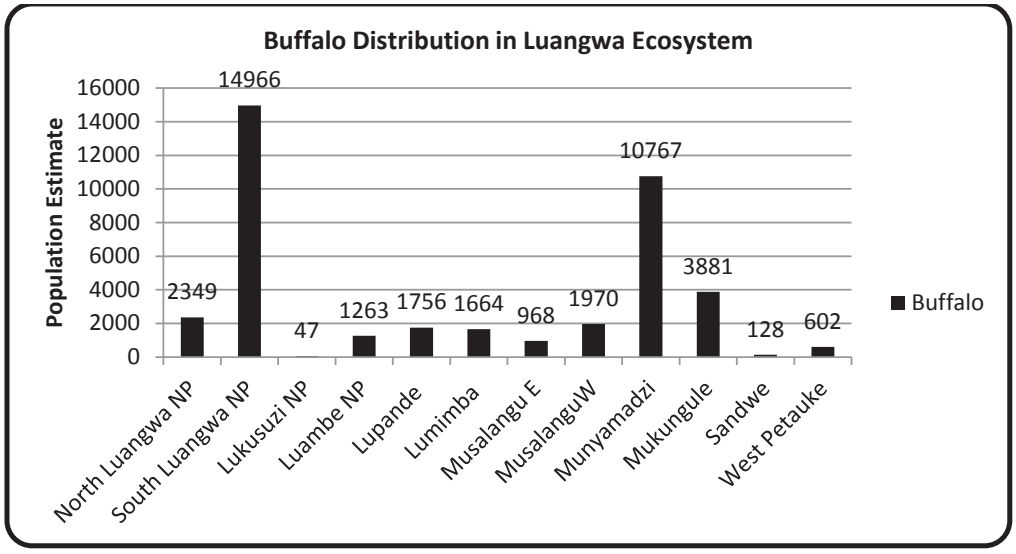
Abundance and trends of each species are presented in bar charts, and trends; in trend analysis graphs. Distribution of animal species is presented on maps.

The impact of man on the status of wild animals cannot be under estimated and ignored. Distribution maps of human effects; settlement, agriculture, mining, logging, charcoal burning etc are also presented in the appendices. These maps will help in relating human effects and presence of wild animals in protected areas.

In the following section selected animal species are assessed in the three perspectives mentioned above.

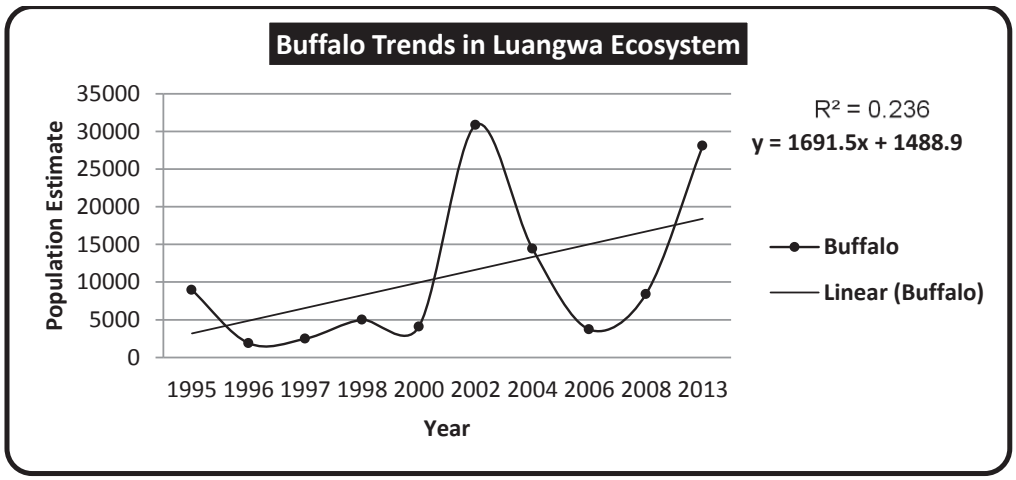
1. Buffalo



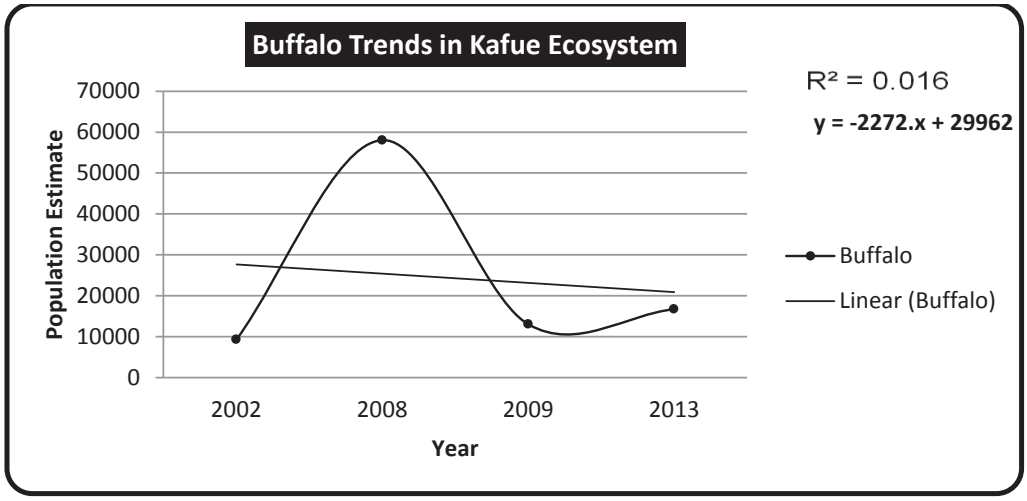


Most of the buffalo (96.1%) in the Kafue ecosystem is found in national Parks; Kafue ,Lochinvar and Blue Lagoon national parks. The game management areas only contain 3.9% of the ecosystem buffalo. The picture is different in the Luangwa system where only 46% is in the national parks while 54% is in the GMAs. This means that there is almost no huntable buffalo in the Kafue ecosystem.

Buffalo Trends:

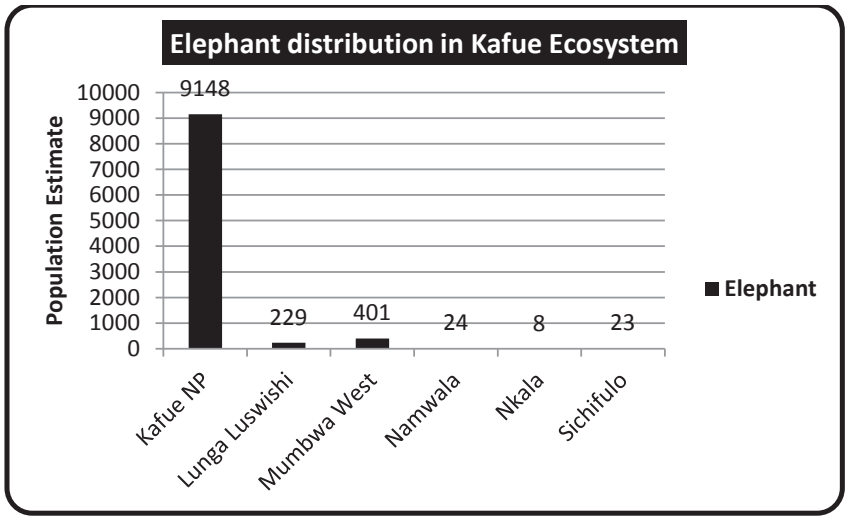


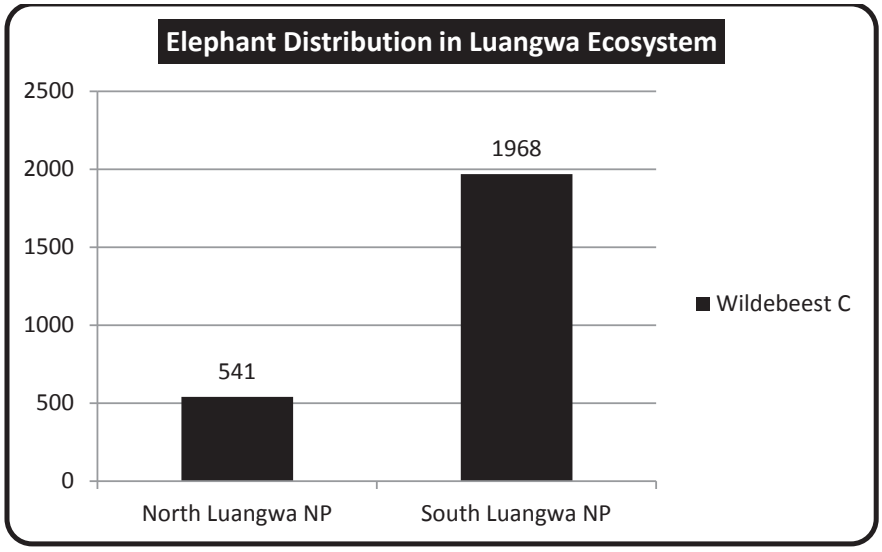
There is a positive trend even though the coefficient of determination is low for the trend line to be used for prediction.



The population trends for buffalo in the Kafue ecosystem are negative indicating a declining population. However, this is the overall picture of the whole ecosystem, situations may vary from place to place in the ecosystem. Harvesting quotas have to be cautionary until the situation improves.

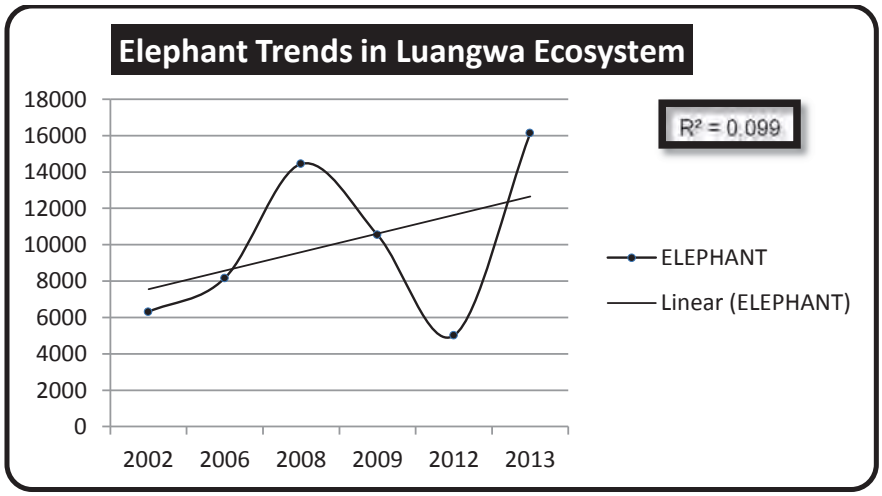
2. Elephant

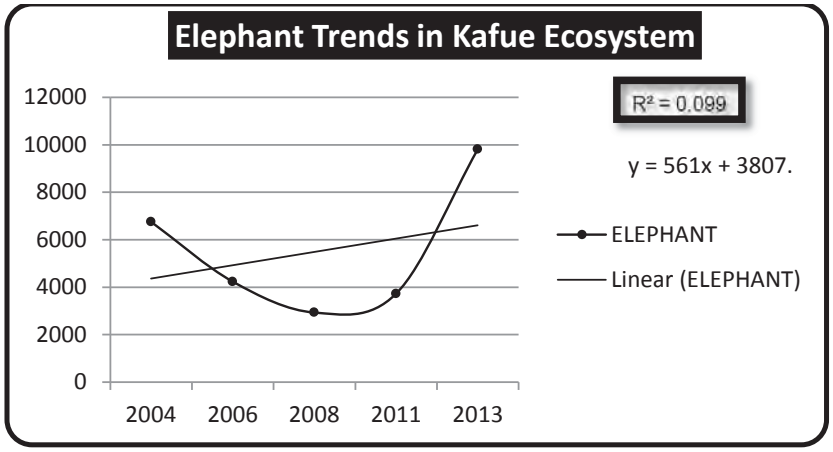




The ecosystem estimate for elephants in the Kafue area is 9833 and 93% of this population is within Kafue national park. Out of the remaining population 92% is found in Lunga Luswishi and Mumbwa west. The other three areas, Sichifulo, Namwala and Nkala have insignificant populations.

On the other hand, elephants are found in almost all the GMAs and national parks. Only Lukusuzi and Chisomo had no elephant observations. The total ecosystem estimate is 22112 and 53% was in the park and 47% was in the GMAs.



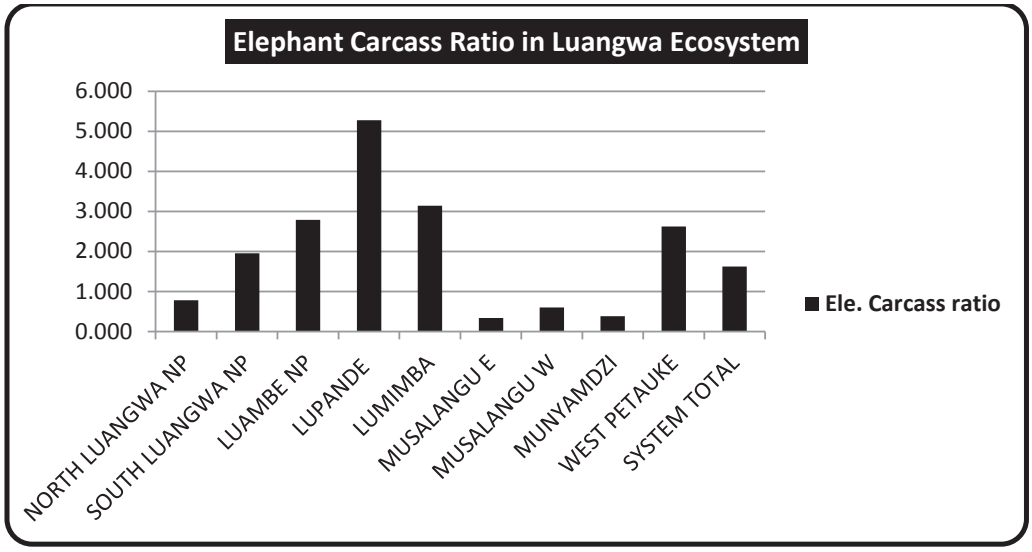


Both Luangwa and Kafue elephant populations are showing positive trends even though utilization of elephant in the Kafue will have to be with a lot of caution.

ELEPHANT CARCASS DISTRIBUTION

SPECIES/PA	NORTH LUANGWA NP	SOUTH LUANGWA NP	LUAMBE NP	LUPANDE	LUMIMBA	MUSALANGU E	MUSALANGU W	MUNYAMDZI	WEST PETAUKE	SYSTEM TOTAL
Elephant	5097	6168	349	2263	895	2669	1503	2632	334	22112
Ele. Carcass 1				9		9		10		28
Ele. Carcass 3	22	9		20						51
Ele. Carcass 4	18	114	10	97	29		9		9	286
Ele. Car ratio	0.779	1.955	2.786	5.274	3.139	0.336	0.595	0.379	2.624	1.624

The Luangwa system elephant carcass ratio was 1.624 with the highest carcass ratio in Lupande of 5.274, although most of the carcasses were class 4 (78% of all the carcasses observed). The bar chart below shows elephant carcass ratios in various protected areas of the Luangwa Ecosystem. There were no observations of elephant carcasses in Lukusuzi, Chisomo, Sandwe and Mukungule.



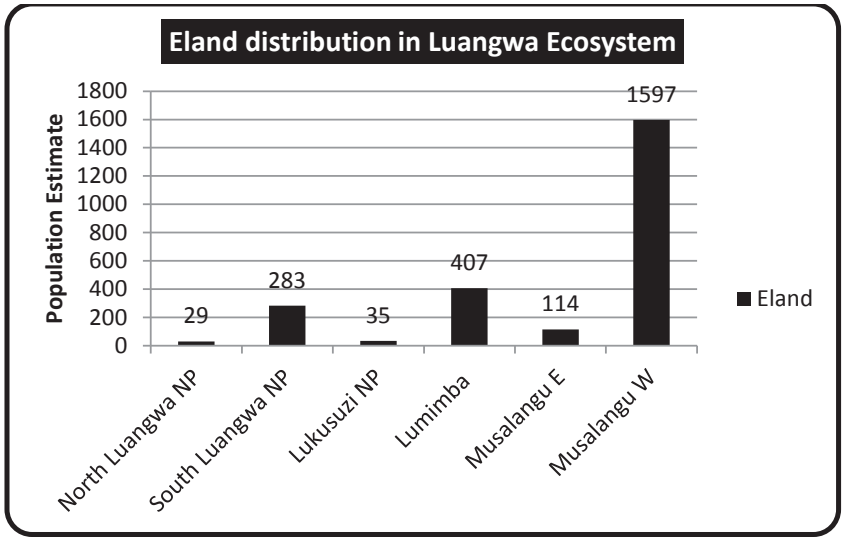
Elephant carcass ratio between 2-8% indicates a stable population (Douglas-Hamilton and Hillman, 1981).

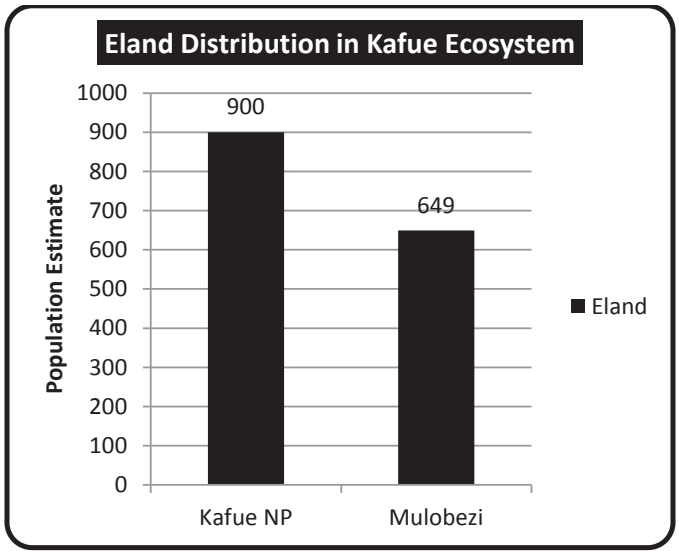
ELEPHANT CARCASS DISTRIBUTION IN KAFUE ECOSYSTEM

In the Kafue system, carcasses were only observed in Kafue National Park, and the estimated number of carcasses in the park was 57. The elephant carcass ratio was 0.65. It is however possible that the team was not consistent in making observations of elephant carcasses.

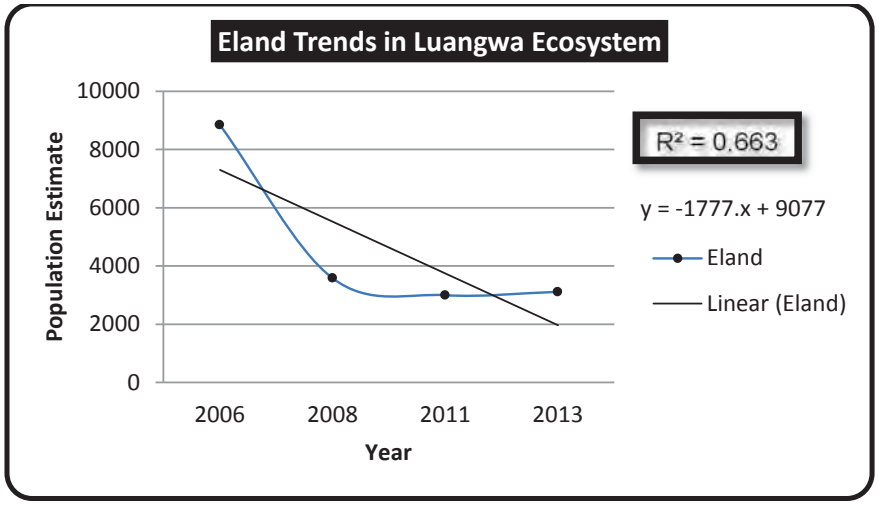
3. Eland

It is expected that the strong holds for the eland population in Zambia is Luangwa and Kafue. The total estimate, both systems put together is 4014. More than two thirds (61.4%) of this population is in the Luangwa ecosystem.

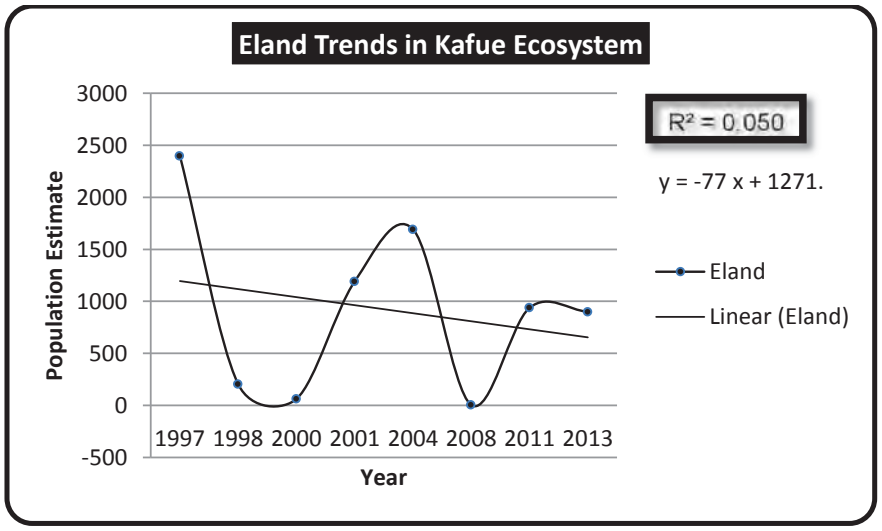




The eland population in both ecosystems is not so good. The Luangwa estimate was 2465 out of which 86% was outside parks. This means that almost the whole population is huntable and yet the population trends below show declining populations in both ecosystems.

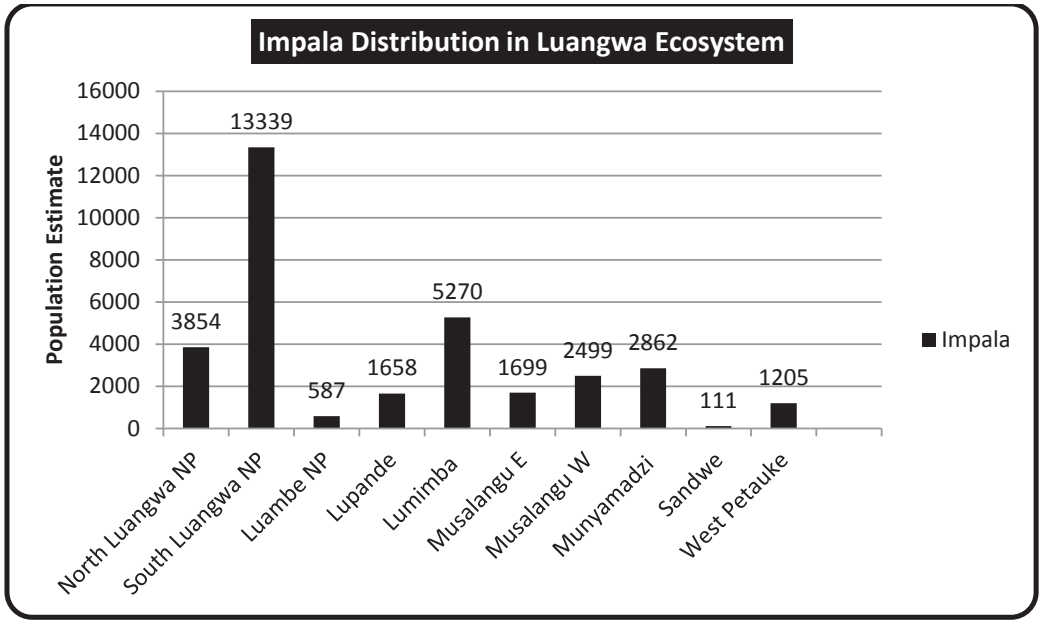


The coefficient of determination shows that we could, to some degree, rely on the Predictability of the trend line and by extrapolation, given the same conditions to prevail, the population will continue to decline.

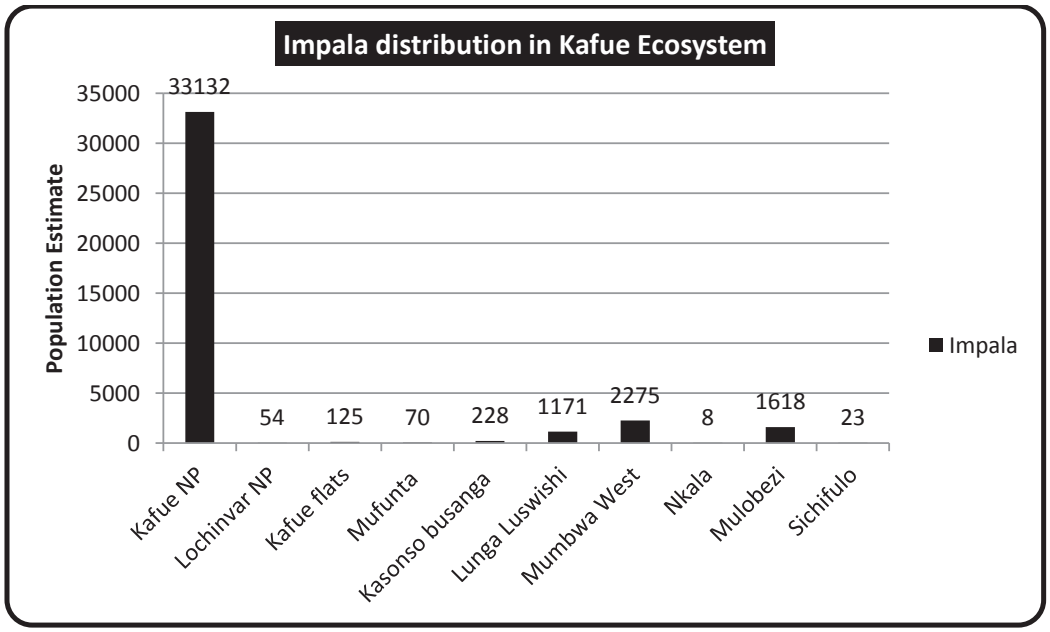


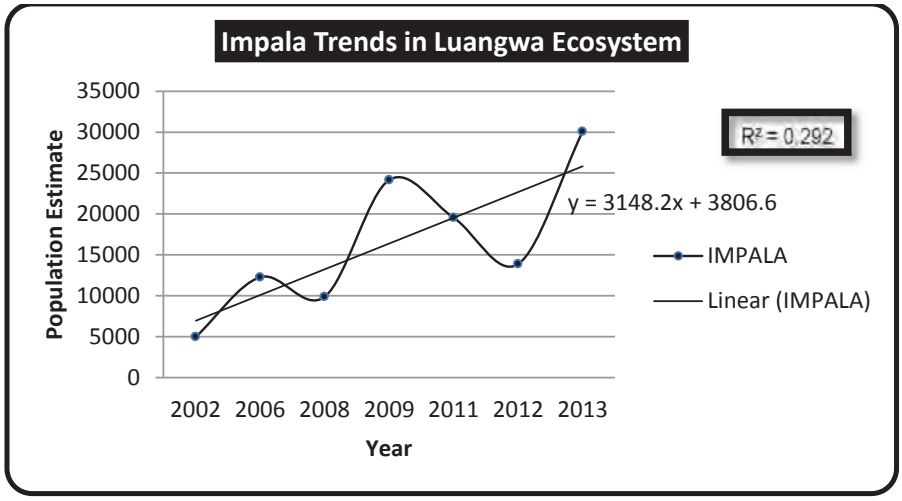
4. Impala

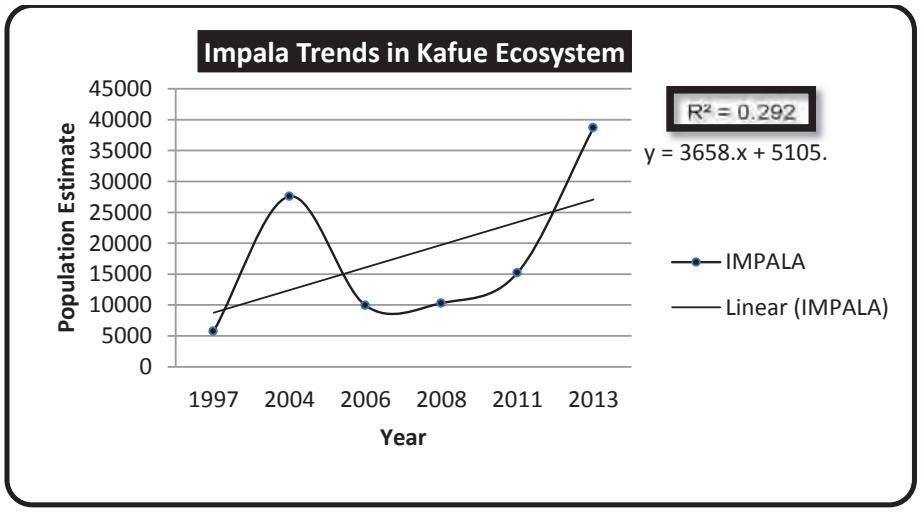
Impala populations is both Luangwa and Kafue ecosystems are wide spread; they were observed in almost all the surveyed protected areas. However, the Luangwa population would be said to be more stable than the Kafue because there is a balance in distribution of the animal species. In Luangwa ecosystem, 54 % of the population is within national parks while the Kafue system population seems to be pushed into more protected areas the national parks. In Kafue 86% of the impala population is within Kafue national park and only 14% is in the GMAs.



It is worth noting that impala was not observed in Lukusuzi, Mukungule and Chisomo. In the Kafue system, it was not seen in Blue Lagoon national park, Mumbwa East, Namwala and Bilili game management areas.



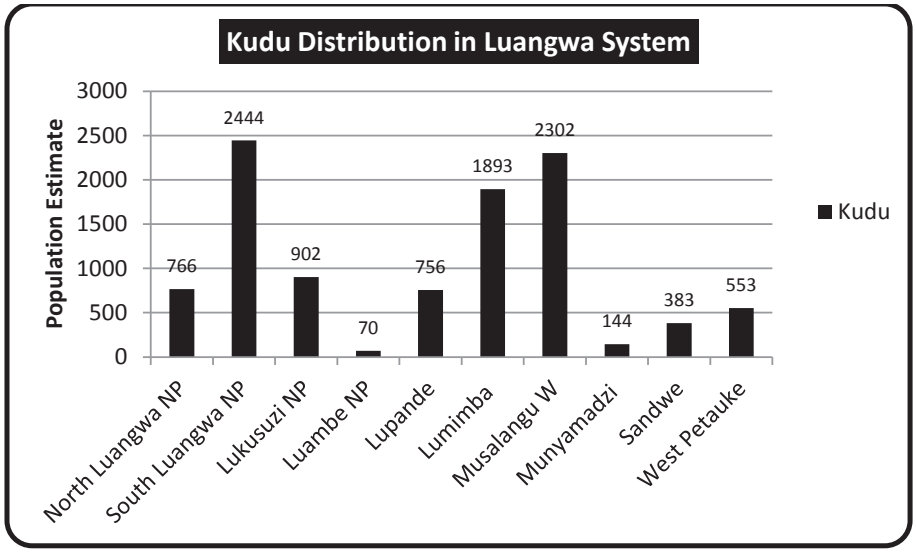


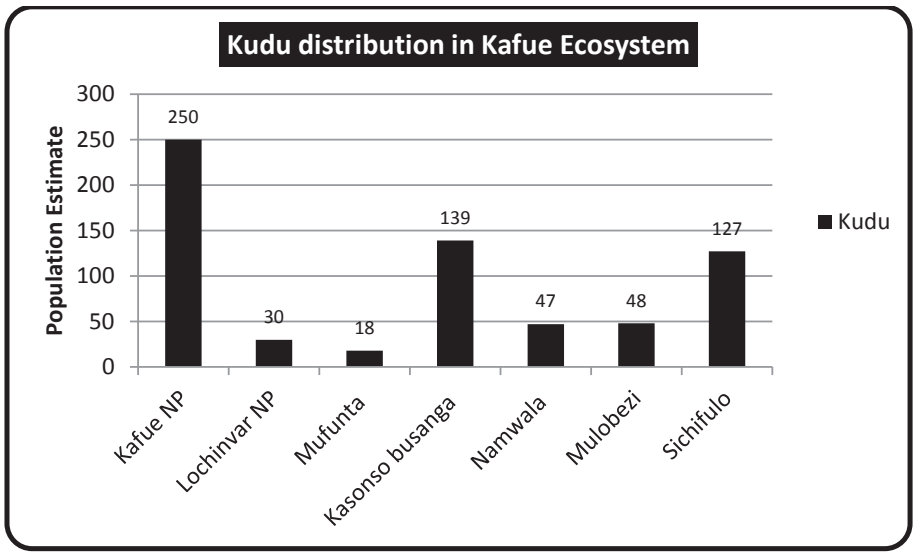


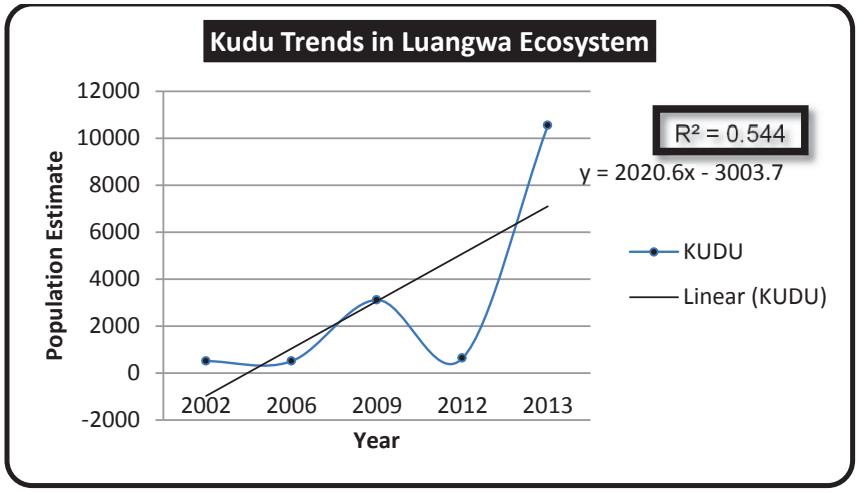
Impala shows positive trends in both ecosystems, although the predictability of the trend line is poor.

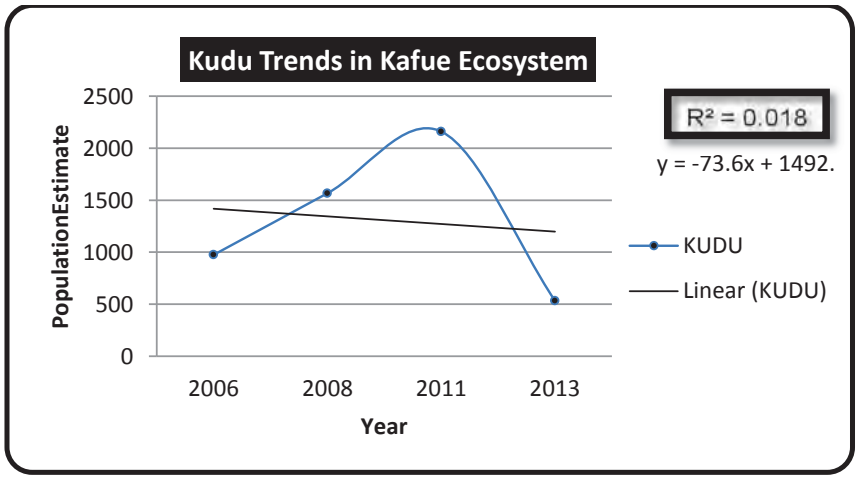
5. **Kudu**

The Luangwa ecosystem estimate of Kudu was 10213 while that of the Kafue system was only 659. The distribution of these populations is almost the same; 41% of the kudu, in the Luangwa Ecosystem is within the park. In Kafue the proportion is almost the same; 42% in the park. This means that only 8 Kudu could be utilized for consumptive use in the whole Kafue ecosystem for both resident and non-resident hunting


Kudu Distribution in Luangwa System
Population Estimate
3000
2500
2000
1500
1000
500
0
766
2444
902
70
756
1893
2302
144
383
553
North Luangwa NP
South Luangwa NP
Lukusuzi NP
Luambe NP
Lupande
Lumimba
Musalangu W
Munyamadzi
Sandwe
West Petauke
Kudu


Kudu distribution in Kafue Ecosystem
Population Estimate
300
250
200
150
100
50
0
250
30
18
139
47
48
127
Kafue NP
Lochinvar NP
Mufunta
Kasonso busanga
Namwala
Mulobezi
Sichifulo
Kudu

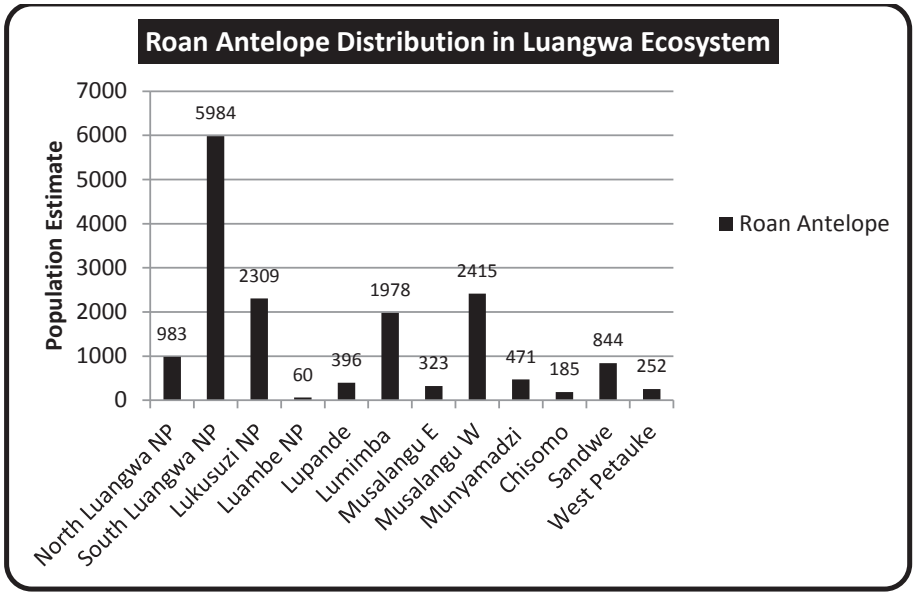


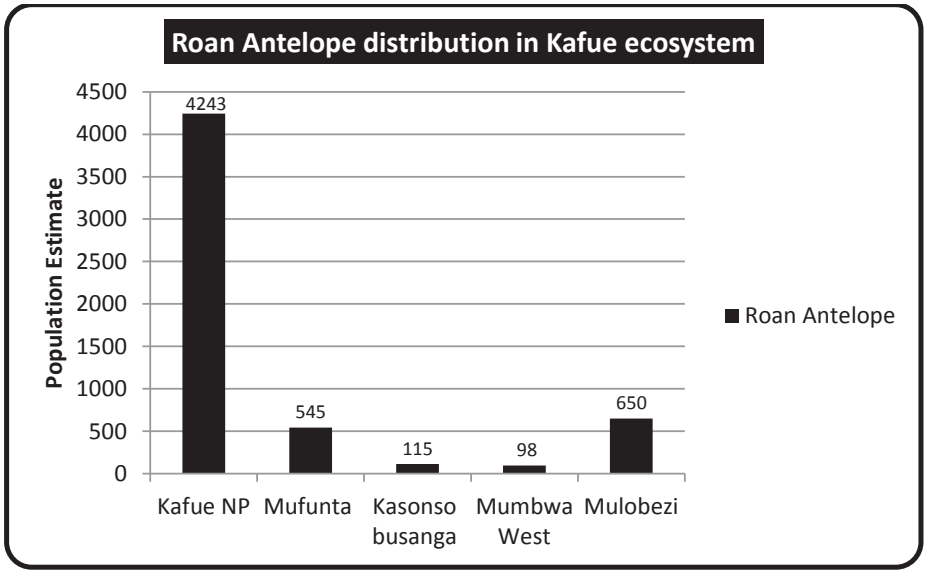


The population trend in the Luangwa ecosystem is positive while Kafue shows a declining population; a slight negative trend.

6. Roan Antelope

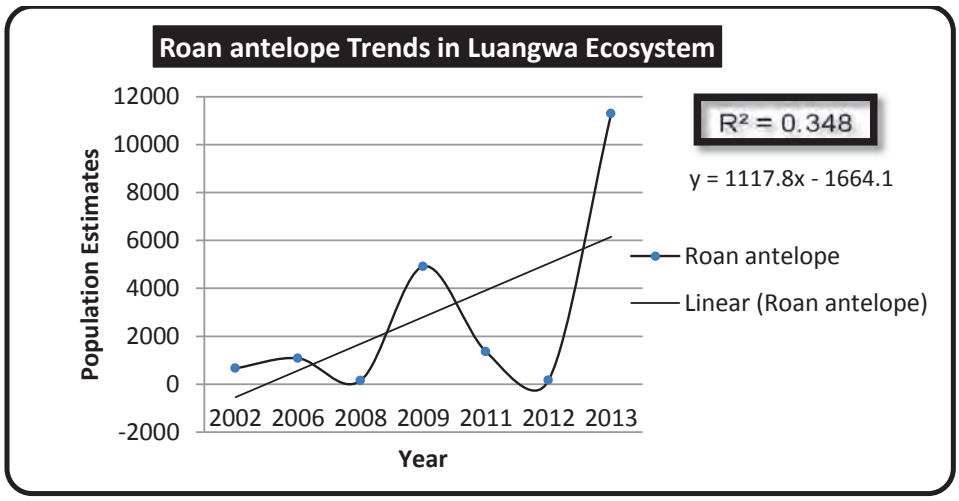
Roan antelope is very well distributed in the Luangwa ecosystem; it was observed in all the protected areas surveyed except Mukungule. The ecosystem estimate was 16200 roan antelopes. The population is 58% in National Parks and 42% in Game Management Areas. The highest population was observed in South Luangwa national Park (5984) followed by Musalangu west (2415) and then Lukusuzi national park (2309).

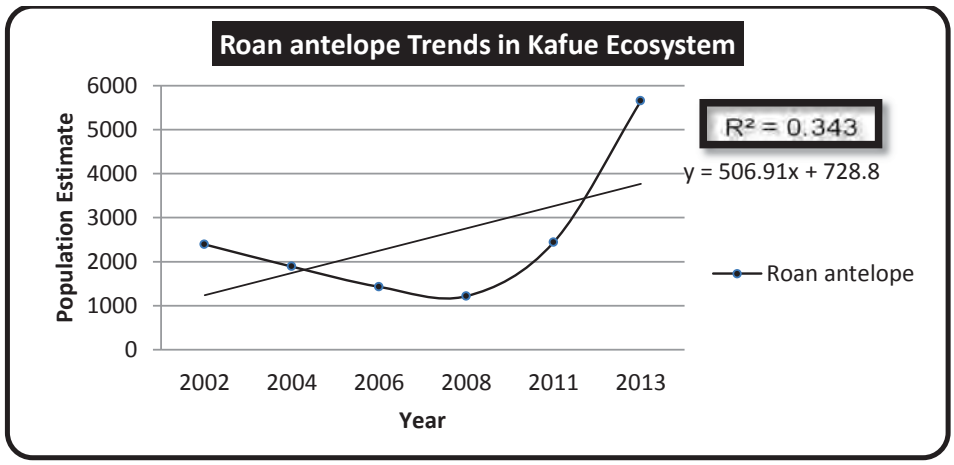




In the Kafue ecosystem, 75% of the total estimate 5651 was in Kafue national park. This tendency may be attributed to some external pressure that forces most species to be confined to the park areas.

Roan antelope Trends

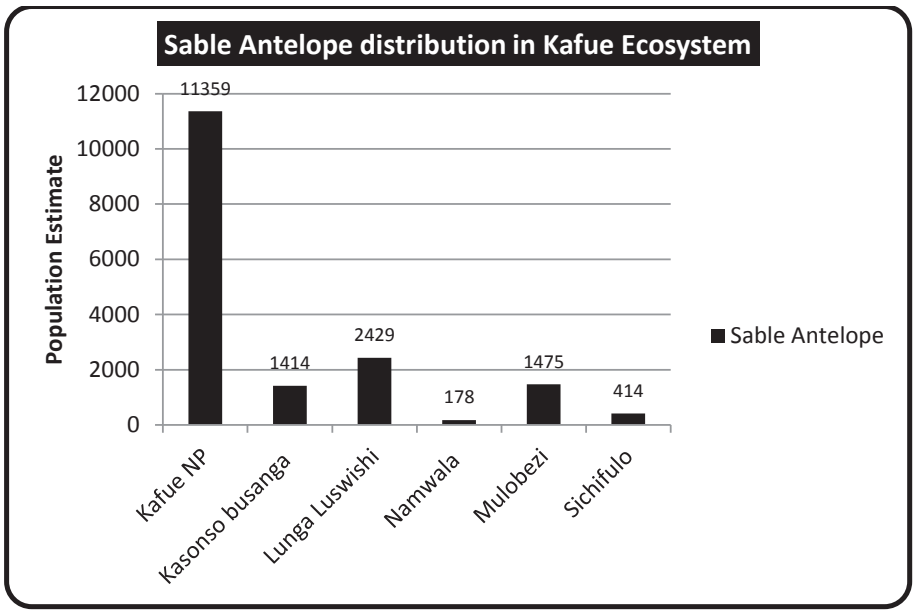


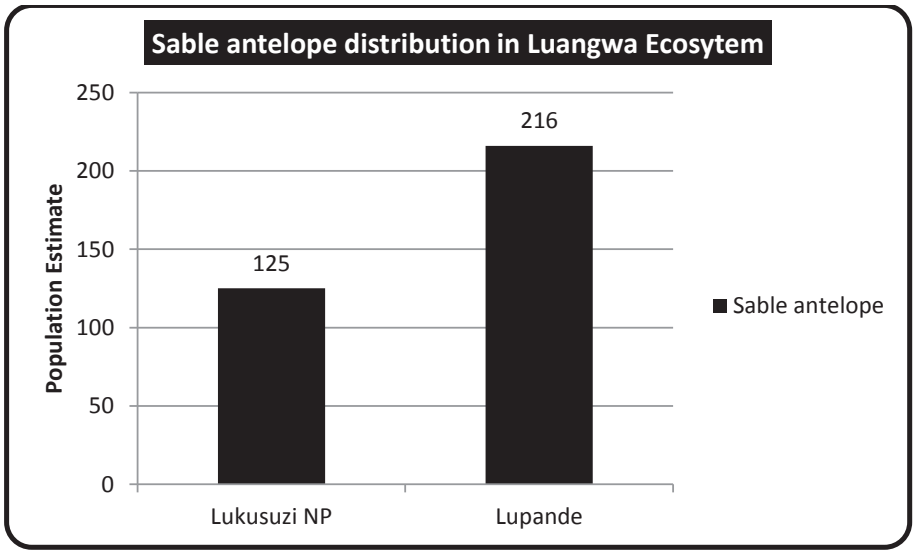


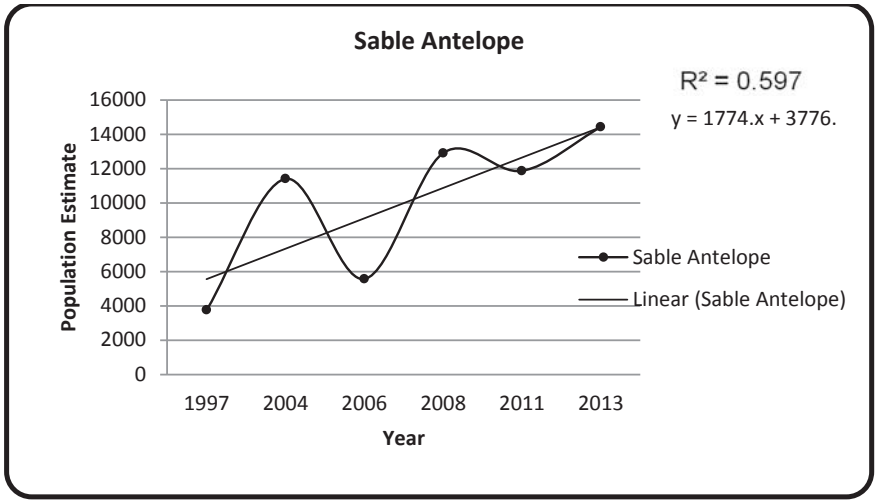
Population trends for both the Luangwa and the Kafue are showing a growing population.

7. Sable antelope

The Kafue ecosystem is the stronghold of Sable antelope in Zambia. The estimated population is 17269 and 66% of this population is within the Kafue national Park. Sable antelope is almost none existent in the Luangwa ecosystem; it was only seen in Lukusuzi and Lupande. The total estimate in this ecosystem is 341.



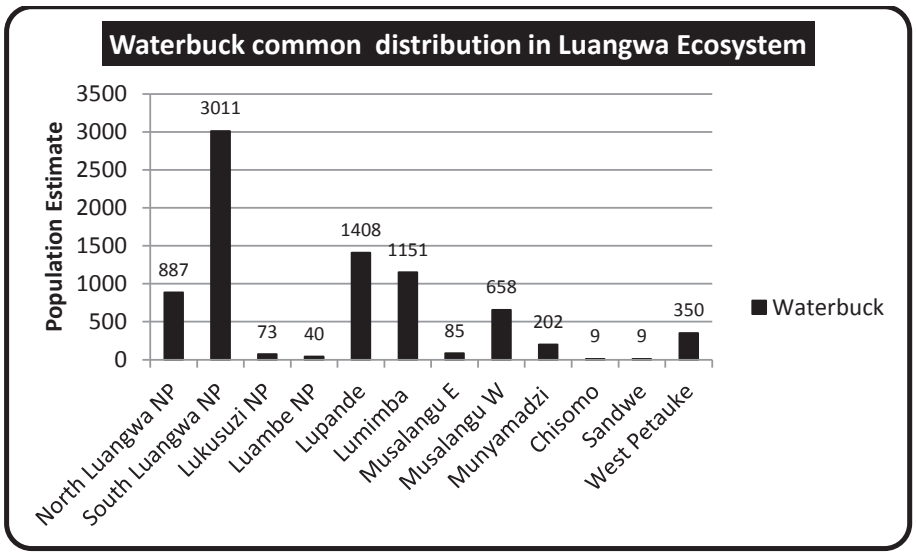


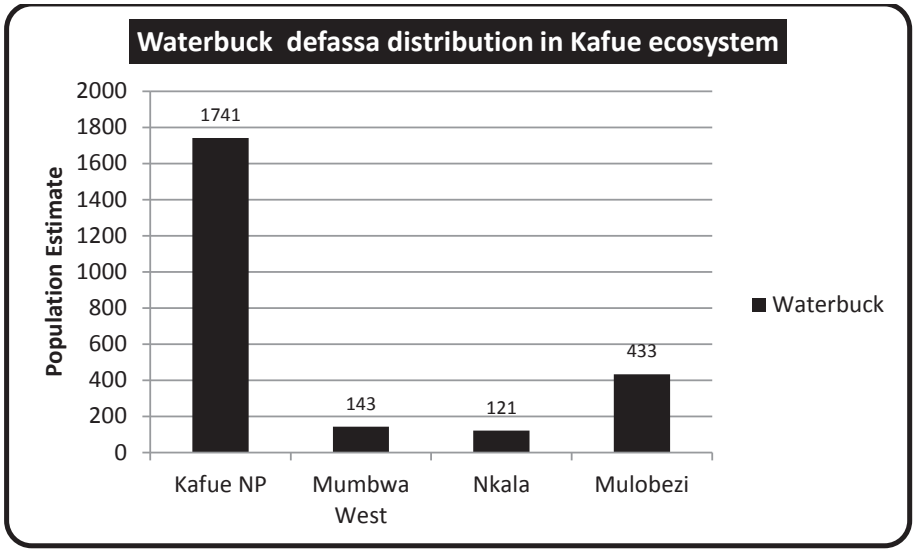


There is no enough information to plot trends for sable in the Luangwa ecosystem. The population trend for sable in the Kafue ecosystem shows a growing population.

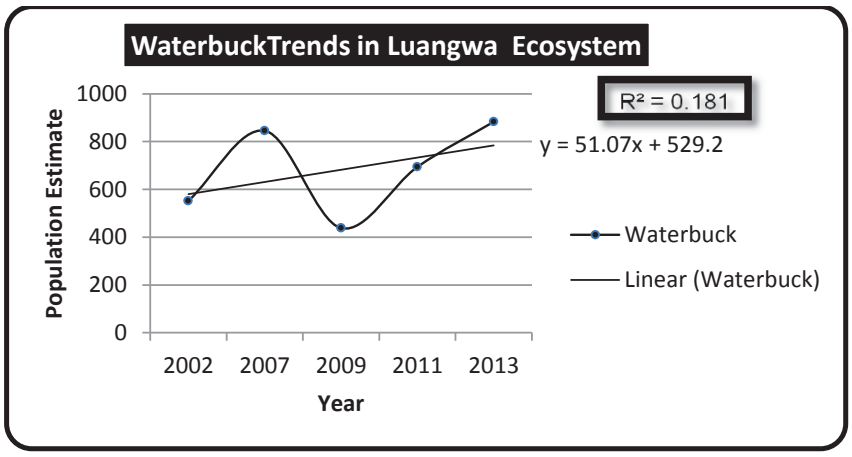
8. Waterbuck

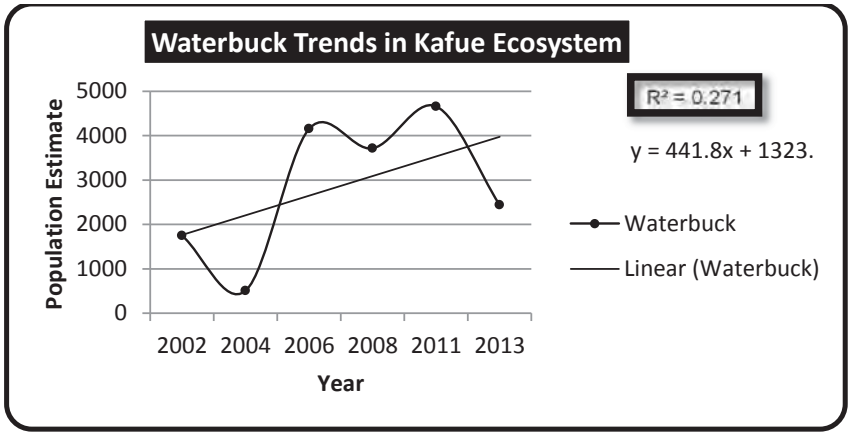
The estimated Waterbuck common population in the Luangwa ecosystem is 7883 and 51% of this population is in the national parks of the area. The highest population is in south Luangwa national park followed by Lupande(1408) and then Lumimba(1151).





The total estimate of Waterbuck defassa for the Kafue system is 2438 and 71% of this population is within Kafue national Park. Only 219% is in the GMAs surrounding the Kafue national Park



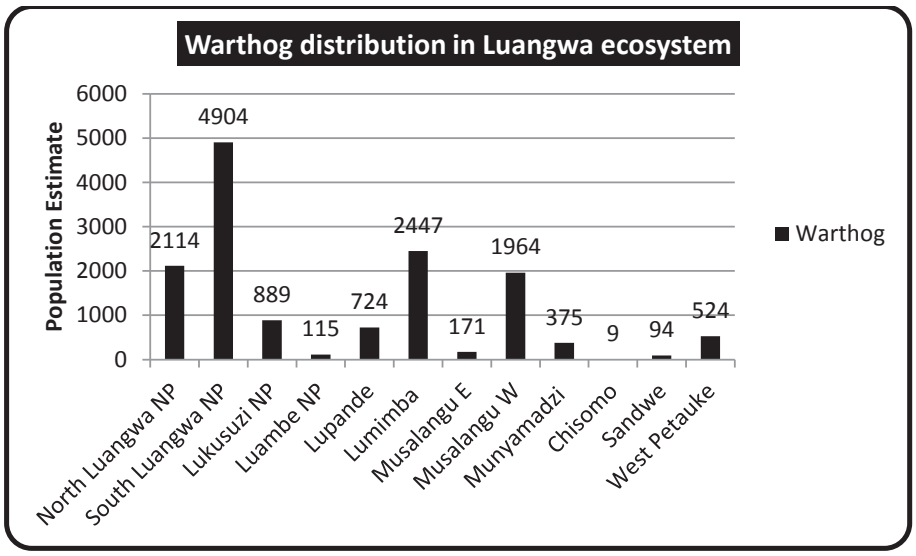


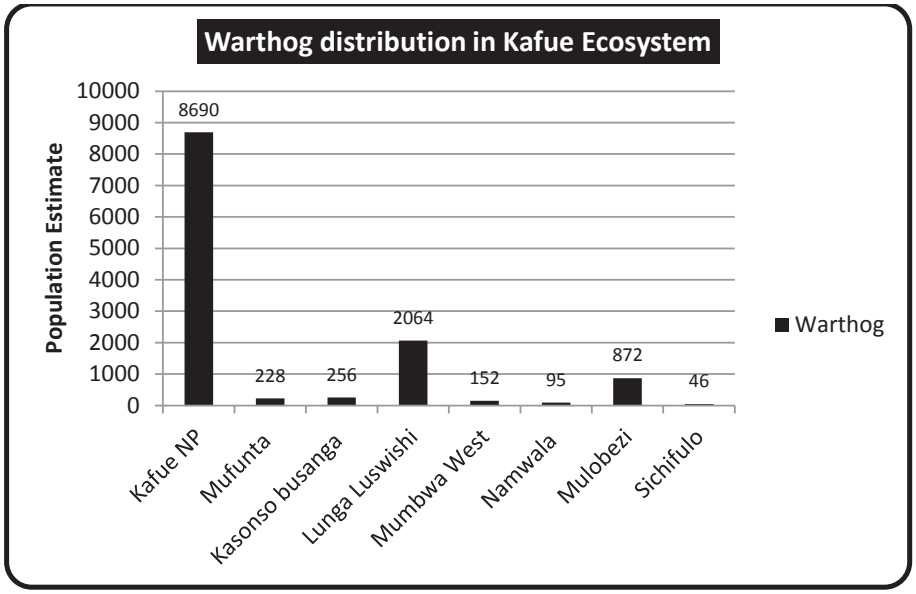
Both the Kafue and Luangwa waterbuck species are showing positive trends even though the predictability is low.

9. Warthog

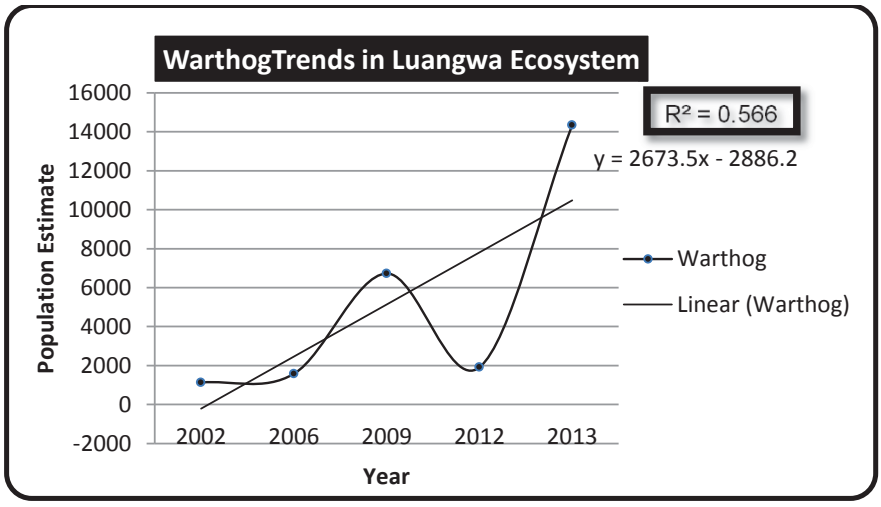
Warthog is well distributed in both ecosystems with similar population estimates 14330 and 12403 for Luangwa and Kafue ecosystems respectively. It is the distribution within the ecosystems that id different; the Luangwa population has 56% within the parks while the Kafue system has 70% in Kafue national park.

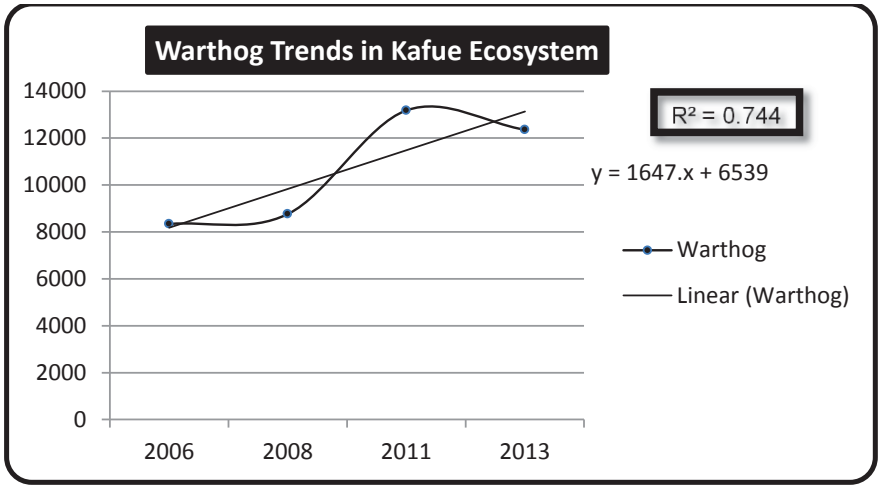
The highest population is in South Luangwa national park(4904) followed by Lumumba(2447) and then North Luangwa(2114).





The distribution of Warthog in both systems is wide spread and found across ecosystems.

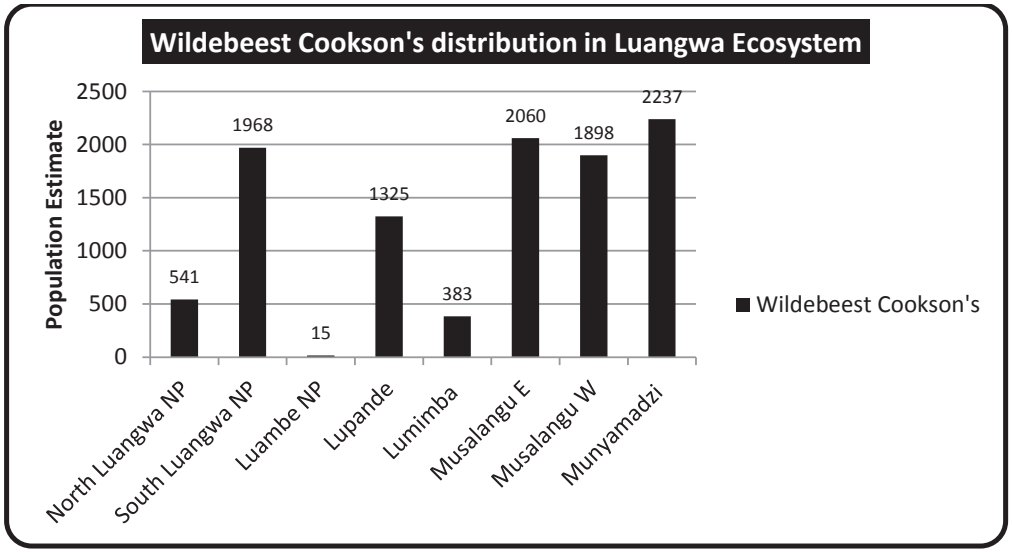


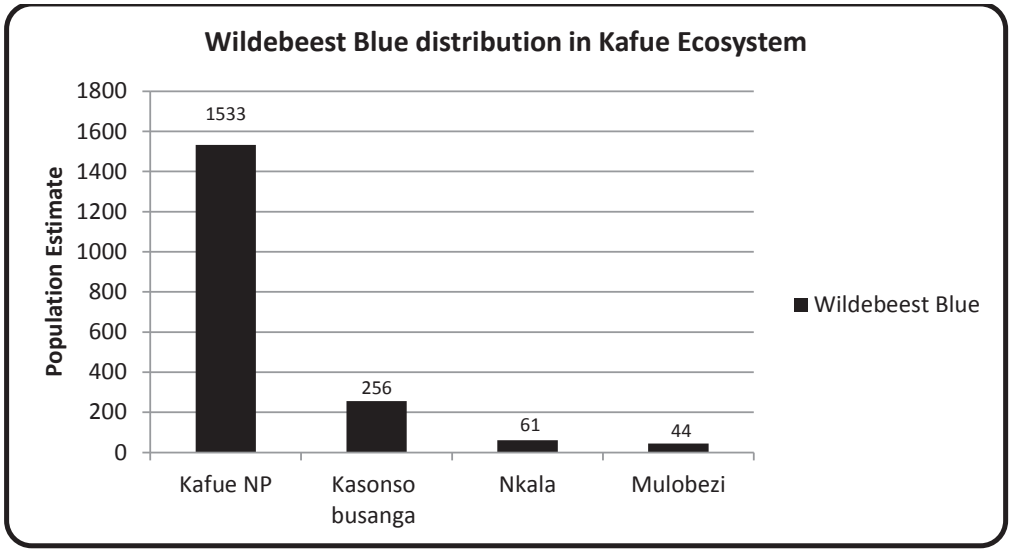


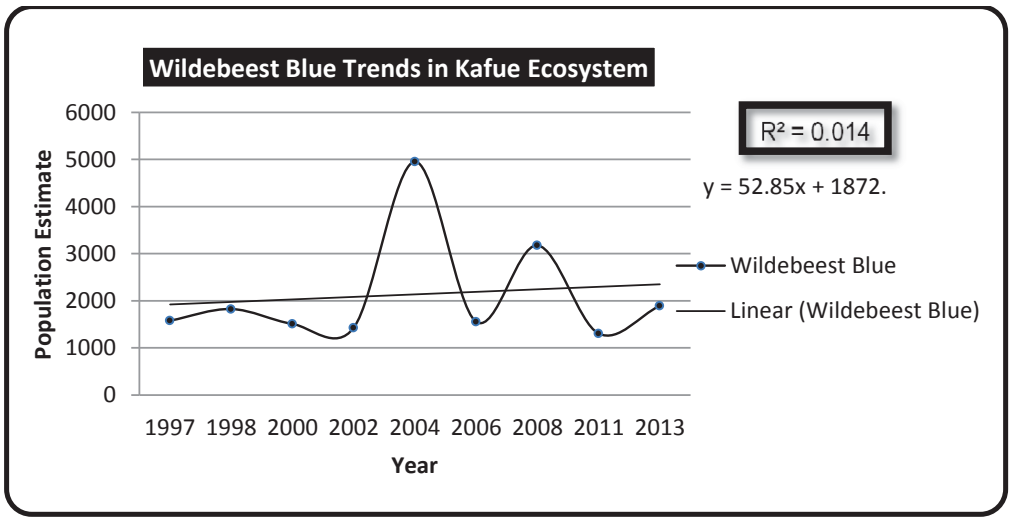
Both systems are showing growing population with a fair degree of confidence of predictability.

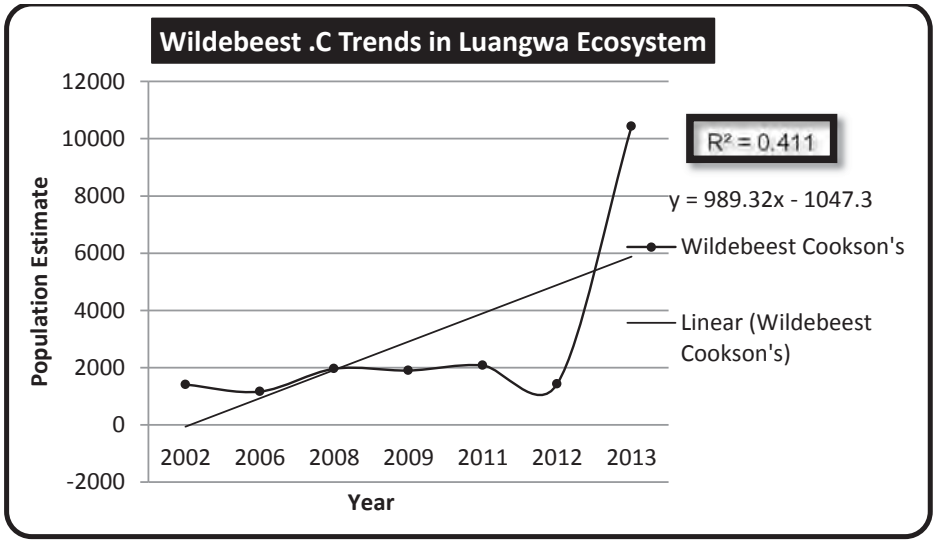
10. Wildebeest

The total estimate of Cookson's wildebeest in the Luangwa Ecosystem is 10 427 with 76% of this population dwelling outside national parks. The highest population was in Munyamadzi followed by Musalangu East and then South Luangwa national Park. The Blue wildebeest in the Kafue system has an estimated population of 1894 with 81% of this population observed in national parks. Only 19% would be available for consumptive use. Wildebeest in the Kafue System was found in Kasonso Busanga, Nkala and mulobezi. Because of size, it is most likely that the animals hunted in the GMA are animals directly from the national park.




Wildebeest Blue distribution in Kafue Ecosystem
Population Estimate
1800
1600
1400
1200
1000
800
600
400
200
0
1533
256
61
44
Kafue NP
Kasonso busanga
Nkala
Mulobezi
Wildebeest Blue

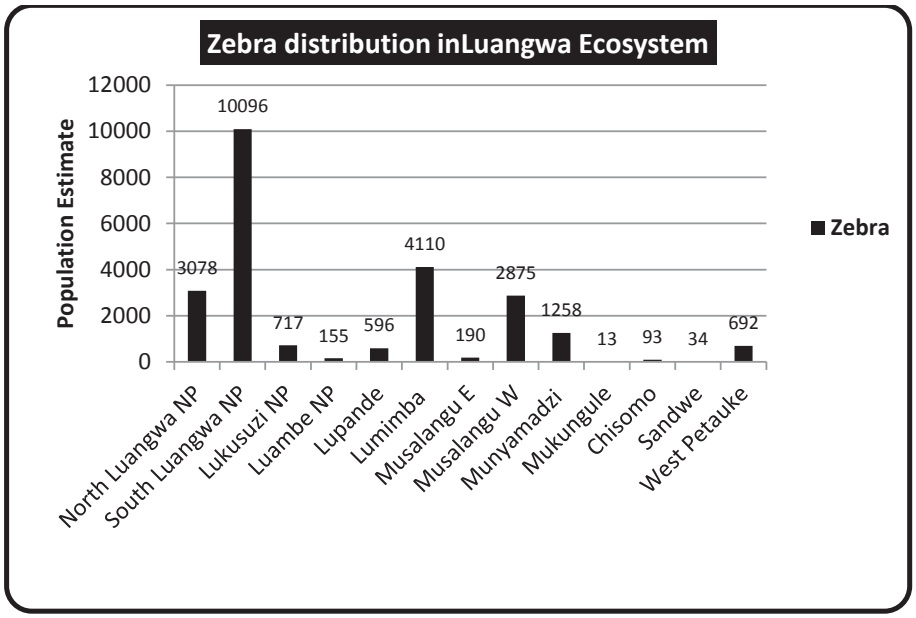

Wildebeest Blue Trends in Kafue Ecosystem
Population Estimate
6000
5000
4000
3000
2000
1000
0
1997 1998 2000 2002 2004 2006 2008 2011 2013
Year
R² = 0.014
y = 52.85x + 1872.
Wildebeest Blue
Linear (Wildebeest Blue)



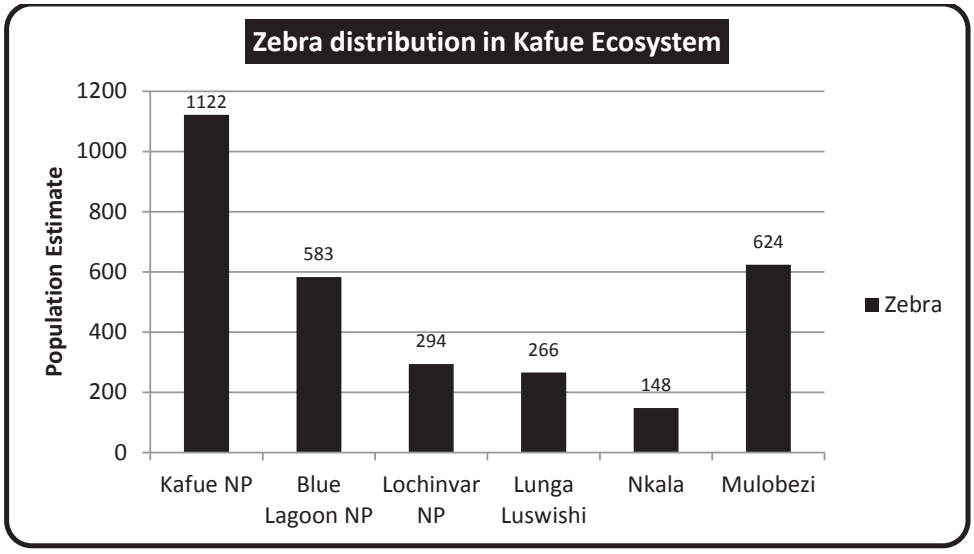
The wildebeest population shows a positive trend for Luangwa system and an almost negative trend in the Kafue System.

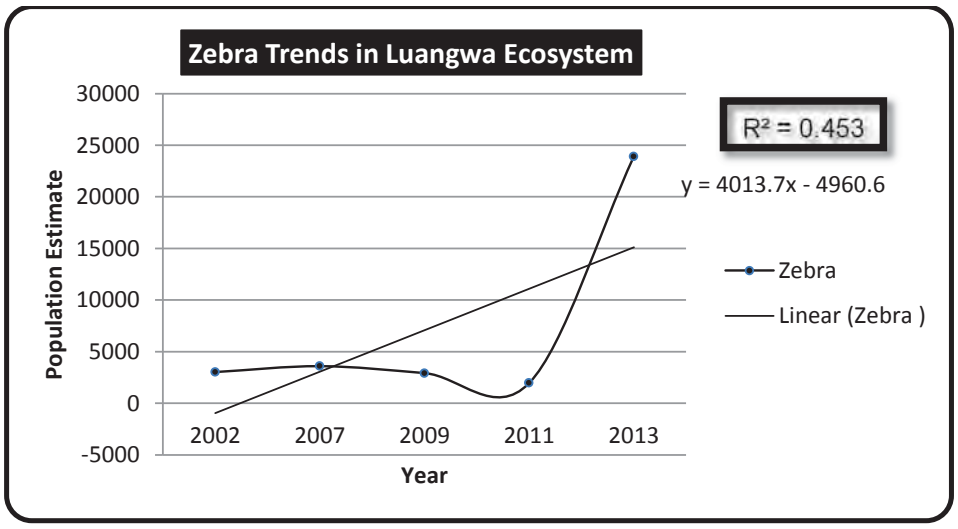
11. Zebra

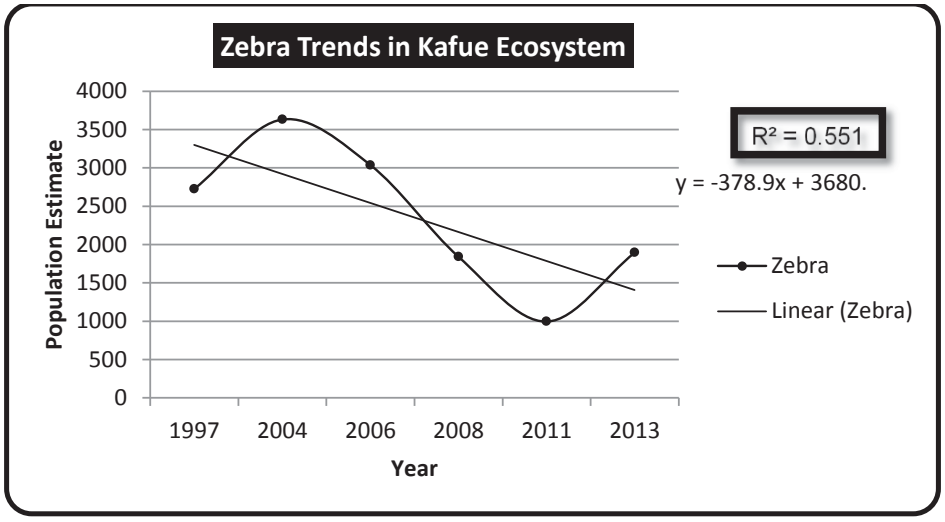
Zebra was observed in 13 areas in the Luangwa system with a total estimate of 23907 of which 59% was in national park and the rest in the GMAs. The estimated population for the system is 3037 with 66% in the national parks of the system. The highest population in the Luangwa system was in South Luangwa national Park**.**



The highest population in Kafue ecosystem was in Kafue national park.


Zebra distribution in Kafue Ecosystem
Population Estimate
1200
1000
800
600
400
200
0
1122
583
294
266
148
624
Kafue NP
Blue Lagoon NP
Lochinvar NP
Lunga Luswishi
Nkala
Mulobezi
Zebra


Zebra Trends in Luangwa Ecosystem
Population Estimate
30000
25000
20000
15000
10000
5000
0
-5000
2002
2007
2009
2011
2013
Year
R² = 0.453
y = 4013.7x - 4960.6
Zebra
Linear (Zebra)



Population trends for the Luangwa system are showing a growing meta- population, while the Kafue system shows otherwise.

SUMMARY OF ESTIMATES, TRENDS AND HARVEST LEVELS

KAFUE ECOSYSTEM

Species	Eco-estimate	Nat. Parks	GMA	Harvest [2%]	Trends	Recommendation
Buffalo	29218	28494	724	14	+	Cautionary
Common Duiker	1979	818	1161	23	+	Hunt
Eland	1549	900	649	13	–	No hunting
Elephant	9594	9148	446	9	+	Cautionary
Lechwe. Kafue	45000	17100	27900	558	+	Hunt
Lechwe Red	15786	15781	5	0	+	No hunting
Hartebeest	12264	6118	6146	123	+	Hunt
Impala	38676	33186	5490	110	+	Hunt
Kudu	643	280	363	7	–	No hunting
Puku	13319	11306	2013	40	+	Hunt
Roan Antelope	5651	4243	1408	28	+	Hunt
Sable Antelope	17269	11359	5910	118	+	Hunt
Waterbuck	2438	1741	697	14	+	Cautionary
Warthog	12403	8690	3713	74	+	Hunt
Wildebeest	1658	1533	125	3	+	Very cautionary
Zebra	3037	1999	1038	21	–	No hunting

LUANGWA ECOSYSTEM

SPECIES	Eco-estimate	Nat.Park	GMA	Harvest[2%]	Trends	Recommendation
Buffalo	36780	18625	18155	363	+	Hunt
Common Duiker	6079	2394	3685	74	+	Hunt
Eland	2465	347	2118	42	−	No hunting
Elephant	22112	11614	10498	210	+	Hunt
Giraffe	481	282	199	4	+	Live sale (No export)
Hartebeest	7110	4004	3106	62	+	Hunt
Impala	33084	17780	15304	306	+	Hunt
Kudu	10213	4182	6031	121	+	Hunt
Puku	19991	11759	8232	165	+	Hunt
Roan Antelope	16200	9336	6864	137	+	Hunt
Sable Antelope	341	125	216	4	±	No hunting
Waterbuck	7883	4011	3872	77	+	Hunt
Warthog	14330	8022	6308	126	+	Hunt
Wildebeest C	10427	2524	7903	158	+	Hunt
Zebra	23907	14046	9861	197	+	Hunt

The term *cautionary* means that the quotas must be conservative with strict rules of monitoring; number of days taken to hunt, trophy sizes and the GPS coordinates of where it was hunted. Minimum trophy sizes must be set for export of trophies. *Very cautionary* would be that this particular species is only hunted under special conditions

CONCLUSION

In this survey 15 animal species were observed in the Luangwa ecosystem and 16 were observed in the Kafue ecosystem. Animal species like lion, cheetah, hyena, Hippo, and others that dwell in specialized habitats and also others with nocturnal behavior and secretive in nature were never intended to be surveyed by this method. Therefore, no attempt has been made to estimate their populations in this report.

From the aerial survey results it is evident that most animal species have a positive population trend, indicating growing populations. There are some animal species however that show signs of decline because of some factors that require to be identified through research. Eland in particular has shown negative trends in both the Kafue and Luangwa ecosystems. Kudu, buffalo, wildebeest and zebra have shown declining populations in the Kafue ecosystem.

Generally species distributions in the two ecosystems show that animals are more wide spread in the Luangwa ecosystem more than the Kafue. In the Kafue most species have higher populations within national parks; areas that have greater protection. This means that there could be pressures in the Kafue system that drive (force) animals into national parks. More management and research interventions are required in the Kafue ecosystem.

Some protected areas are rapidly their efficacy to protect wildlife because of human related activities. Lukusuzi has very few animal species and those that are found are in small numbers. Mining prospecting is wide-spread leaving little room for animal dwelling. Most Game Management Areas are losing habitat for animals to agriculture and settlements. Mukungule, Chisomo, some parts of Lupande, Musalangu east, Mumbwa east, Bilili, Sichifulo are good cases in point.

RECOMMENDATION

1. Animal species showing low populations and negative trends should be utilized with a lot of caution and monitoring.
2. Hunting of eland should be suspended until populations recover.
3. Sable should not be hunted in the Luangwa system and programmes should be put in place to encourage existing populations to grow.
4. There is urgent need of engaging communities in areas of rapid encroachment. Those that are already encroached should be restored so that no precedent is set tolerating encroachment.
5. General Management plans should be implemented with a conscious budget to effect key action points.
6. From the animal populations and trends hunting can resume in both ecosystems although more caution is required in the Kafue system for some species.
7. Sourcing of external consultants should be avoided. It undermines the need of capacity building in local personnel, compromises security because it is not known how else the data will be used by the external consultant, and also deprives the institution of the vital processed data which may be used for other management purposes and also the need of retaining data for future reference.
8. Dissemination of information about wildlife protected areas should be through the Zambia Wildlife Authority.
9. Countrywide surveys need to be conducted every after two or three years.

APPENDICES

65th CITES Standing Committee Meeting Summary – 7 to 11 July, 2014

IUCN assembled a delegation to participate in the 65th meeting of the CITES Standing Committee which took place in Geneva, Switzerland 7th to 11th July, 2014. We would very much like to thank the SSC Specialist Groups for their incredibly helpful work in preparing for and participating in this meeting. The delegation consisted of the following:

Richard Jenkins - Manager UK office, IUCN Global Species Programme, United Kingdom (IUCN Delegation Lead)
Dena Cator - Programme Officer SSC Network Support, IUCN Global Species Programme, Switzerland (IUCN Delegation Manager)
Dan Challender – IUCN / SSC Pangolin Specialist Group, UK
Holly Dublin – IUCN / SSC African Elephant Specialist Group, Kenya
Diane Skinner – IUCN / SSC African Elephant Specialist Group, Kenya
Simon Hedges – IUCN / SSC Asian Elephant Specialist Group, UK
Richard Emslie – IUCN / SSC African Rhino Specialist Group, South Africa
Tomas Waller – IUCN / SSC Boa & Python Specialist Group, Argentina
Daniel Natusch – IUCN / SSC Boa & Python Specialist Group, Australia
Christine Lippai – IUCN / SSC Crocodile Specialist Group, South Africa
Despina Symons –IUCN SSC Policy Subcommittee and IUCN / SSC Sustainable Use and Livelihoods Specialist Group
Kristin Nowell – IUCN / SSC Cat Specialist Group, USA (working from the US)

NOTE: To view more information on this meeting, see: http://www.cites.org/eng/com/sc/index.php. You can also find more information in IISD's Earth Negotiations Bulletin report here (in English and French): http://www.iisd.ca/cites/sc65/. If you have any questions about this report, please contact Dena Cator at dena.cator@iucn.org.

Agenda items relevant to SSC Specialist Groups (**all other agenda items are general**):

Specialist Group	**Agenda item(s)**	**Specialist Group**	**Agenda item(s)**
African Elephant	8.2, 16.2, 24.2, 42	Global Trees	16.3, 26.1, 31, 48, 49.1, 49.2
African Rhino	24.2, 43	Groupers & Wrasses	27.1
Asian Elephant	24.2, 42	Iguana	27.1
Asian Rhino	24.2, 43	Madagascar Plant	48

Amphibian	26.1	Marine Turtle	16.2
Antelope	16.2, 24.2, 40, 41	Mollusc	24.2, 26.1
BirdLife	16.2, 34.1, 35	Pangolin	24.2, 27.1
Boa & Python	24.2, 34.1, 34.2, 44	Primate	8.2, 16.2, 34.1, 37
Cat	16.2, 24.2, 38, 39	Seahorse	26.1
Caprinae	16.2	Shark	16.2, 20.2, 24.2, 33, 46
Cetacean	24.2, 26.1	Sturgeon	24.2, 26.1, 47
Crane	26.1	Sustainable Use & Livelihoods	19, 36
Crocodile	24.2, 25.1, 34.1, 34.2	Tortoise & Freshwater Turtle	24.2, 26.1, 45

Agenda item	**Lead**	**Agenda detail**	**Brief Summary**	**IUCN position / info**	**Relevant SG**
1. Opening remarks of the Chair	N/A		*No document*	N/A	N/A
2. Opening remarks of the Secretary-General	N/A		*No document*	N/A	N/A
3. Agenda	N/A		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-03_0.pdf	N/A	N/A
4. Working programme	N/A		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-04.pdf	N/A	N/A
5. Rules of Procedure of the Standing Committee	N/A		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-05.pdf	N/A	N/A
6. Credentials	N/A		*No document*	N/A	N/A
7. Admission of observers	N/A		http://cites.org/sites/default/files/eng/com/sc/65/E-SC65-07.pdf	N/A	N/A
8. Relationship with the United Nations Environment Programme	Dena	8.1 Briefing by the Chair / Secretary-General	*No document*	N/A	N/A
	Dena	8.2 Report of	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-	This report was noted by the Standing Committee.	Primate SG,

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
		UNEP	08-02.pdf This is a report of UNEP-led activities relating to CITES.	It mentions the work of the Great Apes Survival Partnership (GRASP) and the African Elephant Fund.	African Elephant SG
9. Financial matters	N/A	9.1 Review of the Terms of Reference for the Administration of the Trust Fund	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-09-01.pdf	The Committee noted the report of the Chair of the Finance and Budget Subcommittee in document FBSC/SC65 Doc. 1. The Committee also adopted all the recommendations in the document presented by the subcommittee for its consideration.	N/A
	N/A	9.2 Costed programme of work for 2012-2013	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-09-02_1.pdf	N/A	N/A
	N/A	Annex 1: Costed programme of work for the CITES Secretariat for 2012	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-09-02-A1.pdf	N/A	N/A
	N/A	Annex 2: Costed programme of work for the CITES Secretariat for 2013	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-09-02-A02_1.pdf	N/A	N/A
	N/A	Annex 3: CITES Trust Fund Status of Contributions as of 31 December 2013	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-09-02-A3.pdf	N/A	N/A
	N/A	Annex 4: CITES Trust Fund Contributions received in 2013 for each month (Cumulative)	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-09-02-A4.pdf	N/A	N/A
	N/A	Annex 5: CITES Trust Fund Annual	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-09-02-A5.pdf	N/A	N/A

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
		Distribution of the Unpaid Contributions as of 31 December 2013			
	N/A	Annex 6: Statement of Income and Expenditure for CTL for 2012-2013	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-09-02-A06.pdf	N/A	N/A
10. Administrative matters	N/A		*No document*	N/A	N/A
11. Meetings of the Conference of the Parties	Dena	11.1 Structure and length of future meetings	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-11-01.pdf This relates to reducing the length of CoP meetings.	N/A	N/A
	Dena	11.2 Guidance on the submission of credentials	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-11-02_0.pdf This relates to rules for submitting of credentials for CoP meetings.	N/A	N/A
	Dena	11.3 Arrangements for the 17th meeting of the Conference of the Parties	*No document*	This was an update from South Africa, where the next CITES CoP meeting will be held, on preparations for the meeting. The host city for the CoP is in the process of being determined.	All
12. Organization of special meetings	N/A		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-12.pdf This relates to a document submitted at the CITES CoP16 meeting regarding the rules of CoPs applying to other CITES meetings.	N/A	N/A
13. Scientific committees	N/A	13.1 Report of the Animals Committee	*No document*	N/A	N/A

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
	N/A	13.2 Report of the Plants Committee	*No document*	N/A	N/A
	Dena	13.3 Potential conflicts of interest in the Animals and Plants Committees	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-13-03_1.pdf This is a report of decisions taken at CITES CoP16 to reduce potential conflicts of incidents at CITES meetings given the roles of members of the Animals / Plants Committees in their personal capacities. The document is just to be noted.	N/A	N/A
14. Implementation of the CITES Strategic Vision: 2008-2020	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-14_0.pdf This is a note that the CITES Strategic Vision 2008-2020 has now been shared with both the CBD and GEF and that the Strategic Vision now makes express reference to the Strategic Plan for Biodiversity: 2011-2020 and relevant Aichi Biodiversity Targets as well as relevant outcomes of the United Nations Conference on Sustainable Development (Rio+20). Inclusion of a reference to the Strategic Plan for Biodiversity in the Strategic Vision establishes a link to the GEF-6 Programming Directions, as the Biodiversity Focal Area Strategy within those Directions is largely based on the Strategic Plan for Biodiversity.	The oral report of the Secretariat was noted and it was agreed that this agenda item would be considered together with agenda item 24.2 on Special reporting requirements and reporting on trade in artificially propagated plants.	N/A
15. Celebration of the first World Wildlife Day	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-15_1.pdf This is a report on how the first World Wildlife Day was acknowledged after its creation at CITES CoP16 in 2013. The Standing Committee is to consider the establishment of a World Wildlife Day Working Group to identify, compile and formulate ideas on how best to celebrate future celebrations of World Wildlife Day, as well as to advise on how best to obtain adequate financial support and the necessary human resources to organize them.	A working group was formed for this which will be Chaired by Botswana. IUCN is not a member of it but TRAFFIC is.	All
16. Cooperation with	Dena	16.1 Overview	*No document*	N/A	N/A

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
other organizations					
	Dena	16.2 Convention on the Conservation of Migratory Species of Wild Animals	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-16-02_0.pdf At its 62nd meeting (SC62, Geneva 2012), the Standing Committee endorsed a CMS CITES Joint Work Programme 2012-2014. This document includes a report of the activities undertaken between CITES and CMS between 2012 and 2014. It also contains a draft CMS-CITES Joint Work Programme 2015-2020. The joint activities focus on 4 main themes: (A) Harmonization of species-specific information (primarily relating to nomenclature); (B) Joint activities addressing shared species and issues of common interest; (C) Implementation and fundraising; (D) Outreach and capacity building. Regarding (B), shared species for particular attention include: - Argali sheep (*Ovis ammon*); - Saiga antelope (*Saiga* spp.); - Big cats, such as Snow leopard (*Uncia uncia*) and Cheetah (*Acinonyx jubatus*); - Great apes (Hominidae); - African elephant (*Loxodonta* spp.); - Saker falcon (*Falco cherrug*); - Marine turtles (Cheloniidae and Dermochelyidae); and - Sharks and rays (Elasmobranchii)	The Committee welcomed the cooperation between the secretariats of CITES and CMS and endorsed the CMS-CITES Joint Work Programme 2015-2020 in Annex 2 of the document.	Caprinae SG, Antelope SG, Cat SG, Primate SG, African Elephant SG, BirdLife, Marine Turtle SG, Shark SG
	Dena	16.3 Food and Agriculture Organization of the United Nations (Report of the working group)	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-16-03.pdf This document is a history of the work that CITES and FAO have done over the past few years to coordinate their work, in particular related to forestry issues. The document includes the recommendations: 16. The Standing Committee is invited to take note of the draft	The Committee agreed to extend the Working Group until SC66 in 2015 with a mandate to consider all options for enhancing cooperation with FAO, including an overarching memorandum of understanding on institutional cooperation (as per below), a subsidiary cooperative agreement regarding forestry resources and consideration of how those two instruments might work together. IUCN is not a part of this working group at the	Global Trees SG

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			memorandum of cooperation with regard to forestry issues contained in Annex 1 to this document 17. The Committee is invited to determine the need for an over-arching memorandum of cooperation between CITES and FAO on forestry issues contained in Annex 1 to this document.	present time.	
	Dena	Annex 2: Draft memorandum for cooperation between the FAO and CITES Secretariat (version with changes marked up)	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-16-03-A2.pdf This is the draft Memorandum of Cooperation mentioned above but with track changes.	This will be considered again at the next meeting of the CITES Standing Committee meeting in 2015.	Global Trees SG
	Richard	16.4 International Consortium on Combating Wildlife Crime	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-16-04.pdf This is an update of the activities of ICCWC and its partners, including CITES. There are no actions / recommendations related to this document other than encouraging countries to continue to fund ICCWC – the document is to be noted. ICCWC was created in 2010 and is the collaborative effort of five inter-governmental organizations working to bring coordinated support to the national wildlife law enforcement agencies and to the sub-regional and regional networks that, on a daily basis, act in defense of natural resources. The ICCWC partners are the CITES Secretariat, INTERPOL, the United Nations Office on Drugs and Crime, the World Bank and the World Customs Organization. In July 2012, ICCWC launched the Wildlife and Forest Crime Analytic Toolkit which provides government officials, Customs, police and other relevant enforcement agencies with a framework to analyse, prevent, detect and combat wildlife and forest	The Standing Committee noted the report on activities completed by ICCWC in the document.	All

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			offences.		
	Dena	16.5 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystems Services: Report of the working group	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-16-05.pdf At the CITES Animals / Plants Committee meetings in May 2014, a drafting group developed a brief set of recommendations for consideration of the Standing Committee Working Group on IPBES on matters such as: a) CITES participation at IPBES meetings; b) the development of and nomination of experts for the assessment on sustainable use of wild species; and c) the pertinence of a draft Resolution on CITES and IPBES collaboration and any other matter relevant to the implementation of Decision 16.14. Recommendations made were quite general and included: 1. It would be important to make sure that experts with good knowledge of CITES take part in the forthcoming assessment by the IPBES sustainable use Task Force; 4. For a comprehensive assessment of sustainable use, expertise in additional areas other than biology and biodiversity management will be required, such as social and economic sciences, an rural development policies The Working Group on IPBES plans to meet in the margins of the CITES Standing Committee meeting to review the recommendations from AC27/PC21 and any additional developments related to IPBES. It will then prepare a set of specific recommendations for consideration by the Standing Committee at the present meeting.	The Standing Committee agreed that the mandate of the IPBES Working Group comprised relevant decisions adopted at CITES CoP16 and the recommendations adopted at the joint session of the Animals and Plants Committee meetings in 2014. The Committee also agreed that the CITES Secretariat should issue a Notification inviting Parties to nominate experts to the planned IPBES assessment on sustainable use, as soon as the IPBES Secretariat launched its invitation for such nominations in September 2014.	All
	Dena	16.6 International Tropical Timber Organization	*No document*	N/A	N/A
	Dena	16.7 Cooperation with other biodiversity-	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-16-07_0.p df	This document was noted.	N/A

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
		related conventions	This is an update on the Liaison Group of the Biodiversity-related Conventions (BLG).		
17. Access to finance, including GEF funding and innovative mechanisms	Richard		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-17.pdf This is a report on progress made regarding: Access to finance for implementation of Decisions from the 16th meeting of the Conference of the Parties (CoP16, Bangkok, 2013); Access to Global Environment Facility (GEF) Funding; and Innovative finance mechanisms. The document mentions that the CITES Secretariat has become a member of the donor council of SOS - Save Our Species.	The Committee noted the document and welcomed progress made regarding access to finance for implementation of CoP16 Decisions; Access to GEF; and the establishment of a Endangered Species Technology and Innovation Fund (ESTIF). It also re-established the Working Group on "Access to Finance, including GEF funding and innovative mechanisms" under the Finance and Budget Subcommittee. IUCN is not currently a member of this working group. Switzerland is the Chair of the working group.	All
18. Cooperation between Parties and promotion of multilateral measures	Dena		*No document*	There was an oral report given on this.	N/A
19. CITES and livelihoods	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-19.pdf This document has been prepared by Peru*, as Chair of the Working Group on CITES and Livelihoods, in collaboration with the CITES Secretariat. The Standing Committee is invited to note this document and re-establish the working group so that it can reconvene in the margins of the present meeting, taking account of the contents of the present document and, if deemed appropriate, make recommendations for further action. This is a report of the work that has been done to date on implementing the CoP16 decisions related to CITES and livelihoods. The Organization of American States (OAS) has offered to assist in the development of an international workshop in the Peruvian Amazon towards the end of August 2014 aimed at presenting some case studies and exchanging successful experiences. The workshop will also allow the identification of practical cases to implement the	This document and the oral report of the CITES Secretariat were noted. It was agreed to re-establish the working group on CITES and livelihoods with the mandate provided in Decision 16.20, which is "The Standing Committee shall continue the operation of its Working Group on CITES and Livelihoods so that the Working Group can review the comments on the toolkit and guidelines submitted by Parties, stakeholders and interested organizations, and make recommendations to the Standing Committee". The working group will be chaired by Peru - IUCN is a member of it.	All, Sustainable Use and Livelihoods SG

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			toolkit and guidelines mentioned in Decision 16.20 and Resolution Conf. 16.6. A questionnaire has been prepared to facilitate the implementation of Decision 16.24, and is annexed tomthe present document (in Spanish only).		
20. Capacity building	Dena	20.1 Needs assessment for strengthening the implementation of CITES	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-20-01.pdf The document makes recommendations as follows: 7. The Secretariat invites the Standing Committee to: a) endorse the extension of the deadline for Parties to make inputs to the questionnaire on Needs assessment for strengthening the implementation of CITES, with a view to considering the findings of the survey at its 66th meeting; b) establish a working group to focus on mechanisms by which the technological, logistical and equipment needs of all Parties to implement the Convention can be assessed on a regular basis and organize an intersessional meeting to discuss development of the mechanism and the challenges faced by non-English speaking countries regarding translation and interpretation. as soon as external resources are available; and c) invite Parties and stakeholders to contribute financial support to allow the Secretariat to undertake a study of new and appropriate information and communication technologies needed to implement the Convention and organisation of the intersessional meeting.	The Standing Committee created a working group on the development of a mechanism to assess the needs of Parties which is Chaired by Australia. IUCN is not a part of this working group but TRAFFIC is.	All
	Dena	20.2 Capacity building activities for implementation of the CITES listing of sharks and manta rays	This document has been posted here: http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-20-02.pdf This is a brief update of activities undertaken by range States, Parties, intergovernmental organizations, non-governmental organizations and other stakeholders in support of the listings of shark and manta species at CITES CoP16.	The Committee noted the activities listed in document SC65 20.2 and urged Parties to continue their ongoing capacity building activities to implement the new CITES listing of sharks and manta rays.	Shark SG

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			The document recommends: 7. The Standing Committee to: a) note this document; and b) encourage Parties and other stakeholders to continue undertaking capacity-building activities in support of the listings, and to provide suggestions to improve future capacity-building activities to implement the new CITES-listing of sharks and manta rays, and information that can be made available in the shark web portal of the CITES website.		
21. CITES logo	N/A		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-21.pdf This document relates to the policy for using the CITES logo. A working group will reconvene on this during the meeting.	The CITES Standing Committee encouraged Management Authorities to inform the Secretariat of any proposed use of the CITES logo.	N/A
22. National laws for implementation of the Convention	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-22.pdf Recommendations 30. The Secretariat recommends that the Standing Committee take note of the information contained in this report and a related oral update at the present meeting. 31. The Standing Committee may wish to stress the need for individual Parties affected by compliance measures under Decisions 16.33, 16.34 and 16.37 to submit information to the Secretariat, at least 60 days before SC66, on the adoption of appropriate measures for effective implementation of the Convention. 32. The Secretariat further recommends that the Standing Committee encourage donor States and organizations to direct any technical or financial assistance they might be able to provide to Parties which are shown in the Annex to have an identified or possible need for drafting assistance, and that a preference be given to enabling the relevant CITES Management Authority to contract a local legal expert for such	The Standing Committee noted the report submitted by the CITES Secretariat. It requested Colombia, Guatemala, Niger and the United States of America to consult informally on the need for a proposed working group on legislation. The working group concluded that it was not necessary to establish an intersessional working group on legislation and that it would be more useful instead if each regional representative of the Committee could collaborate with the Parties in their region about any legislative assistance needs and then inform the Secretariat. The Standing Committee agreed with this.	All

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			work.		
23. Application of Article XIII – International Measures	Dena		*No document*	This related to the CITES Secretariat informing Parties about species being affected adversely by trade or Parties relaying this information to the CITES Secretariat in turn.	N/A
24. National reports	N/A	24.1 Late submission or non-submission of national reports	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-24-01_0.pdf This relates to a list of countries that have not submitted national reports for 3 years in a row without adequate justification.	The Committee determined that Comoros, Gambia, Lao People's Democratic Republic, Malawi and Saint Vincent and the Grenadines had failed to provide annual reports for three consecutive years, without having provided adequate justification, and agreed that if they had not provided their missing reports within 60 days of the present meeting the Secretariat would issue a Notification recommending that Parties not authorize any trade in specimens of CITES-listed species with those Parties until the missing reports are provided.	All
	Dena	24.2 Special reporting requirements and reporting on trade in artificially propagated plants	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-24-02.pdf This relates to the work of the Standing Committee Working Group on Special Reporting Requirements. The document recommends: **Implementation of Decision 16.44** **57. Recommendations relating to reporting requirements:** a) The Standing Committee should review all of the reporting requirements listed in **Annex 1** and make a decision on whether they should be maintained or deleted. b) To increase the response rates for reports, the Secretariat should raise the profile of reporting, for example by: i. one or more reminder notifications before reports are due; ii. consolidating all reporting in a particular, highly visible, section of the CITES website; iii. developing a reporting search tool on the CITES website to allow searches on reporting requirements, general advice or	The recommendations of the working group contained in the Annex to document SC65 Com. 6 on CITES reporting requirements were adopted. Annexes 2 (Strategic Vision indicators) and 3 (draft implementation report) of document SC65 Doc. 24.2 will be revised following the Standing Committee meeting and a Notification will then be issued requesting comments from Parties, including on whether they are willing for the information they provided to be shared with UNODC. The Committee also agreed to defer its consideration of the reporting on trade in artificially-propagated plants until its 66th meeting (SC66) in 2015. The Committee also agreed that a Notification should be issued inviting comments from Parties on draft revised Guidelines on the preparation and submission of annual reports and that the Secretariat would further revise the draft Guidelines and present them for consideration at	Crocodile SG, Cat SG, Sturgeon SG, Cetacean SG, Tortoises & Freshwater Turtles, African / Asian Elephant SGs, Pangolin SG, Mollusc SG, African / Asian Rhino SGs, Antelope SG, Shark SG, Boa & Python SG

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			individual country reports. This would aid Parties to find the information needed for implementation and find guidance on report submission / content. **58. Recommendations relating to the implementation report and** Strategic Vision indicators: a) The Standing Committee should review the proposed changes to the Strategic Vision indicators in **Annex 2** and adopt the revised indicators (subject, if necessary, to detailed feedback provided at SC65). b) The Standing Committee should review the draft implementation report format in **Annex 3** and adopt it (subject, if necessary, to detailed feedback provided at SC65). **59. Recommendations relating to reporting illegal trade:** The Working Group on Special Reporting Requirements should further analyse the opportunities for collating / collecting information on illegal trade by CITES and should report to the 66th meeting of the Standing Committee. Implementation of Decision 16.45 60. Subject to comments on individual reporting requirements by SC65 under Decision 16.44, the recommendations for maintaining or deleting reporting requirements relevant to the Animals and Plants Committees listed in Annex 1 should be adopted. Implementation of Decision 16.46 61. Parties should, where possible, use the online reporting process for provision of the special report on enforcement measures. They should submit such reports by 31 October 2014 and are invited to provide comments on the process to the Secretariat by the end of November 2014. **Reporting on trade in artificially-propagated plants** 62. In view of the Plants Committee decision to continue its consideration of this issue until PC22 (2015), as described in paragraph 54 above, the Standing Committee should defer consideration of the issue until SC66. Annual report guidelines	SC66 in 2015. Standing Committee verified the results of decisions taken at the CITES Animals / Plants Committee meetings and reviewed several other reporting requirements relevant to the Standing Committee. These included: 11. Ranching - Res. Conf. 11.16 (Rev. CoP15) - maintained 59. Asian big cats – Res. Conf. 12.5 (Rev CoP16) and Decision 16.68 - maintained 16. Cetaceans – Res. Conf. 11.4 (Rev. CoP12) - maintained 15. Elephants – Res. Conf. 10.10 (Rev. CoP16) and 61. Elephants and Ivory – Decision 16.79 and 16.80 – maintained 60. Leopards – Decision 16.76 – maintained 56. Pangolins – Decision 16.41 - maintained 75. Queen conch – Decision 16.143 - maintained 14, 63, 64, 65, 66 – Rhinos – maintained. 19. Sturgeon / certificates – Res. Conf. 12.7 (Rev CoP16) and Notification 2010/34 – deleted 21. Saiga - Decision 14.93 (Rev. CoP16) and 68.	

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			63. It is recommended that the Secretariat revise the Annual Report Guidelines on the basis of previous comments received from UNEP-WCMC and any comments received from Parties in response to a Notification to be issued after the present meeting. It is further recommended that the Secretariat present the revised Guidelines to the 66th meeting of the Standing Committee for consideration and possible approval.	Saiga - Decision 16.98 – maintained 17. Sharks - Res. Conf 12.6 (Rev. CoP16) - maintained 44. Tibetan antelope – Res. Conf. 11.8 (Rev CoP13) – deleted 67. Tibetan Antelope – Decision 16.93 - maintained 69. Snake trade - Decision 16.107 and 77. Snake trade - Decision 16.106 - maintained 27. Tortoises and freshwater turtles (Notification 2004/44) - deleted 70, 73, 74 Tortoises and freshwater turtles – Decisions 16.113, 16.118 and 16.121- maintained	
	Dena	Annex 1: CITES Reporting Requirements, and draft recommendations on whether they should be maintained or deleted	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-24-02-A1.pdf This was discussed at the Animals / Plants Committee meetings. Results relevant to SSC Specialist Groups were: 11. Ranching (Res. Conf. 11.16 Rev CoP 15) – Maintained, though the CITES Standing Committee should look at whether bi-annual reporting could be implemented instead. 27. Tortoise (Notification 2004/44) – Removed, notification is 10 years old, relating to the endemic *Geochelone yniphora*. Madagascar have confirmed the reporting requirement is no longer required. 21. Saiga (Decision 14.93, Rev. CoP16) - Maintained 68. Saiga (Decision 16.98) - Maintained 17. Sharks (Res. Conf. 12.6, Rev. CoP16) - Maintained 69. Snake trade (Decision 16.107) - Maintained 77. Snake trade (Decision 16.106) – Maintained Decisions are now to be made on the additional reports as per the right hand column and the link above.		
	Dena	Annex 2: Proposal for a revised set of indicators to measure progress with the CITES Strategic Vision 2008-2020	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-24-02-A2.pdf The Standing Committee should review the proposed changes to the Strategic Vision indicators in Annex 2 and adopt the revised indicators (subject, if necessary, to detailed feedback provided at SC65).		
	Dena	Annex 3: Proposal	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-		

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		for a new national report format under Article VIII, paragraph 7 (b)	SC65-24-02-A3.pdf		
25. Ranching operations in Madagascar	Christine Lippai	25.1 Report of Madagascar	This document has been posted in English here: http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-25-1.pdf This is a report from Madagascar on how it has responded to the recommendations of the working group on ranching operations in Madagascar (in particular relating to the Nile crocodile).	The report of Madagascar on this topic was noted. A working group was formed to discuss whether the recommendations relating to ranching of the Nile crocodile had been implemented and which included the IUCN SSC Crocodile Specialist Group which has been working very closely with Madagascar on this issue. The Crocodile Specialist Group agreed that activities outlined by Madagascar to address trade in Nile crocodiles (*Crocodylus niloticus*) had resulted in implementation of the relevant recommendations. The working group developed a set of recommendations in document SC65 Com. 1. The Committee agreed to the recommendation contained in paragraph 7 of SC65 Com. 1 and noted paragraph 8 of the same document. The IUCN SSC Crocodile Specialist Group has been working very closely with Madagascar on this issue and will continue to support them in this regard.	Crocodile SG
	Christine Lippai	25.2 Report of the Secretariat	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-25-02.pdf This is the report of the CITES Secretariat in response to Madagascar's report as per agenda item 25.1. It reports on both the history of decisions taken relating to the Nile crocodile in Madagascar and the current set of 9 actions and recommendations that Madagascar has been asked to undertake in relation to its ranching programme. The CITES Secretariat found that the 9 actions had been fully implemented, though some are still to be completed (the draft Decree and related draft ministerial Arrêté need to be adopted and enter into force. The CITES Secretariat recommends that the Working Group on Ranching Operations in Madagascar meet in the margins of the present meeting and prepare recommendations for consideration by the Standing Committee – this might relate to the withdrawal of the recommended trade suspension contained in Notification to the Parties No. 2010/015.		
26. Review of Significant Trade in specimens of Appendix-II species	Dena	26.1 Report of the Secretariat	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-26-01_0.pdf The Annex to the present document summarizes the status of	The Committee noted the contents of document SC65 Doc. 26.1 and the oral presentation of the Secretariat.	Cetacean SG, Global Trees SG, Sturgeon SG, Mollusc SG,

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			each review for which deadlines for implementing the recommendations of the Animals Committee have passed. Only fauna species are involved on this occasion. It comprises three columns that contain: – the text of the recommendations made by the Committee; – a summary of the information received from the range States; and – the Secretariat's determination, made in consultation with the Chair of the Animals Committee, regarding compliance with the recommendations, and its recommendations to the Standing Committee. The CITES Secretariat has made the recommendations on which species should subsequently be removed from the Review of Significant Trade process. ***Tursiops aduncus*** – suggested to be removed from Review of Significant Trade process. ***Huso huso*** – The CITES Secretariat is satisfied that the Islamic Republic of Iran is not planning to resume the commercial catch and export of wild H. huso in 2013 or 2014, and that compliance with Article IV, paragraphs 2 (a) and 3 is assured in the present circumstances. Consequently, the CITES Secretariat recommends that the Standing Committee withdraw the trade suspension of *H. huso* from the Islamic Republic of Iran. ***Balearica regulorum*** **(grey crowned-crane)** – suggested to be removed from Review of Significant Trade process. ***Testudo horsfieldii*** **(Horsfield's tortoise)** - In view of the absence of trade in this species since 2008, the Secretariat should liaise with Tajikistan to determine whether it is still exporting specimens of *T. horsfieldii*, and to inform the	***Tursiops aduncus*** **(Indo-Pacific bottle-nosed dolphin), Solomon Islands** – The species was removed from the Review of Significant Trade process as per the recommendation of the CITES Secretariat in the document. The Standing Committee agreed that if the Solomon Islands wished to resume exports of specimens of *Tursiops aduncus* using permits issued under Article IV of the Convention, it should first provide the Secretariat with details of the basis for its non-detriment finding (NDF). **Additional notes** - The US made an intervention and said that the Solomon Islands should provide the rationale and information behind trading of *T. aduncus* again if and when it chooses to do so. Israel said that it is a range state for this species and commended the Solomon Islands for its efforts with this species, but echoed the US in that the Solomon Islands needs to prepare a science-based Non-Detriment Finding before trade is resumed and called upon the CITES Secretariat to ask the Solomon Islands for that information before resuming any trade. The Animal Welfare Institute said that they think that removing the species from Review of Significant Trade process was premature. Australia made the point that the Solomon Islands has faced severe resource constraints so Australia will support the country on implementing any actions relating to *T. aduncus* in that regard. Australia said that it was wary of the rules being changed in terms of needing to report before trading *T. aduncus* anymore but the US clarified that it is consistent that all species taken off out of the Review of Significant Trade process because of a	Seahorse SG, Crane SG, Tortoise & Freshwater Turtle SG, Amphibian SG

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			Standing Committee accordingly. ***Amyda cartilaginea* (Asiatic softshell turtle)** – suggested to be removed from Review of Significant Trade process. ***Mantella aurantiaca* (golden mantella)** – suggested to be removed from Review of Significant Trade process. ***Hippocampus kellogi, H. kuda* and *H. spinosissimus* (seahorses)** - The Standing Committee is invited to congratulate Thailand for the progress achieved in implementing the recommendations of the Animals Committee, recognizing the external support that it had received in doing so. Thailand should be requested to finalize the implementation of recommendations h), i), j) and k) by 31 May 2015. ***Tridacna spp*., Solomon Islands** – a number of recommendations have been given, the species are not suggested to be removed from the Review of Significant Trade process.	zero quota should clarify its science-based Non-Detriment Finding before resuming any international trade. The Chair of the Standing Committee said that it is normal to make these kinds of requirements. Mexico made the point that there is a trend happening in that countries set zero quotas in dealing with the Review of Significant Trade process and agreed that as soon as a zero quota is lifted, a country needs to provide a Non Detriment Finding to go forward re: Article IV implementation. The CITES Secretariat said that it would be best to further discuss this under the Evaluation of Review of Significant Trade process – suggested not making changes on a case by case basis for each species but changing the procedure in a more structured way with the Evaluation of the Review of Significant Trade process. ***Pericopsis elata*, Congo -** The Standing Committee encouraged the Democratic Republic of the Congo to communicate to the Secretariat, by 30 November 2014, its annual export quota for 2015 on the basis of inventory management reports that have been submitted to the national forestry administration and to present its NDF process for this species at the 22nd meeting of the Plants Committee. ***Huso huso*, Iran** - The Committee endorsed the recommendation to withdraw the trade suspension of *H. huso* from the Islamic Republic of Iran and agreed that if the Islamic Republic of Iran wished to resume exports of specimens of *Huso huso* using permits issued under Article IV of the Convention, it should first provide the Secretariat with details of the basis for its non-detriment finding.	

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				***Tridacna spp.*, Solomon Islands** - The Committee endorsed the recommendations in the Annex to the document for this agenda item with the addition of a paragraph vi) for *Tridacna deresa* and for *Tridacna crocea*, *T. gigas*, *T. maxima* and *T. squamosa* stating "The Secretariat should issue a Notification to the Parties to state that no ranching or captive breeding of *Tridacna* species currently takes place in the Solomon Islands and that until further notice from the Secretariat, Parties should not authorize the importation of specimens from these sources from Solomon Islands". The Committee noted that the CITES Secretariat will increase its efforts to make available a fully functional database of actions undertaken under the Review of Significant Trade. ***Hippocampus kellogi, H. kuda* and *H. spinosissimus* (seahorses), Thailand** – The recommendations of the CITES Secretariat for these species were noted. ***Balearica regulorum* (grey crowned-crane), Uganda** - The species was removed from the Review of Significant Trade process as per the recommendation of the CITES Secretariat in the document. The Standing Committee agreed that if the country wished to resume exports of specimens of the species using permits issued under Article IV of the Convention, it should first provide the Secretariat with details of the basis for its non-detriment finding (NDF).	

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				***Testudo horsfieldii* (Horsfield's tortoise), Tajikistan** - – The recommendations of the CITES Secretariat for these species were noted. ***Amyda cartilaginea* (Asiatic softshell turtle), Indonesia** - The species was removed from the Review of Significant Trade process as per the recommendation of the CITES Secretariat in the document. The Standing Committee agreed that if the country wished to resume exports of specimens of the species using permits issued under Article IV of the Convention, it should first provide the Secretariat with details of the basis for its non-detriment finding (NDF). ***Mantella aurantiaca* (golden mantella), Madagascar** - The species was removed from the Review of Significant Trade process as per the recommendation of the CITES Secretariat in the document. The Standing Committee agreed that if the country wished to resume exports of specimens of the species using permits issued under Article IV of the Convention, it should first provide the Secretariat with details of the basis for its non-detriment finding (NDF).	
		26.2 Evaluation of the Review of Significant Trade: Report of the Animals and Plants Committees	*No document*	The Standing Committee noted an oral report from the chair of the Animals Committee on progress with the evaluation of the Review of Significant Trade and that the Advisory Working Group for the evaluation would be addressing the situation where reviews are concluded merely by the establishment of a zero export quota rather than by implementation of the recommendations of the Animals or Plants Committees. See: http://www.cites.org/sites/default/files/eng/com/sc/6	All

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				5/exsum/E-SC65-Sum-06.pdf	
27. Enforcement matters	Dena, Dan Challender	27.1 Report of the Secretariat	http://www.cites.org/com/sc/65/index.php This is a report on activities that have contributed towards enforcement efforts against wildlife trafficking and, as such, there is a list of meetings that took place after CITES CoP16 to the present time which focused on illegal wildlife crime / wildlife trafficking. It also outlines various decisions that were taken at CITES CoP16 relating to enforcement matters, including: **Decisions 16.39 and 16.40**: 16.39 - initiating a process to assess implementation and enforcement of the Convention as it relates to the trade in species listed in Appendix I 16.40 – establishing Wildlife Incident Support Teams (WISTs) and conducting assessments of seizures. **Decisions 16.41 and 16.42 (pangolins):** 16.41 - All range States for Asian pangolin species to compile information on the conservation of and illegal trade in Asian pangolins, and their efforts to address such trade for SC65. 16.42 - The Standing Committee, at its 65th meeting, shall review the information provided by Asian pangolin range States and develop recommendations to address the illegal trade in pangolin species. **Decisions 15.87 (Rev. CoP16) and 16.139 (Humphead wrasse):** 15.87 - Review the actions taken by relevant Parties to implement the Appendix-II listing of the humphead wrasse. 16.139 – Effectively implement the Appendix-II listing of the humphead wrasse. The Secretariat recommends that the Standing Committee: a) encourage all Parties, in particular range States for African and Asian pangolin species, to take note of the concerns about the illegal trade in pangolins and their parts and derivatives,	The Standing Committee noted the oral update provided by the CITES Secretariat and established an intersessional working group on pangolins, chaired by the European Union, and one on enforcement, chaired by the United States. The working group on pangolins met in-session to develop a mandate for its intersessional work. IUCN is a member of both working groups. The Committee endorsed the draft mandate of the intersessional working group on implementation of Decision 16.39, as proposed in document SC65 Com. 2. The Committee endorsed the draft mandate of the intersessional working group on pangolins as proposed in document SC65 Com. 8. The Committee noted the oral report by the CITES Secretariat and requested that it issue a Notification to Parties seeking updated information on trade in humphead wrasse and that it report at SC66 in 2015. The Committee noted the oral report of the Bahamas referring to document SC65 Inf. 4, a report on the smuggling of Bahamian rock iguanas, and the request to look into the issues raised in the document. The Committee endorsed the offer of the United States to form a contact group to engage in these discussions, and to report its findings and recommendations at SC66 in 2015. The IUCN SSC Pangolin Specialist Group made the	Pangolin SG, Groupers & Wrasses SG, Iguana SG

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			and to take urgent action to implement measures to combat it; b) encourage Parties to engage in education and outreach efforts and to develop and implement strategies or programmes to enhance community awareness with regard to the growing nature and environmental impacts of illegal pangolin trade, and to encourage the general public to report illegal activities to appropriate authorities for further investigation.	intervention as follows: "The IUCN can contribute to this agenda item through expertise within its SSC Pangolin Specialist Group. At CoP11, the Conference of the Parties established zero export quotas for all wild-caught Asian pangolins traded for primarily commercial purposes. Since this time, there have been over 800 seizures involving upwards of an estimated 220,000 Asian pangolins, all of which was illegal, and which occurred in 16 of the 19 range states for these species. The magnitude of this trade also suggests that populations of these species are in severe decline. Although less well documented, there is now also a tangible, unrecorded, and therefore seemingly illegal trade in pangolin scales from African countries to Asian markets. The IUCN SSC Pangolin Specialist Group welcomes a focus on this issue and is willing to share further information and work with both the CITES Secretariat and the Parties in this regard." Also, IUCN made an intervention on behalf of the Groupers & Wrasses Specialist Group as follows: "Regarding Humphead Wrasse, as per Decision 16.140 taken at CITES CoP16, Directed to IUCN, the IUCN SSC Groupers and Wrasses Specialist Group stands ready to 'support Parties in achieving sustainable fishing of Humphead wrasse and making non-detriment findings in compliance with CITES'. This is particularly important given information that the Groupers and Wrasses Specialist Group has regarding continued Humphead Wrasse IUU issues, which should be taken into consideration when making NDFs. The	
		Annex 1: Information on pangolins to be submitted for the 65th meeting of the Standard Committee	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-27-01-Annex-1.pdf This is information provided by China on *Manis* spp.		
	Dan Challender	Annex 2: Report on Status and Conservation of Asian Pangolins Species in Pakistan	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-27-01-Annex-2.pdf		
	Dan Challender	Annex 3: Data on seizures of illegal trade in Asian pangolins (2013 to Present)	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-27-01-Annex-3.pdf		
	Dan Challender	Annex 4: Analysis of seizure data for *Manis* spp. submitted by Member States of the European Union to the European Commission	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-27-01-A04.pdf		

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				Groupers and Wrasses Specialist Group is working both with relevant Parties and the CITES Secretariat in this regard."	
	Dena	27.2 Disposal of illegally traded and confiscated specimens of Appendix-I, -II and -III species	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-27-02.pdf The Secretariat recommends that the Standing Committee establish a working group on the disposal of illegally traded and confiscated specimens, with agreed terms of reference and a designated Chair, to report at the Standing Committee meeting in 2015 (SC66).	The Committee agreed to establish a working group chaired by Switzerland with IUCN as a member.	
28. Introduction from the sea	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-28.pdf This is an update on work done to implement Decision agreed upon at CITES CoP16 relating to Introduction from the Sea. The Secretariat further invites relevant Parties to provide to the Secretariat the information anticipated by Decision 16.48: experience gained by Parties with the provision on chartering arrangements in Resolution Conf. 14.6 (Rev. CoP16).	The Standing Committee noted this document as well as the oral report of the CITES Secretariat and requested the Secretariat to issue a Notification inviting Parties, where relevant, to provide information on chartering.	Marine related SGs
29. Electronic permitting	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-29.pdf This document has been submitted by Switzerland, as Chair of the Standing Committee Working Group on Information Technologies and Electronic Systems. The document is an update of several CITES e-permitting systems that are currently being developed or implemented. The report is to be noted.	The Committee noted document SC65 Doc. 29 and the oral report of Switzerland, as Chair of the Working Group on Information Technologies and Electronic Systems. The Committee also noted the offer by Colombia to organize a meeting between France and Switzerland and Member Countries of the Amazon Cooperation Treaty Organization on CITES e-permitting systems.	All
30. Transport of live specimens	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-30.pdf This report is an update of the work being done on the transport of live specimens, e.g. with IATA, FAO and the World Organisation for Animal Health (OIE). It is to be noted.	The Committee noted the document and the oral report of the Secretariat.	All

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31. Physical inspection of timber shipments	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-31.pdf This is an update on implementation of Decision 16.58 taken at CITES CoP16 which relates to the Secretariat obtaining information and materials from Parties that they have developed tools and procedures for the identification and measurement of CITES-listed tree species, and the physical inspection of timber shipments – to be published on the CITES website for other Parties. The document is to be noted and the issue discussed again at the next CITES Standing Committee meeting in 2015 (SC66).	The Standing Committee noted the document and the oral report of the CITES Secretariat and agreed that the Secretariat should issue a Notification to solicit more information from Parties on tools and procedures they have developed for the identification and measurement of CITES-listed tree species and the physical inspection of timber shipments.	Global Trees SG
32. Identification manual	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-32.pdf This is an update on work of the CITES Identification manual. An inter-sessional working group was created at the 2014 CITES Animals and Plants Committee meetings to work on this issue in between CITES meetings – IUCN is currently not a member of this working group.	This document was noted.	All
33. Inclusion of CITES-listed species in the Harmonized Commodity description and Coding System	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-33.pdf At its 16th meeting (CoP16, Bangkok, 2013), the Conference of the Parties adopted Decision 16.62 on E-commerce of specimens of CITES-listed species. This Decision directs the Standing Committee to, in collaboration with the CITES Secretariat, liaise with the World Customs Organization re: inclusion of CITES-listed species in the Harmonized Commodity Description and Coding System. In addition, in Resolution Conf. 12.6 (Rev. CoP16), on Conservation and management of sharks, the Conference of the Parties: REQUESTS Management Authorities to collaborate with their	This document was noted.	Shark SG

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			national Customs authorities to expand their current classification system to allow for the collection of detailed data on shark trade including, where possible, separate categories for processed and unprocessed products, for meat, cartilage, skin and fins, and to distinguish imports, exports and re-exports and between shark fin products that are dried, wet, processed and unprocessed fins. Wherever possible, these data should be species-specific. In the same Resolution, the Conference of the Parties: INSTRUCTS the Secretariat to monitor discussions within the World Customs Organization regarding the development of a Customs data model, and the inclusion therein of a data field to report trade in sharks at species level, and to issue Notifications to the Parties concerning any significant developments. This document is to be noted.		
34. Implementation of the Convention relating to captive-bred and ranched specimens	Christine Lippai, Tomas Waller, Dan Natusch	34.1 Report of the Secretariat	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-34-01.pdf This document outlines the various Decisions that were taken on captive-bred and ranched specimens at CITES CoP16. It notes that this work relates to various other decisions taken at CITES CoP16, including on snakes and sturgeon. The CITES Secretariat advises that the Standing Committee take the recommendation of the Animals Committee, as per below, to defer taking a final decision on this issue until the 66th Standing Committee meeting in 2015 when more information will be available. Since the decision on captive-bred and ranched specimens was agreed at CoP16, the Secretariat has taken some initiatives or entered into a dialogue with Parties on some issues, particularly where there is serious doubt about the identified	The Committee noted this document and that the Secretariat will prepare by 2015 a report on concerns relating to trade in specimens claimed to be derived from captive breeding or ranching.	Crocodile SG, Boa & Python SG, Primate SG, BirdLife

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			source of trade in specimens that have been declared as bred in captivity or ranched specimens, as in the following examples: a) Export of captive-bred parrots from Bahrain. b) Export of Appendix I primates from Guinea. c) Export of pythons from Lao People's Democratic Republic.		
	Christine Lippai, Tomas Waller, Dan Natusch	34.2 Report of the Animals Committee	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-34-02.pdf This is a report from the 2014 CITES Animals Committee meeting which also discussed this topic and: a) endorsed the conclusions of the TRAFFIC report in Annex 1 of AC27 Doc. 17 and noted that the reports of both TRAFFIC and UNEP-WCMC on captive breeding and ranching [Annex 2 of AC27 Doc. 17] identify many of the common themes and challenges with trade in specimens derived from captive-production systems. b) noted that the issues identified in the reports might have a range of implications for conservation of wild populations but that these issues require greater analysis. c) recognized that in considering mechanisms to mitigate the issues identified, there were two separate issues: i) where source codes were being incorrectly applied and ii) where source codes were being deliberately mis-used to enable trade in specimens which might not otherwise be permitted. As these are separate issues, they call for separate and distinct actions. d) established an inter-sessional working group to, among other tasks, consider the conservation implications of the concerns identified with specimens claimed to be derived from captive production systems. The Animals Committee advised the Standing Committee that it: - will continue to work inter-sessionally to complete its work by its 28th meeting (2015) and so provide a full report to the	The Committee noted this document and endorsed the conclusions of the 27th meeting of the Animals Committee.	Crocodile SG, Boa & Python SG

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			66th meeting of the Standing Committee (2015); - has concluded, in the interim, that a mechanism is required under the Convention to address concerns arising from trade in specimens reported to be produced in captivity; - will provide recommendations to the Standing Committee on potential measures that could be adopted to identify and address issues of concern.		
35. Registration of operations that breed Appendix-I animal species in captivity for commercial purposes	Dena		http://cites.org/sites/default/files/eng/com/sc/65/E-SC65-35.pdf On 19 November 2012, the Secretariat received an application from the United States of America to include *Anodorhynchus hyacinthinus*, bred by Hyacinth Macaw Aviary, Inc., in the CITES Register of operations that breed Appendix-I animal species for commercial purposes. On 6 February 2014, the Secretariat received an objection from the CITES Management Authority of the Philippines regarding the application to include *Anodorhynchus hyacinthinus* bred by Hyacinth Macaw Aviary, Inc. in the Register.	The Standing Committee agreed to the inclusion in the Register of captive breeding operations of Hyacinth Macaw Aviary Inc, in the United States of America, for the breeding of *Anodorhynchus hyacinthinus*.	BirdLife
36. Bushmeat	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-36.pdf This agenda item relates to a number of Decisions that were taken on bushmeat at CITES CoP16, including Decision 16.149 which directs the Standing Committee along with other stakeholders to review Resolution Conf. 13.11 on Bushmeat, taking into consideration the decisions and guidance developed under the CBD, the outcomes of the joint CITES/CBD meeting on bushmeat and other relevant sources of information, and report on this at CITES CoP17. CITES CoP16 also adopted Decisions 14.73 and 14.74 (Rev. CoP16) directed to the Central Africa Bushmeat Group. The Secretariat recommends that the Standing Committee establish a working group to assist it with the implementation of Decision 16.149.	The Standing Committee noted the document and the oral report of the CITES Secretariat and agreed to establish a working group with the mandate provided in Decision 16.149, which would be chaired by the Chair of the Animals Committee. IUCN is a part of this working group. Decision 16.149: The Standing Committee, assisted by the CITES Secretariat, and in consultation with interested Parties, the Convention on Biological Diversity (CBD), the Convention on the Conservation of Migratory Species of Wild Animals, the Food and Agriculture Organization of the United Nations, the International Tropical Timber Organization, relevant United Nations programmes, relevant Parties, the Animals and	All, Sustainable Use and Livelihoods SG

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				Plants Committees as appropriate, intergovernmental and non-governmental organizations, other experts and stakeholders shall: a) review Resolution Conf. 13.11 on Bushmeat, taking into consideration the decisions and guidance developed under the CBD, the outcomes of the joint CITES/CBD meeting on bushmeat and other relevant sources of information; and b) submit the results and its recommendations for consideration at the 17th meeting of the Conference of the Parties.	
37. Great Apes	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-37.pdf The Secretariat recommends that the Standing Committee: a) invite all Parties, in particular great ape range States, to review their implementation of Resolution Conf. 13.11 on Bushmeat; b) encourage Parties and organizations with relevant expertise to conduct research to improve methods for species-specific identification of bushmeat; c) extend the mandate of its Working Group on Special Reporting Requirements to consider the possible establishment of an illegal trade reporting mechanism for reporting illegal trade in great apes, as directed in Decision 16.67; and d) consider requesting the Secretariat, subject to external funding, to commission a report on the status of great apes for its 67th meeting, as suggested in paragraph 12 of the present document.	This document and the oral report of the CITES Secretariat were noted. Also, the recommendations in paragraph 22 of the document were agreed upon, as follows: 22. CITES legislation is a key item for analysis and potential follow-up action in countries which have implemented the ICCWC Wildlife and Forest Crime Analytic Toolkit (e.g. Bangladesh) or plan to implement the ICCWC Toolkit (e.g. Angola, Gabon, Nepal). Part one of the ICCWC Toolkit addresses legislation relevant to wildlife and forest offences and other illicit activities. **Additional notes** – The EU asked the CITES Secretariat about problems with source codes (relating to CITES permits and Great Apes) and also requested that any GRASP-led initiative not duplicate existing Great Ape trade tracking efforts. The US echoed the EU's comments regarding supporting a new reporting mechanism for trade of Great Apes (provided it works with existing mechanisms). Japan also supported the creation of a new reporting mechanism for trade of Great Apes,	Primate SG

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				but asked that it take into account other factors affecting Great Apes. UNEP-GRASP gave an intervention confirming that, should a separate reporting mechanism for Great Apes be formed by GRASP, it would be cognisant of not duplicating efforts with existing Great Ape trade reporting mechanisms (e.g. such as Interpol). IUCN made an intervention on behalf of the IUCN SSC Primate Specialist Group, as follows: "The Section on Great Apes of the IUCN SSC Primate Specialist Group welcomes the focus on further investigating illegal trade on Great Apes, which is among the top three threats to the species, and is the most significant threat to bonobos. Because illegal trade is clandestine, the scale of such trade is often severely underestimated - the IUCN SSC Primate Specialist Group therefore supports extending the mandate of the Working Group on Special Reporting Requirements to consider the establishment of an illegal trade reporting mechanism for Great Apes. Regarding a report on the status of great apes for its 67th Standing Committee meeting, the Section on Great Apes of the IUCN SSC Primate Specialist Group is currently reassessing the status of all Great Apes species for the IUCN Red List by 2015. Also, population abundance estimates derived from all available Great Ape survey datasets will soon be made available on the IUCN SSC Ape Populations, Environments and Surveys (A.P.E.S.) database and portal. The Section on Great Apes of the IUCN SSC Primate Specialist Group would be pleased to	

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				contribute relevant information to the report requested on the Status of Great Apes for the 67th Standing Committee meeting and would be interested in supporting development of a report in general." The US also gave an update on classifying captive chimpanzees in the US as endangered and biomedical facilities requiring permits. Niger and several other Parties (Cote d'Ivoire) suggested an inter-sessional (between CITES meetings) working group to be formed. To deal with this, the CITES Secretariat asked for discussion on the proposed new Great Ape illegal trade reporting mechanism to be included in the CITES inter-sessional working group on Special Reporting Requirements which was formed and which IUCN is a member of. The US raised a question about Great Apes being imported from Guinea – China responded that it didn't know that there were no captive breeding facilities in Guinea at the time of the imports, so couldn't prevent them and that it's up to the range states to control this. Cote d'Ivoire made an intervention mentioning that it is a range state of Great Apes and is undertaking a campaign against illegal trade of Great Apes and wants more support on this.	
38. Asian big cats	Kristin Nowell		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-38.pdf This is a report on implementation progress for the Decisions that were taken on Asian Big Cats at CITES CoP16. The Secretariat recommends that the Standing Committee:	A working group was created to discuss the various recommendations regarding trade of Asian big cats that were included in a consultant's report which was undertaken by Kristin Nowell of the IUCN SSC Cat Specialist Group. IUCN was a member of the working group.	Cat SG

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			a) request the Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam to review their implementation of Resolution Conf. 12.5 (Rev. CoP16); b) request China, India and Nepal to take note of the information about the alleged illegal trade in Asian big cats from the seven border towns identified in Annex 1 to the present document, and to take it into account when developing work programmes and undertaking law enforcement operations; c) request China and Viet Nam to take note of the information about the alleged illegal trade across the Ka Long river at the border between near Mong Cai, Viet Nam, identified in Annex 1; d) request China, India, the Lao People's Democratic Republic, Myanmar, Nepal, Thailand and Viet Nam to provide a report to the Secretariat, by 1 June 2015, on activities implemented in relation to recommendations a) to c) above, as applicable, for consideration by the Standing Committee at SC66 in 2015; e) encourage Appendix-I Asian big cat range States, where possible, to promote the elements referred to in Decision 16.70, paragraph a), within existing or planned broader enforcement initiatives in order to implement this part of the Decision in a cost-effective manner, and to invite the Secretariat to support these as instructed by the Conference of the Parties.	The Standing Committee agreed to establish an intersessional working group on Asian big cats to be Chaired by China – IUCN is a part of this working group. The Committee endorsed the recommendations in document SC65 Com. 4 as the terms of reference for the working group, with some amendments. See: http://www.cites.org/sites/default/files/eng/com/sc/65/exsum/E-SC65-Sum-09.pdf **Additional notes** – The EU made an intervention regarding being particularly concerned about tigers and countries still not reporting on Asian Big Cats (e.g. India and Indonesia). The EU supported the CITES Secretariat's recommendations on Asian Big Cats but also the additional IUCN / TRAFFIC recommendations in their paper and wanted Decision 14.69 to be kept in force. The CITES Secretariat confirmed that Decision 14.69 is still valid – it has not been revoked. Norway supported the measures suggested by the CITES Secretariat's report and also want cooperation with Interpol as stated in the report. Norway also suggested that the Standing Committee consider if it can develop guidelines for shipping animals to know if traded animals / derivatives are legal. The US (North America) agreed with the EU that there was a need to focus on the consultant report, particularly regarding demand reduction and managing stockpiles. The US suggested forming a working group to discuss how to do this. Indonesia mentioned the good work being done with ASEAN-WEN and agreed with the proposal of the EU for a template for reporting on Asian big cats – it said this was a good proposal and would make it easier	
		Addendum	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-38-Add.pdf This is India's report on the implementation of Resolution Conf. 12.5 (Rev. CoP16) on Conservation of and trade in tigers and other Appendix-I Asian big cat species, in response to Notification to the Parties No. 2013/037.		
		Annex 1: Review	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-		

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		of implementation of Resolution Conf. 12.5 (Rev. CoP16) - report of the consultants	38-A01_0.pdf This is a report written by the SSC Cat Specialist Group.	for Indonesia to report and help the Secretariat to analyze the condition of the relevant species. India gave a report of the work that it is doing on tigers (Project Tiger) – it had a number of recommendations for priority actions (e.g. sharing seizure information). China agreed with the CITES Secretariat's recommendations and said that it would like to see stricter monitoring and supervision of tigers in captivity – specifying that products from "farmed" tigers are used for educational purposes – there is only a ban on tiger bone in China and not tiger skins. China made reference to the fact that it doesn't believe that illegal trade is related to captive bred tigers because of the measures that China has implemented in that regard. A working group was formed on this which IUCN was a part of. TRAFFIC suggested that more could be done regarding demand reduction – particularly in countries delivering this. The UK agreed with this and suggested putting in place suggestions under each headline of the IUCN / TRAFFIC document, including demand reduction, measures to prevent illegal trade from parts and derivatives, legislative / regulatory actions, etc. India mentioned photo trapping, which helps with id of trafficked skins, etc. and suggested sharing these photos among countries. TRAFFIC suggested going forward with an inter-sessional working group to refine the consultant recommendations. The focus of the in-session working group was to focus on recommendations to add to the Secretariat's – stemming from the consultant's report.	
		Annex 2: Report of Cambodia	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-38-A02.pdf		
		Annex 3: Report of China	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-38-A03.pdf		
		Annex 4: Report of Malaysia	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-38-A04.pdf		
		Annex 5: Report of Nepal	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-38-A05.pdf		
		Annex 6: Report of Pakistan	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-38-A06.pdf		
		Annex 7: Report of Thailand	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-38-A07.pdf		
		Annex 8: Report of the United Kingdom of Great Britain and Northern Ireland	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-38-A08.pdf		
		Annex 9: Report of Viet Nam	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-38-A09.pdf		
39. Illegal trade in	Kristin Nowell		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-	The document for this agenda item and the oral	Cat SG

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cheetahs (*Acinonyx jubatus*)			39.pdf At its 16th meeting (CoP16, Bangkok, 2013), the Conference of the Parties adopted a number of Decisions on Illegal trade in cheetahs (*Acinonyx jubatus*). The SSC Cat Specialist Group was contracted by the CITES Secretariat to write a report in this regard. At AC27, the Animals Committee established a working group to review the study and make recommendations on the impacts of the legal and illegal trade on the species conservation in the wild, and on measures concerning the disposal of confiscated live specimens. These recommendations are contained in the document above. The Standing Committee is invited to: a) consider the results of the study; b) consider the recommendations of the Animals Committee; c) make its own recommendations.	updates provided by the CITES Secretariat and by the Chair of the Animals Committee were noted. The Committee established an intersessional working group on illegal trade in cheetahs, which also met in-session to develop terms of reference for its intersessional work, including consideration of the organization of a workshop. IUCN is a member of the intersessional working group. The Standing Committee endorsed the recommendations in document SC65 Com. 5 as the terms of reference for the intersessional working group on cheetahs, with some amendments as per here: http://www.cites.org/sites/default/files/eng/com/sc/65/exsum/E-SC65-Sum-09.pdf. **Additional notes** – Kuwait advised that the CITES Secretariat follow up directly with cheetah range states to monitor illegal trade and gave an update on the activities that the country is doing to discourage illegal trade. South Africa also gave an update regarding compliance on illegal cheetah trade. Bahrain also gave an update on its actions in this regard. Saudi Arabia and the UAE also made interventions as well as Botswana, Kenya, Zimbabwe and Qatar.	
40. Saiga antelope	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-40.pdf This document updates progress on the Decisions for Saiga that were taken at CITES CoP16. The Standing Committee is invited to: a) take note of this document; and b) encourage relevant Parties to provide information on the measures and activities they have undertaken to implement the Medium-Term International Work Programme for the Saiga	The Committee noted the document and the oral report of the CITES Secretariat. It agreed to the recommendation in subparagraph 13.b) of the document and requested the Secretariat to issue a Notification to the Parties to seek the related information. 13. b) encourage relevant Parties to provide information on the measures and activities they have undertaken to implement the Medium-Term	Antelope SG

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			Antelope (2011-2015) and the recommendations of the Urumqi workshop on the conservation and sustainable use of the saiga antelope (September 2010) via the online Saiga Resource Centre, in compliance with Decisions 14.93 (Rev. CoP16) and 16.98. The information should be submitted by 31 May 2015, in time for the Secretariat to report at the 66th meeting of the Standing Committee in 2015, in compliance with Decision 16.100.	International Work Programme for the Saiga Antelope (2011-2015) and the recommendations of the Urumqi workshop on the conservation and sustainable use of the saiga antelope (September 2010) via the online Saiga Resource Centre, in compliance with Decisions 14.93 (Rev. CoP16) and 16.98. The information should be submitted by 31 May 2015, in time for the Secretariat to report at the 66th meeting of the Standing Committee in 2015, in compliance with Decision 16.100. **Additional notes** – The US said that it was disappointed with the poor reporting from range states regarding Saiga antelope and asked the CITES Secretariat to issue a notification to facilitate a proper report at SC66 in 2015. Hungary on behalf of the EU echoed this.	
41. Tibetan antelope	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-41_0.pdf This document relates to Resolution Conf. 11.8 (Rev. CoP13) on Conservation of and control of trade in the Tibetan antelope, in particular relating to a recommendation at CITES CoP16 to delete the resolution. However this was not done due to reports of continued illegal trade – the document presents additional information on this. Recommendations: 10. The Secretariat recommends that the Standing Committee: a) remind Parties of the need to continue to implement Decision 16.93 and to report information on seizures made and on the progress of investigations to the Secretariat by 30 April 2015; b) request the Secretariat to evaluate the reports submitted by Parties in accordance with Decision 16.93, and to report its	The Committed noted the document and the oral report of the CITES Secretariat and agreed to the recommendations in subparagraphs 10.a) to c) of the document, as follows: 10. The Secretariat recommends that the Standing Committee: a) remind Parties of the need to continue to implement Decision 16.93 and to report information on seizures made and on the progress of investigations to the Secretariat by 30 April 2015; b) request the Secretariat to evaluate the reports submitted by Parties in accordance with Decision 16.93, and to report its findings and recommendations at the 66th meeting of the Standing Committee (SC66); and c) reconsider, at SC66, the recommendation to delete paragraph b), under 'DIRECTS', of	Antelope SG

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			findings and recommendations at the 66th meeting of the Standing Committee (SC66); and c) reconsider, at SC66, the recommendation to delete paragraph b), under 'DIRECTS', of Resolution Conf. 11.8 (Rev. CoP13).	Resolution Conf. 11.8 (Rev. CoP13). **Additional notes** – China made an intervention saying that trade of shatoosh is still an ongoing issue in the country so requested the Standing Committee to retain paragraph b), under 'DIRECTS', of Resolution Conf. 11.8 (Rev. CoP13). The recommendations were agreed and the issue raised by China will come back at SC66 in 2015.	
42. Elephants	Holly Dublin, Diane Skinner, Simon Hedges	42.1 Elephant conservation, illegal killing and ivory trade	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-01_2.pdf Submitted by the CITES Secretariat. Reminds the Standing Committee about the Decisions and Resolutions adopted at COP16 re: elephants. The joint report prepared by IUCN, CITES, TRAFFIC, UNEP-WCMC is annexed. - Decision 16.78, Para (a) calls for a Task Force. The Secretariat recommends this be formed between SC65 and SC66, although it is pending funding. - Dec 16.78, Para (b). UNODC is developing a manual on "Guidelines for forensic methods and procedures of ivory sampling and analysis". - Decision 16.78, Para (c). Interpol and WCO developing projects to enhance use of controlled deliveries. WCO developing multi-year programme seeking to to build capacity of Customs officers. - Decision 16.78, Para (e). WB & CITES in discussions on an e-learning module on money laundering and wildlife crime. - Decision 16.79. Secretariat sent letters to Tier 2 countries requesting them to submit reports by Nov 2013 on their implementation of CITES provisions. Only 3 countries responded (CD, GA, EG), with only EG providing any detail. EU funding is available for the consultancy to help with the action plans.	The Committee noted the comprehensive reports provided for agenda items 42.1 and 42.2, and document SC65 Doc. 42.7, and agreed to establish an intersessional working group to develop a consolidated set of recommendations. The Working Group was Chaired by Uganda as the current Chair of the MIKE-ETIS Subgroup and included all relevant countries and IUCN, among others. The Committee endorsed the recommendations arising from document SC65 Doc. 42.1 as presented in document SC65 Com. 7, with some amendments as per here: http://www.cites.org/sites/default/files/eng/com/sc/65/exsum/E-SC65-Sum-10.pdf. The IUCN SSC African and Asian Elephant Specialist Groups made an intervention for this agenda item as follows: "Holly Dublin: The joint report presented in Document 42.1 outlines the critical ongoing situation facing the African elephant and the trade in illegal ivory and	African Elephant SG, Asian Elephant SG

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			- Decision 16.80. Secretariat sent letters to Tier 3 countries, requesting reports by April 2014. Only Qatar and UAE responded. Secretariat provided details on other Tier 3 countries. - Decision 16.81. Reference to UN processes ongoing wrt wildlife crime. - Decision 16.83.Regarding forensic testing. ICCWC has been working with Uni Washington on testing from a number of seizures. Secretariat makes a number of suggestions to Parties on this front. - Res Conf 10.10. Only 10 Parties have declared their ivory stocks The Secretariat recommends that the Standing Committee: a) note the Secretariat's evaluation of the progress reports submitted by China, Kenya, Malaysia, the Philippines, Thailand, Uganda, the United Republic of Tanzania and Viet Nam on the implementation of their NIAPs, as presented in the Annex; b) encourage the eight Parties to review and, as necessary, revise their NIAPs, including the milestones and timeframes, based upon any new identified needs and these Parties' own evaluations of progress. In doing so, the eight Parties are further encouraged to take into consideration the evaluation of the Secretariat, in particular the actions where progress was rated as 'challenging' or 'unclear'; c) request the eight Parties to continue to implement their NIAPs between SC65 and SC66, in accordance with the milestones and timeframes in each NIAP, and including any revisions made to their NIAPs as referred to in recommendation b) above; d) request the eight Parties to report on the further measures taken to implement their NIAPs to the Secretariat by 30 May 2015 and in the format used for the Secretariat's evaluation of	more on this will follow from our MIKE and ETIS partners. From IUCN's standpoint, and we trust you agree, our joint work with MIKE and ETIS on fully integrated reporting has demonstrated a process of continual improvement and now provides robust and reliable information to track the status of elephants, illegal killing of elephants, and the illegal trade in ivory. This work deepens understanding and the collaboration provides an important decision support system to the Parties. In SC65 Inf. 13, the Secretariat has helpfully provided us with a summary of events, agreements, and commitments since the last time this Committee met in Geneva in 2012 - and there have been many. And many reference the need for tracking progress. Just as an example of these include: - the Elephant Protection Initiative, launched in February 2014, notes that longer-term funding to address the elephant crisis will be linked to overall elephant numbers and growth in elephant populations. - Likewise, the US Strategy, presented in SC65 Inf. 9 notes the need to "improve the information available to assess and improve our and our partners' efforts" - The African Elephant Summit agreed, under Urgent Measure 5, on the need to "support	

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			the progress reports as presented in the Annex, so that the Secretariat can make the reports available to the Standing Committee and convey any recommendations it may have, as appropriate, at SC66; and e) consider taking any further decisions, as appropriate, after noting the Secretariat's review of the progress reports submitted by the eight Parties on the implementation of their NIAPs and any responses provided thereto by these Parties at SC65. http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-01-Add.pdf The first addendum to this agenda item contains the reports of Cambodia and Japan pursuant to Decision 16.80 which describes their implementation of CITES and other provisions concerning control of trade in elephant ivory and ivory markets. This is in response to the letters from the Secretariat sent to "countries of importance to watch" in late February 2014. http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-01-Add-02.pdf The second addendum to this agenda item contains the report of the United Arab Emirates pursuant to Decision 16.80 which describes its implementation of CITES and other provisions concerning control of trade in elephant ivory and ivory markets. This is in response to the letters from the Secretariat sent to "countries of importance to watch" in late February 2014.	evidence-based decision-making and pool efforts to improve the coverage of monitoring of African elephant populations." - And the actions that are being taken under the ivory action plan process and Decisions 16.79 and 16.80 require a large number of activities to be undertaken, which will all require the measurement of indicators to assess progress. - And all this in addition to the ongoing reporting requirement provided for under Decision 14.78 (Rev. CoP16). It is a well-known adage that "you can't manage what you don't measure". And the ultimate indicator of the success (or failure) of all these many planned actions will be in terms of the status and trends of elephant populations across the continent. This clearly enhances our expectation of an increased demand on the AfESG and its AED….. In order for us to understand how effective these actions are, we need to be able to monitor whether elephant numbers are improving on the ground and this pressing need will give us additional responsibilities for ongoing analytical work and, ultimately, additional reporting. Our ability to adequately compile, consolidate, and communicate this information in a timely manner will be crucial. But we would like to alert the Parties that this function, which the AfESG has carried out for decades as the data repository for the	

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				African elephant range States, is now in serious jeopardy. While we anticipate some limited support from CITES MIKES, we will be severely challenged to stay on top of what are likely to be dozens of surveys to be conducted in the coming year - easily twice the annual average number of surveys normally processed. With this increase, we also need to increase our capacity to process, verify and analyse the data and communicate the results – and we need to do it quickly. While we are delighted that the value of MIKE and ETIS has been recognized and that they now have the necessary resources to scale up their capabilities to meet the increased needs of the Parties, we need to do likewise. Without further financial support, we will not be able to maintain the pace of joint reporting with MIKE and ETIS to you and to other related fora. We would like to take this opportunity to thank all those governments and partners who have supported the African Elephant Database over the years. We have already contacted some of you regarding the situation but would be happy to share our concept with others who may be in a position to help. Chair, I would like to thank you and to hand over to my colleague, Simon Hedges, the Co-Chair of the Asian Elephant Specialist Group for very brief additional comments….. Simon Hedges:	

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				The Asian Elephant Specialist Group of course shares African Elephant Specialist Group's concerns about the critical situation facing Africa's elephants. In addition, the AsESG would like to draw attention to the serious situation facing Asia's elephants. As Holly said, "you cannot manage what you don't measure" and that has long been a problem in Asia with the guesstimate that there are some 30,000-50,000 Asian elephants being repeated for over 25 years. This lack of information about the status of Asian elephants is particularly worrying given the current poaching crisis: there is a desperate need to establish how many Asian elephants are being killed illegally every year and how much Asian elephant ivory is entering the illegal trade chain. It is disappointing therefore that reporting of the MIKE program's PIKE indicator remains poor for many Asian elephant range States as you will see in Doc 42.1. More generally, there is a need to monitor elephant population size and trend in key sites across Asia, as well of course of more effective efforts to combat illegal killing and the other threats facing Asian elephants including habitat loss and degradation. We call therefore for all range States to address these issues as matter of urgency with help from other Parties and NGOs and IUCN as appropriate. Finally, we remain concerned about the scale of the illegal trade in live elephants in Asia but will reserve our comments on that matter until the Committee discusses Document 42.9."	
		42.2 National ivory action plans (NIAPs)	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-02_1.pdf	The Committee endorsed the recommendations arising from document SC65 Doc. 42.2 as presented in document SC65 Com. 7, with some amendments	African Elephant SG, Asian Elephant SG

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			This relates to the ivory action planning process. All 8 countries submitted their plans and reports on time. The Secretariat has done an analysis and presented it in the annex. http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-02-Add.pdf The addendum to this agenda item contains correspondence from China to the Secretariat providing additional information on the implementation of the national ivory action plan of Hong Kong, China, and responding to the Secretariat's evaluation of this plan contained within document SC65 Doc. 42.2.	as per here: http://www.cites.org/sites/default/files/eng/com/sc/65/exsum/E-SC65-Sum-10.pdf.	
		42.3 Decision-making mechanism for authorizing ivory trade	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-03.pdf Refers to Decision 16.55 in which the SC is directed to propose, by COP17, a decision-making mechanism for a process of trade in ivory. WG was to be formed at SC64 and report to SC65 and SC66. • WG was formed at SC64: BW, BF, CM, CN, CG, IN, KE, NG, RW, ZA, TH, UK, US, NO, and Secretariat. • EC provided USD 15,000 to the WG for consolidation of information and translation. • Secretariat has discussed with some of the members of the WG in sidelines of other meetings. • Discussions have been on the organization and focus of the work of the WG: chairmanship, tasks ahead and desired outputs; modus operandi; and timelines and deliverables. • Support for Norway to be Chair. • No other agreements. • UNEP has expressed interest in working with Secretariat to develop a background document.	The Committee decided that the Decision Making Mechanism Working Group established at SC64 in 2013 should continue to work intersessionally. It also requested that the CITES Secretariat, in collaboration with the Secretariat of UNEP, should prepare a background document on a Decision-making mechanism for authorizing ivory trade and make it available to the Working Group by January 2015 at the latest. The Committee noted the oral report of the Secretariat on how it would develop the background document for the working group on the decision-making mechanism for authorizing ivory trade.	African Elephant SG, Asian Elephant SG

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			Recommendation: WG to meet in sidelines of SC65.		
		42.4 Review of Resolution Conf. 10.9 on *Consideration of proposals for the transfer of African elephant populations from Appendix I to Appendix II*	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-04.pdf Refers to Decision 16.160, which directs the SC to establish a working group to review Res Conf. 10.9 as necessary and present recommendations to CoP17. The Standing Committee is invited to establish the working group.	The Committee established an intersessional working group to review Resolution Conf. 10.9, while taking into account the proposal made in document CoP16 Doc. 73 (Rev. 1) and the Secretariat's comments in the same document and to report to the Committee at SC66 in 2015. IUCN is included in this working group.	African Elephant SG
		42.5 Elephant Protection Initiative (Botswana, Ethiopia, Gabon, United Republic of Tanzania)	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-05.pdf Submitted by Botswana, Tanzania, Chad, Gabon and Ethiopia. Notes the Elephant Protection Initiative (EPI) which was put forward in London in February 2014. Objectives include: - Provide immediate and longer-term funding towards African Elephant Action Plan through public and private sector support. Provides incremental payments linked to overall elephant numbers and growth in elephant populations. - Close domestic ivory markets in those states still operating domestic markets - Observe moratorium on any consideration of future international trade for a minimum of 10 years and thereafter. Agree to put all stockpiles beyond commercial use. The Standing Committee was invited to take note of the EPI and encourage other range states to join.	This document was noted.	African Elephant SG
		42.6 Preventing the illegal ivory trade under Article VII and through the internet (Chad,	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-06_0.pdf Submitted by Chad and the Philippines, and supported by Comoros. Focuses on Article VII, Paras 2 & 3 that list	The Committee noted the oral report provided by the Philippines and requested that Chad and the Philippines develop a proposal for consideration of this matter at the 17th Conference of the Parties.	African Elephant SG, Asian Elephant SG

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
		Philippines)	exemptions for pre-convention specimens, and personal and household effects. Also refers to Decision 15.57 regarding recommendations on internet trade. Basically notes the potential and real loopholes and asks the SC to: - Recognize the need to make Article VII more strict. - Congratulate Parties who have undertaken stricter measures and invite others to do so - Establish a WG to prepare recommendations for SC66 on: a more restrictive approach to Article VII, measures aimed at preventing trade over the internet, a definition of "antique" ivory and proposals for a system of registration and monitoring of antique ivory. - Prepare recommendations based on the report issued by the WG to be presented at CoP17 Request Sec to prepare Notification drawing attention to the use of falsified certificates related to ivory that predates the Convention.		
		42.7 Disposal of ivory stocks (Chad, Philippines)	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-07.pdf Submitted by TD and PH, and supported by the Comoros. Refers to the challenge of managing ivory stockpiles, and notes that the purpose of the document is to seek endorsement from CITES of the destruction of ivory stockpiles, to encourage such ivory destruction events, and to provide assistance and technical guidance to countries to assist in stockpile destruction. Provides step by step argument why stockpile destruction is necessary. Request SC to: - Endorse destructions taken by KE, GA, PH, US, CN, FR, TD, BE	The Committee endorsed the recommendations contained in document SC65 Com. 9, with the following amendment: deletion of the words "if needed" in paragraph c). The IUCN SSC African Elephant Specialist Group made an intervention on this on behalf of IUCN and TRAFFIC as follows: "This intervention is made by IUCN, on behalf of IUCN and TRAFFIC. The non-commercial disposal of ivory stockpiles has been an issue of concern in CITES for many years, including a dedicated Decision, 10.2, back in 1997 which was never once implemented and was finally repealed by the Parties some twenty years	African Elephant SG, Asian Elephant SG

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			- Recommend that all countries holding stockpiles destroy them; - Urge countries to establish protocols to continue destroying newly-acquired ivory; - Request the Secretariat to provide best practice guidelines - Encourage NGO and IGO to provide support for countries to plan and carry out destructions	later. The problem of ivory stocks, of both illegal and legal origins, persists and will continue into the future. We are concerned about the potential leakage of ivory from these stockpiles and believe that all Parties should be encouraged and assisted to implement robust ivory stock management. In support of the ivory stock reporting requirements that were agreed by the Parties in Resolution Conf. 10.10 at CITES CoP16, these stocks need to be secured and accountably managed to prevent risk of their entering the illegal trade. These stocks are valuable from many perspectives - not just economically. With advanced forensic techniques available, ivory stockpiles represent an important source of information on their geographic origins and potentially their age, providing us with key information on trade routes and a host of other information about elephant populations that might be fueling the illegal trade. The new requirements in Resolution Conf. 10.10 on annual reporting of ivory stockpiles, including the required forensic testing of large-scale ivory seizures, represent a vital new source of information to assist law enforcement. We would like to urge Parties to ensure that these obligations have been met before considering any ivory stockpile destructions. And any stocks to be destroyed should be independently audited. Finally, and before the Standing Committee considers endorsing the recommendation that all countries with ivory stockpiles held by government and parastatal agencies destroy	

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				all ivory, we would urge the due consideration of the crucial role that stockpiles may play in the economics of the ivory trade. The impact of high profile ivory destruction events on market dynamics that drive the illegal ivory trade remains poorly understood. We need to act on the basis of evidence and many parallel economic studies are currently underway. We would urge the institutions and organizations involved to collaborate on these studies and share their results in an open and timely manner."	
		42.8 Ivory stock in Burundi (Burundi)	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-08.pdf Submitted by Burundi. Notes the large seizure in 1987 and that they wish to reopen talks with CITES regarding this stock. - Stock is a heavy burden on the government. - State of Burundi is facing legal proceedings from the traders, and requests help in figuring this out.	The Standing Committee noted the oral report provided by Burundi and recommended that it consider preparing a proposal for consideration of this matter by the 17th Conference of the Parties.	African Elephant SG
		42.9 Reporting on trade in and registration of live Asian elephants (Greece)	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-09.pdf Submitted by Greece on behalf of the EU and its 28 Member States. A draft version of this document was shared with all Asian elephant range States and comments were received from the authorities of Malaysia, China, and Laos. Makes the point that illegal trade in live wild-caught Asian elephants occurs within and between a number of Asian elephant range states; specifically China/Myanmar/Thailand, and India/Nepal and that this illegal trade is a significant threat to remaining populations. - Notes that in 2012, the Thai authorities launched a crackdown on elephant camps, confiscating 56 live elephants between 2012 and September 2013, compared to 1 between 2009 and 2011.	The Standing Committee noted the report and agreed that the Secretariat, pending the availability of external resources, would conduct a review of the implementation of Resolution Conf. 10.10 (Rev. CoP16), in particular the trade in live elephants, in Asian Elephant range States and other relevant Parties and report its findings at SC66 in 2015. The IUCN SSC Asian Elephant Specialist Group made an intervention on this agenda item, as follows: "The Asian Elephant Specialist Group appreciates Document 42.9 and the increased attention now being paid to the illegal trade in live elephants in Asia. The unfortunate reality in many parts of Asia is that elephant populations are small and isolated	Asian Elephant SG

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			- Nevertheless, the lack of accurate quantitative data on the illegal trade in live elephants is a significant constraint in efforts to tackle it. - The lack of comprehensive registration systems for captive/domestic Asian elephants in the range States further handicaps efforts to control the illegal trade in live elephants. - Notes that Res Conf 10.10 (Rev. CoP16) recommends that all elephant range States have in place legislative, regulatory, enforcement, or other measures to prevent illegal trade in live elephants. - Concludes by recommending that the Standing Committee note the situation in relation to trade in live Asian elephants and requests the Secretariat review the progress of Asian elephant range States in implementing Resolution Conf. 10.10 (Rev. CoP16) in particular in respect of the trade in live elephants, and to report its findings and make any recommendations for further action to SC66.	and so even relatively small levels of illegal trade in elephants can drive those populations to extinction. We also note that the illegal trade in live elephants can provide a smoke-screen for illegal trade in ivory. For all these reasons it is clearly essential that a properly-established registration system for domestic elephants is required as well as changes to legislation in some range States. We are encouraged, therefore, that at the last Asian elephant range States' Meeting in Malaysia in 2006, all 13 range States called for such a registration system to be adopted across Asia. Since that meeting there has been some progress in some range States but much more needs to be done. There is a need for agreed standards for registration systems including the use of DNA based methods, microchip implants, and photographic records, for the greater roll-out of such systems, and for regular reporting of domestic elephant numbers to the CITES Secretariat under Resolution Conf 10.10 (Rev. CoP16). The AsESG would be happy to assist the range States in the development and implementation of such registration systems recognizing that it they would facilitate better management of domestic elephant populations as well as help combat illegal trade in elephants."	
43. Rhinoceroses	Richard Emslie	43.1 Report of the working group	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-43-01_0.pdf This is a summary of the ongoing work of the CITES Rhinoceros working group is doing. A number of recommendations were made in the document, as follows: 21. The Working Group recommends that the Standing Committee adopt the following recommendations	The reports of the Working Group on Rhinoceroses and the CITES Secretariat were noted and an in-session working group on rhinoceroses was established to develop a consolidated list of recommendations, Chaired by the United Kingdom of Great Britain and Northern Ireland as current Chair of the intersessional working group on rhinoceroses. IUCN was a part of this working group. The results of the in-session working group	African / Asian Rhino SGs

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			a) The Standing Committee formally note that Mozambique provided a response to Decision 16.87 some two months after the date set down in the Decision, and failed to provide any response to Decision 16.88. Further note that this impedes the ability of the Working Group to fulfil its mandate. b) Mozambique should develop a national rhino horn action plan, with timeframes and milestones, and submit this to the Secretariat by 8th August 2014. The Secretariat will share the plan received with the Standing Committee, and the Rhino Working Group. c) Mozambique is requested to take urgent measures to implement the national rhino action plan between SC65 and SC66. Mozambique should keep the Secretariat and the Working Group updated via electronic means about progress made against timeframes and milestones, including, but not limited to the comprehensive report identified at e). d) The Secretariat shall, upon request, advise Mozambique on the implementation of their respective plans. In the light of progress with the implementation, the Secretariat may undertake a mission, pending an invitation from Mozambique and the availability of external funding. e) Mozambique is requested to submit a comprehensive report on progress in the implementation of its national rhino action plan, and on any other action taken to effectively implement Resolution Conf 9.14 (Rev. CoP15). This report should be submitted to the Secretariat by 31st January 2015. f) Viet Nam is requested to provide a further comprehensive report on actions taken to effectively implement the requirements of Resolution Conf 9.14 (Rev. CoP15). This should build on the report provided in response to Decision 16.86 ahead of SC65, including, in particular, by providing an update on the implementation of the Prime Minister's Directive On strengthening the direction and implementation of measures for controlling and protecting endangered, rare and precious wild animals, and a detailed update on update on	and its recommendations can be found here: http://www.cites.org/sites/default/files/eng/com/sc/65/com/E-SC65-Com-03.pdf. The IUCN SSC African Rhino Specialist Group produced an update on rhino population statistics and poaching levels for the Standing Committee meeting which was circulated to attendees.	

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			arrests, seizures, prosecutions and penalties for offences related to illegal rhinoceros horn possession and trade in Viet Nam. This report should be submitted to the Secretariat by 31st January 2015. g) The Working Group should evaluate the reports submitted in compliance with recommendations e and f and report its findings and recommendations at the 66th meeting of the Standing Committee. h) Noting the urgent need for effective implementation of actions against the trafficking of rhino horn the Working Group should be mandated to draw to the attention of the Standing Committee issues of compliance, as necessary, intersessionally. Such issues raised will be considered by postal procedure. i) The Standing Committee assist the provision of information requested under Decision 16.85 c) on the effectiveness of demand reduction programmes referred to in Decision 16.85 a) and the strategies and programmes to enhance community awareness referred to in Decision 16.85 b) by requesting the Secretariat convene an expert workshop on these topics, subject to external funding. j) The Standing Committee encourage all parties to make every effort to effectively implement Resolutions and Decisions made under CITES on the illegal trade in rhino horn, and the strategies and actions agreed at the CITES Rhino Enforcement Task Force in Nairobi, 28-29th October 2013.		
		43.2 Report of the Secretariat	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-43-02_0.pdf This is a report of the CITES Secretariat regarding work on rhinoceros trade and illegal activity that various countries are doing. A number of recommendations were made, as follows: 60. The Secretariat recommends that the Standing Committee: a) encourage all Parties to remain vigilant in their		

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			implementation of the Decisions on Rhinoceroses (Rhinocerotidae spp.) adopted at CoP16, as well as the strategies and proposed actions developed by the CITES Rhinoceros Enforcement Task Force; b) invite the Czech Republic, South Africa and Viet Nam each to submit a comprehensive report to the Secretariat, by 31 March 2015, on measures taken, including measures to improve bilateral and trilateral co-operation to ensure that rhinoceros trophy hunting is not exploited by crime groups and is not used to launder rhinoceros horns into illegal trade, and to prevent the illegal re-export of rhinoceros horns from the Czech Republic to Viet Nam; c) invite India to submit a comprehensive report on its implementation of Resolution Conf. 9.14 (Rev. CoP15) to the Secretariat, by 31 March 2015, for consideration by the Standing Committee at its 66th meeting (SC66); d) invite Mozambique to: i) prepare a detailed action plan with time frames and milestones, capturing the measures that are still being or expected to be implemented, as contained in the report submitted by Mozambique and described in the present document, and any other activities and measures to be implemented to combat illegal killing of rhinoceros and illegal rhinoceros horn trade; and ii) provide a comprehensive report on progress with the implementation of the action plan described in i) above, to the Secretariat by 31 March 2015, including information on arrests, seizures, prosecutions and penalties for offenders involved in rhinoceros poaching and illegal rhinoceros horn possession and trade, for consideration by the Standing Committee at its 66th meeting; e) invite South Africa and Mozambique to report on progress in the implementation of the deliverables agreed between their Ministers at their June 2013 meeting, and on any progress made in the implementation of the activities agreed at the 4th JPCDS meeting, as it relate to rhinoceros poaching and the		

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			illegal rhinoceros horn trade, as described in paragraphs 37 to 39 of the present document; f) invite Viet Nam to provide a comprehensive report to the Secretariat by 31 March 2015, for consideration by the Standing Committee at SC66, on: i) arrests, seizures, prosecutions and penalties for illegal rhinoceros horn possession and trade offences imposed in the period between SC65 and SC66, as well as on the outcome of investigations and the application of appropriate penalties in relation to the seizures reported in the report submitted by Viet Nam and presented in Annex 1; ii) any measures implemented to ensure that all confiscated rhinoceros horn stocks are secured, marked and registered in accordance with the provisions of Resolution Conf. 9.14 (Rev. CoP15); iii) any activities conducted to bring seizures to the attention of authorities in countries of origin, transit and destination in accordance with the provisions of Decision 16.84, paragraphs a) and b); and iv) any collection of samples from confiscated rhinoceros horns for forensic analysis, in accordance with the provisions of Decision 16.84, paragraph d); g) request the Secretariat and the Working Group on Rhinoceroses to evaluate the reports submitted in compliance with recommendations b) to f) above and report their findings and recommendations at SC66; h) urge all Parties that have not provided the Secretariat with the contact details of their national focal points on matters related to the illegal trade in rhinoceros horn, as described in paragraphs 8 and 9 of the present document, to do so by 15 August 2014; i) request the Secretariat to invite Parties to provide information on their implementation of the strategies and proposed actions developed by the CITES Rhinoceros Enforcement Task Force, and to and report on its evaluation of the information received at SC66; and j) request the Secretariat to report at SC66 on actions taken to facilitate the implementation of paragraphs 4 a) to c) of the strategies and proposed actions developed by the CITES Rhinoceros		

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			Enforcement Task Force.		
		Annex 1: Viet Nam's Compliance with Resolution Conf. 9.14 (Rev.CoP15) on the Conservation of and Trade in African and Asian Rhinoceroses	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-43-02-A01.pdf		
		Annex 2: Rhino conservation in Zimbabwe: 2012-2013	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-43-02-A02.pdf		
44. Snake trade and conservation management	Tomas Waller, Dan Natusch		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-44_0.pdf Recommendations 22. The Standing Committee is invited to note this document, and the progress in the implementation of Decisions 16.102 and 16.103, as reported by the Secretariat and the Animals Committee. 23. In accordance with Decision 16.05, the Standing Committee is invited to: a) consider the present interim reports and recommendations from the Animals Committee and the Secretariat provided in accordance with Decisions 16.102 and 16.103 and, as appropriate, the results of the ITC study on trade in python skins in Asia, the UNCTAD Biotrade Initiative Working Group on areptile skin sourcing, and any other relevant available information; b) examine the study undertaken by the UNCTAD Biotrade Initiative Working Group on reptile skin sourcing, and any other relevant available information concerning: i) the socio-economic implications of such a traceability	The Committee noted this document and the oral report of the Secretariat and the Chair (Switzerland) of the Standing Committee Working Group on snake trade and conservation management. The Committee endorsed the recommendation to issue a Notification requesting Asian Parties to report on their implementation of Decision 16.106 focusing on eliminating illegal and unreported trade in snakes at the 66th Standing Committee meeting in 2015. Other recommendations will be discussed intersessionally for reporting at SC66 in 2015.	Boa & Python SG

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
			system; and ii) the potential costs of the system at all levels along the supply chain, from producers to consumers; c) determine whether, at this stage, any recommendations should be made to the Parties (and particularly those in the Asian region), the Animals Committee (in support of, or directing, the intersessional work that it is undertaking, as reported in paragraphs 9 and 17), and the Secretariat; d) consider timeframes for, and the organizing of, its reporting on the implementation on Decisions 16.102, 16.104 and 16.105 at CoP17; and e) agree to consider the		
45. Tortoises and freshwater turtles	Peter Paul van Dijk		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-45_0.pdf The Secretariat believes that the implementation of work outlined in Decisions 16.119, paragraph b) (seek funding to establish and convene a CITES Tortoises and Freshwater Turtles Task Force, which should undertake an exchange of intelligence and develop strategies to combat illegal trade), and 16.122, paragraphs a) and b) (hire a consultant to analyse reported data, identify species prevalent in illegal trade, and document illegal trade incidents, trade routes, including Internet-based trade, methods of concealment, and other aspects relevant to enforcing CITES provisions concerning trade in tortoises and freshwater turtles), will be particularly important as it could complement or partially replace the progress reports and information that Parties are expected to submit, and enhance the initiation of targeted activities.	The Committee noted the document and the oral report of the Secretariat, and urged Parties to consider, as a matter of priority, providing resources to the Secretariat for the implementation of Decisions 16.119, paragraph b) (seek funding to establish and convene a CITES Tortoises and Freshwater Turtles Task Force, which should undertake an exchange of intelligence and develop strategies to combat illegal trade), and 16.122, paragraphs a) and b) (hire a consultant to analyse reported data, identify species prevalent in illegal trade, and document illegal trade incidents, trade routes, including Internet-based trade, methods of concealment, and other aspects relevant to enforcing CITES provisions concerning trade in tortoises and freshwater turtles).	Tortoise & Freshwater Turtle SG
		Annex 4	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-45-A04.xlsx		
46. Sharks and rays	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-46.pdf This document reports on the discussion of shark-related	The Standing Committee established a working group, chaired by Colombia with the mandate indicated in decisions 4. o) and p), as follows:	Shark SG

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			CITES CoP16 decisions that took place at the 2014 CITES Animals Committee meeting. A number of recommendations were made at the Animals Committee meeting for sharks and the Standing Committee is invited to consider the following: i. New legislative issues that might arise in exporting, transit and consumer countries; ii. Issues pertaining to chain of custody, including where in the trade chain it is considered essential to be able to identify the products in trade; iii. Issues pertaining to legality of acquisition and introduction from the sea; iv. Existing catch documentation and product certification schemes that could assist in the implementation of Appendix II shark listings; v. The role of Regional Fisheries Management Organisations.	o) The Animals Committee requests the Standing Committee, at its 65th meeting, to consider relevant matters relating to the implementation of shark listings, including the following: i. New legislative issues that might arise in exporting, transit and consumer countries; ii. Issues pertaining to chain of custody, including where in the trade chain it is considered essential to be able to identify the products in trade; iii. Issues pertaining to legality of acquisition and introduction from the sea; iv. Existing catch documentation and product certification schemes that could assist in the implementation of Appendix II shark listings; and v. The role of Regional Fisheries Management Organisations. p) Both the Standing Committee and the Animals Committee should review the requirements that have been developed for the trade in processed product types of Appendix II species such as crocodile skins, caviar etc. and consider their applicability to shark products containing Appendix II species. IUCN is a part of the working group.	
47. Sturgeons and paddlefish: report of the Animals Committee	Dena		http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-47.pdf This is a summary of the work that the Animals Committee did on sturgeon at the 2014 meeting. In particular, it mentions that the Animals Committee found "in light of the lack of response of range states to the reporting requirements under Resolution Conf. 12.7, in order for the Animals Committee to be able to fulfil its mandate, the Committee encourages the Standing Committee to consider ways to improve the reporting of the range states."	The Committee encouraged affected range States to make available to the Animals Committee the information on assessment and monitoring methodologies used for stocks of sturgeons and paddlefish subject to the provisions under paragraph a) of Resolution Conf. 12.7 (Rev. CoP16). The Committee established an intersessional working group to review Resolution Conf. 12.7 (Rev. CoP16), taking account of the proposals by Germany in the Annex to the document and the comments made during the debate and to report at the 66th meeting of the Standing Committee (SC66)	Sturgeon SG

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				in 2015. IUCN is not currently a member of this working group.	
48. Malagasy ebonies (*Diospyros* spp.) and Malagasy rosewoods (*Dalbergia* spp.)	Richard	48.1 Report of the Secretariat	http://www.cites.org/com/sc/65/index.php This is a report by the CITES Secretariat which has a number of recommendations on page 4 of the document.	The reports from the CITES Secretariat and Madagascar regarding progress made to implement the Action Plan on Malagasy ebonies (*Diospyros* spp.) and Malagasy rosewoods (*Dalbergia* spp.) were noted. The Committee agreed to: a) ask Madagascar to continue working and present a stockpile audit and use plan at the 66th meeting of the Standing Committee (2015); b) request Madagascar to significantly increase enforcement actions at a national level and strengthen their enforcement cooperation at the international level. c) request Madagascar to consider as a matter of urgency the offer from the International Consortium on Combating Wildlife Crime (ICCWC) and to deploy a Wildlife Incident Support Team (WIST); d) encourage Madagascar to make use of the ICCWC Wildlife and forest crime analytic toolkit to assist it in undertaking a national assessment of its current enforcement resources and efforts; e) note the preliminary checklist of *Dalbergia* species from Madagascar, presented as information document SC65 Inf. 21 by the Nomenclature Specialist of the Plants Committee and, encourage Parties to use it as a provisional reference; f) encourage Parties to remain vigilant in detecting illegal shipments of CITES-listed timber species coming from Madagascar, taking into account the zero export quota; g) encourage Parties that are possible destinations or transit countries for shipments of Malagasy ebonies, palisanders and rosewoods and, that have	Madagascar Plant SG, Global Trees SG
		48.2 Action plan of Madagascar (Madagascar)	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-48-02.pdf This document has been submitted by Madagascar and is a progress report on the implementation of the Action Plan for *Diospyros* and *Dalbergia* spp.		
		Annex 1: Evaluation ecologique des bois precieux	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-48-02-Annex-01.pdf		
		Annex 2: RAPPORT DE L'ETUDE SUR LES TAXONS DE BOIS PRECIEUX Diospyros spp. et Dalbergia spp. en vue de leur inscription dans l'Annexe II de la CITES	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-48-02-Annex-02.pdf		
		Annex 3: Protocole de collaboration entre le Ministère de l'Environnement et des Forêts, Le Ministère de la Pêche en charge du	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-48-02-Annex-03.pdf		

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		Centre de Surveillance des Pêches et du Ministère des Transports en charge de l'Agence Portuaire Maritime et Fluviale		not yet done so, to incorporate the CoP16 amendments to the Appendices into their national legislation as soon as possible, and to identify any other legislative authority that might be used in the interim to support appropriate law enforcement actions in case of the discovery of shipments without CITES permits; h) request that the Secretariat continue its collaborative efforts with the government of Madagascar and organizations that work on elements of the action plan on *Dalbergia* and *Diospyros* from Madagascar and that it reports back on its findings to the SC66; i) request Madagascar to extend the zero export quota until SC66; j) request Madagascar to submit a use plan by 31 December 2014 for consideration of the Committee by postal procedure; and k) in the case that Madagascar does not communicate to the Secretariat the extension of the zero export quota by the 10 August 2014 (quota valid until the 11 August), recommend that all Parties suspend trade in specimens of the species *Dalbergia* and *Diospyros* from Madagascar, to be reviewed at SC66. Finally, the Standing Committee agreed that if Madagascar does not make significant progress on the points above by the time of the 66th meeting of the Standing Committee, the Committee may consider compliance measures at that meeting. See: http://www.cites.org/sites/default/files/eng/com/sc/65/exsum/E-SC65-Sum-06.pdf	
		Annex 4: Principes clés de la répartition des revenus	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-48-02-Annex-04.pdf		
		Annex 5: Répartition des recettes	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-48-02-Annex-05.pdf		
		Annex 6: 1: Note Verbale, etc.			
		Annex 7: Rapport Final Etude Bois de Rose saisis	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-48-02-Annex-07.pdf		
		Annex 8: F-Notif-2014-019	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-48-02-Annex-08.pdf		

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
49. Annotations	Dena	49.1 Report of the interim working group	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-49-01_0.pdf This document has been submitted by the United States as chair of the interim Standing Committee working group on annotations. IUCN was a member of this working group. The purpose of this document is to begin addressing some of the fundamental elements of the several Decisions related to annotations, which were adopted at CoP16.	The Committee noted the document and oral report of the chair of the interim working group on annotations and agreed to re-establish the working group with the mandate provided under Decision 16.162 as well as the following additional task: to consider the results of the timber trade study called for in Decision 15.35 and, in particular, to consider whether current annotations regarding tree species adequately cover the types of specimens primarily exported from source countries; to assess the advantages and disadvantages of potential changes to those annotations; and, if appropriate to prepare draft amendments to the annotations for consideration at the 17th meeting of the Conference of the Parties. The Committee also agreed that the working group would be co-chaired by the United Kingdom of Great Britain and Northern Ireland and the United States of America. IUCN is not currently a member of this working group, although TRAFFIC is.	Global Trees SG
		Annex: Summary of existing guidance, and other recommendations regarding annotations	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-49-01-A.pdf		
		49.2 Annotations for tree species included in Appendices II and III	*No document*	The Standing Committee noted the oral progress report of the CITES Secretariat, as supplemented by the representative of ITTO, and also noted the continuing collaboration between the CITES Secretariat and ITTO on this and other matters under the ITTO-CITES programme.	Global Trees SG
50. Reports of regional representatives	N/A	50.1 Africa	*No document*	This document was noted	All

Agenda item	Lead	Agenda detail	Brief Summary	IUCN position / info	Relevant SG
	N/A	50.2 Asia	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-50-02.pdf	This document was noted	All
	N/A	50.3 Central and South America and the Caribbean	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-50-03.pdf and http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-50-03-Add.pdf	This document was noted	All
	N/A	50.4 Europe	http://www.cites.org/sites/default/files/eng/com/sc/65/EFS-SC65-50-04.pdf	This document was noted	All
	N/A	50.5 North America	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-50-05.pdf	This document was noted	All
	N/A	50.6 Oceania	http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-50-06.pdf	This document was noted	All
51. Any other business	N/A		*No document*	N/A	N/A
52. Determination of time and venue of the 66th meeting	N/A		*No document*	The Committee noted that a reservation had been made to hold the 66th meeting at the International Conference Centre of Geneva, from 31 August to 4 September 2015, and requested the Secretariat to explore the possibility of holding the meeting later in the year.	All
53. Closing remarks	N/A		*No document*	N/A	N/A

ENHANCEMENT AND NON DETRIMENT FINDINGS FOR AFRICAN ELEPHANT SPORT HUNTING IN ZAMBIA

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1.0 Introduction

The Zambia's annual elephant voluntary export quota is standing at 80 animals or 160 tusks. This follows the upward adjustment of the quota effective after CoP15 (Doha, 2010) from 20 animals or 40 tusks. The hunting area was consequently extended to all elephant range game management areas in Zambia. Proceeds raised from elephant safari contribute towards sustainable elephant conservation and supporting social economic needs of the local communities sharing the game management areas. Elephant safari was introduced as part of several management decisions taken by the Zambian government to sustain conservation of wildlife and other natural resources.

However, in the years 2013 to 2014, Elephant hunting was suspended due to the Government's demand for empirical evidence to guide its decision whether to continue or discontinue wildlife hunting in GMAs in preference to eco-tourism. The moratorium coincided with the expiry of hunting concessions in elephant range areas. The government decision to suspend hunting was timely as no civil litigations could arise due to lost business by concessionaires. In 2013 a large mammal survey was done in key elephant range ecosystems and recommended, from the animal populations and trends that hunting can resume for certain species including elephants.

In order to ensure that elephant sport hunting is sustainable the government of the Republic of Zambia has over the years enhanced conservation of elephants through implementation of the following measures:

(i) The enactment of the Zambia Wildlife Act No. 12 of 1998, which has enhanced Zambia's conservation programme. The Act is being reviewed in order to identify areas that need to be amended in order to make it more effective.

(ii) The establishment of Zambia Wildlife Authority (ZAWA) as an autonomous body supervised by a Board of Directors operating with a free hand to generate its own

funds by commercializing a number of its business components but without compromising its core function of biodiversity conservation;

(iii) The formulation and implementation of a five year-strategic (2008 to 2012) plan aimed at enhancing the conservation of biological diversity;

(iv) The formulation of an elephant policy with strategies and actions for effective elephant management: the policy and management strategy aims to stimulate a more focused approach to the management of the elephant and to provide policy guidance on how this could be carried out by all stake holders;

(v) Enhancing stricter domestic legislation on elephant sport hunting through Statutory Instrument (SI) number 107 of 2010 for elephant protection and SI number 61 of 2007 for the regulation of international trade in Endangered Species of Wild Fauna and flora, to cater for stringent penalties for illegal use of elephants and its products; and

(vi) Involvement of local communities.

ZAWA's overwhelming responsibilities for sustainable conservation requires increased funding to meet the current volumes of conservation task. In order to hasten elephant protection strategies there is need to increase revenue required to invest in ant poaching activities and other interventions. One way of obtaining additional financial resources is through sport hunting in Zambia's Game Management Areas (GMAs). The proceeds from elephant sport hunting are re-invested into elephant conservation and sustainable development in local communities for the benefit of the local people who share their rural frontier with the elephants. Legally, benefit sharing mechanism of revenue from sport hunting is on a 50% ratio between ZAWA and local communities while ZAWA retains 100% of hunting concessions fees.

Zambia manages elephant sport hunting with the following precautions and guiding principles:

(i) Only the approved quota of 160 tusks and other trophies per year are available for elephant sport hunting;

(ii) Hunting licenses are sold to existing safari outfitters, and certificate of ownership issued for trophies to the hunter with details of trophies obtained such as; ivory or skin which provides for stricter monitoring of hunting and movement of trophies;

(iii) All sport-hunted elephant ivories are punch-died in accordance with CITES Resolution Conf. 10.10;

(iv) Only trophies obtained following the process in (ii) above are allowed to be exported to countries of hunter's destination as personal items;

(v) Revenue from elephant sport hunting is used to enhance elephant conservation and community development programmes within Zambia;

(vi) Veterinary measures: Trade in wildlife products in Zambia is governed by veterinary regulations. All the individual ivory specimens are fumigated prior to shipment in compliance with veterinary regulations.

2.0 Rationale

2.1 Elephant conservation

The Zambia Wildlife Authority has a mandate to promote sustainable elephant conservation in all of its protected areas. To this effect, Zambia has made significant progress on African Elephant conservation through the production of a National Strategy for Elephant Management in Zambia in 2005 whose goal is "Conservation of elephants at population levels which promote conservation of biodiversity while providing for sustainable utilization."

The objectives of the National Strategy for Elephant Management among others include:

(i) Mitigate human – elephant conflicts;

(ii) Reduce poaching levels;

(iii) Provide adequate trained personnel;

(iv) Secure and allocate adequate financial resources;

(v) Establish and maintain a comprehensive ivory management system;

(vi) Provide favorable environment for resumption of sustainable elephant hunting;

(vii) Strengthen and maintain coordination of elephant conservation in transfrontier areas;

(viii) Develop and implement public awareness campaigns.

The Zambia National Strategy for Elephant Management and Conservation has been aligned to the African Elephant Action Plan prepared by African Elephant Range States at CITES CoP15 in 2010. (CITES 2010b) Zambia believes this undertaking is therefore a necessity to build a strong foundation for down listing of Zambia´s elephant population to Appendix II of CITES and to build capacity of Zambia to monitor its elephant population on which sound management decisions for elephant utilization would be based. A final draft for the aligned Zambia National Strategy for Elephant Management and Conservation has since been completed and is awaiting adoption.

Over the years, it has been proved that protected areas alone are inadequate to secure the long-term survival of elephants especially areas such as the Lower Zambezi and South Luangwa, where competition with humans for resources is high. It is important, and makes ecological sense under such circumstances that elephants are allowed to roam freely between and across wild habitats on privately owned land, natural and customary land, yet it is in these areas where human-elephant conflicts are more pronounced. If Elephants are to survive in such instances there must be tangible economic benefits to landowners or communities sharing habitat with them without which elephant conservation will always be marginal to other land use forms. This means that elephants must simply have a strong commercial value, the value that is not only limited to eco-tourism which has serious limitations –such as seasonality and fluctuations in the number of visitors. Thus stated, elephant sport hunting is based on a quota that accommodates problem animals and cannot be overemphasized.

2.2 Support to local community

The primary concern for elephant sport hunting in Zambia's GMAs is to fight the injustice that elephants inflict on local people through destruction of their livelihood by loss of crops and

human life. Since 1996, the elephant population in Zambia has continued to increase from an estimated number of 22, 000 elephants to the current populations of about 27,000 elephants (ZAWA, 2009). By 2009, the number of human elephant reports had increased to 3,270 reports per annum from 288 reports per annum in 2002. The year 2012 recorded a decline in overall problem animal reports. During the same period however, the number of humans killed by elephants increased from 6 to 12. In 2013, 5 (five) people were killed by elephants out of the over 2400 problem elephant reports received. However, 20 elephants had to be controlled by killing because of the danger that they posed to human life. Out of the 2897 reports of problem animals threatened humans and destroyed crops and properties, received, a total of 1269 reports representing 44% involved elephants. 8 people were killed by Elephants during the same period.

The most affected areas by human elephant conflicts are the Luangwa and the mid Zambezi areas. In the case of Luangwa Valley, elephants caused damage exceeding 52.0% of the annual crop production and as was also reported in 2011, to be responsible for the largest number of human deaths than any other species.

The number of problem elephant reports is detailed in Table 1.

Table 1 Table of human animal conflict incident reports

Year	Crop, Property damage and human injury	Humans killed	Total
2002	285	3	288
2003	842	5	847
2004	1440	5	1445
2005	1942	11	1953
2006	1163	8	1171
2007	1979	7	1986
2008	2266	10	2276
2009	3225	45	3270
2010	1319	8	1327
2011	2038	6	2044
2012	1780	12	1792
2013	2400	5	2405
2014	1261	8	1269
Total	18279	120	18399

2.3 Preventive and Mitigation Measures for HEC

To mitigate human elephant conflict, traditional methods such as drumming, clapping, beating metals / stones, use of fire, watchtower and guarding are used. Other methods include blasting. Use of chili smoke is also getting widely used in some areas. In extreme cases, problem elephants have been destroyed (killing of problem elephants) and the ivory stockpiled.

Preventive countermeasures being implemented include use of alarm bells, physical barriers e.g. live fencing of crop fields and village areas, solar fencing and buffer fencing with chilli. Long

term preventive measures being implemented are; information gathering, rural local community sensitization and land use planning. Experience has shown that integrated elephant control approach is better that any single method.

2.4 Costs of Human – Elephant Conflicts

The cost of dealing with human elephant conflicts varies from one area to another and one optional method to another. Human - elephant conflicts occur in varying forms, which are associated with disproportional costs, including human life insecurity (death and injuries), food insecurity (crop and food store damages), damage to water points and properties including houses. In addition, the government and local communities incur indirect costs ranging from medical costs due to exposure to widespread malaria when guarding their crops while others forego employment and education for children who are involved in safeguarding crop fields.

The Zambian government further incurs costs related to logistics and man hours in addressing HEC. These include man days, costs of ammunition, transport and operational rations. The translocation option of problem elephant is unattainable as the cost of approximate US$1000 per animal for 1000km is prohibitive. Logistics to carry out most of the preventive and mitigation measures are therefore not within the means of the affected people in the impoverished rural areas let alone the government.

2.5 Local Community Perceptions and Publicity

In areas where HEC incidences are frequent, community perceptions are likely to be negative towards elephants, as losses incurred by communities can be enormous and traumatic. The sensation that arise from such loses often attract high political attention especially when human life is involved. While elephant has global and national significance, the cost is much felt by local communities whose life is affected on a near daily basis.

2.6 Perceived Benefits

While the communities take pride in sharing areas with elephants and other animals, no economic value is perceived from elephants killed on control except for meat that is distributed to affected families or villages. Real economic value can only be realized through sustainable utilization of elephants which would not only help mitigate HEC but ensure the survival of elephants in Zambia. If, indeed the future of elephants is to be assured the international community should have an anthropogenic approach to the conservation which in any case it is the humans that are a decisive factor in that equation. Elephants should be seen to provide tangible benefits for communities to accept conservation of elephants as a viable land use alternative.

3.0 Sport Hunting Necessary for Conservation

Since its inception in Zambia in 2005, sport hunting has contributed to the survival of the elephant, given that resources are channeled towards conservation activities and improving rural livelihoods. Furthermore, a quota for elephant is an added incentive to the Safari Operators whose continued presence in the hunting areas provides extra security to the resources in the hunting areas, not to mention job creation for local communities and protein from harvested animals.

Benefits that flow back to communities through hunting will help to improve the local communities' appreciation for the conservation of wildlife in general especially elephants. In Zambia and most of Africa, it has been realized that communities are a very cardinal partners in the conservation of natural resources and thus should also benefit from the conservation thereof.

4.0 Political Imperatives for Sport hunting

Zambia as a party to the CITES has to abide by its requirements while at the same time addressing the many social and economic needs of its citizens in rural areas, that there are hardly any resources left from the central treasury to channel to elephant conservation. From

pronouncements made by the CITES parties, it is assumed that elephants are a global resource, which puts Zambia at a great disadvantage as a third world country. This is so because conservation usually not always a funding priority by government which often has difficulties explaining Zambia's obligations to CITES and the controversy surrounding the African elephant to local communities which is highly misunderstood, questioning morals and ethics of CITES authorities where they have been seen to place high value on elephants and less on humans.

In order for Zambia to promote the benefits of being a Party to CITES, principles that centre on people and environment should be an important part of the Convention hence the need to accommodate resource utilization pathways that will bring the best for both human life and wildlife. Trophy hunting of elephants will therefore, contribute to the cost of conservation in elephant range areas, as elephant conservation can no longer be subsidized by the Government.

5.0 Biological and species status

5.1 Historical Distribution

In Zambia elephants were widely distributed until the early 1970s.

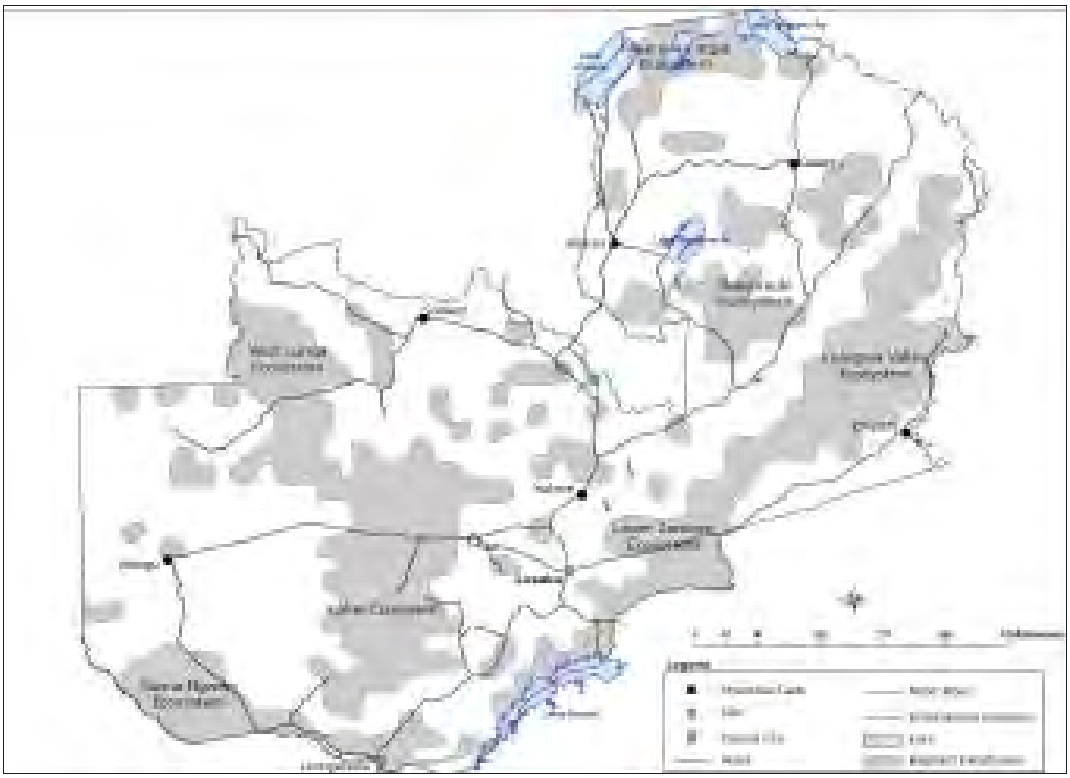


Figure 1 Map of Zambia showing elephant range areas in 1970s

The increase in human population, conversion of land for agricultural activities and excessive hunting for ivory during the pre-colonial and colonial era reduced elephant populations such that today they are mainly confined to protected areas. By 1989 for example, the numbers dwindled from about 200,000 before 1970 to about 18,000 animals. The species was upgraded to Appendix I of CITES in 1989 to save it from extermination from commercial poaching.

5.2 Current Distribution

The range for elephant in Zambia currently covers seven sub-regions as follows: Luangwa Valley system, Mid/Lower Zambezi system, Kafue system, Mosi-oa-Tunya, Sioma - upper Zambezi system, Bangweulu system, Nsumbu – Mweru waNtipa, Lusenga -Tanganyika system, and West Lunga system (Figure 3 and Table 2). Each of the sub regions is larger than 10,000km2 and a total area far exceeding 200,000 km2. From an ecosystems point of view, none of the subsystems is fragmented according to the biological criteria of Annex 5 of Resolution Conf. 9.24(Rev.CoP14). Furthermore, these elephant sub regions cover a diverse landscape and land

tenure systems encompassing National Parks, Game Management Areas and some open areas creating an almost contiguous landscape in which elephants can roam between habitats. Still others form a continuum with the neighboring countries linking into the southern African sub-region population.

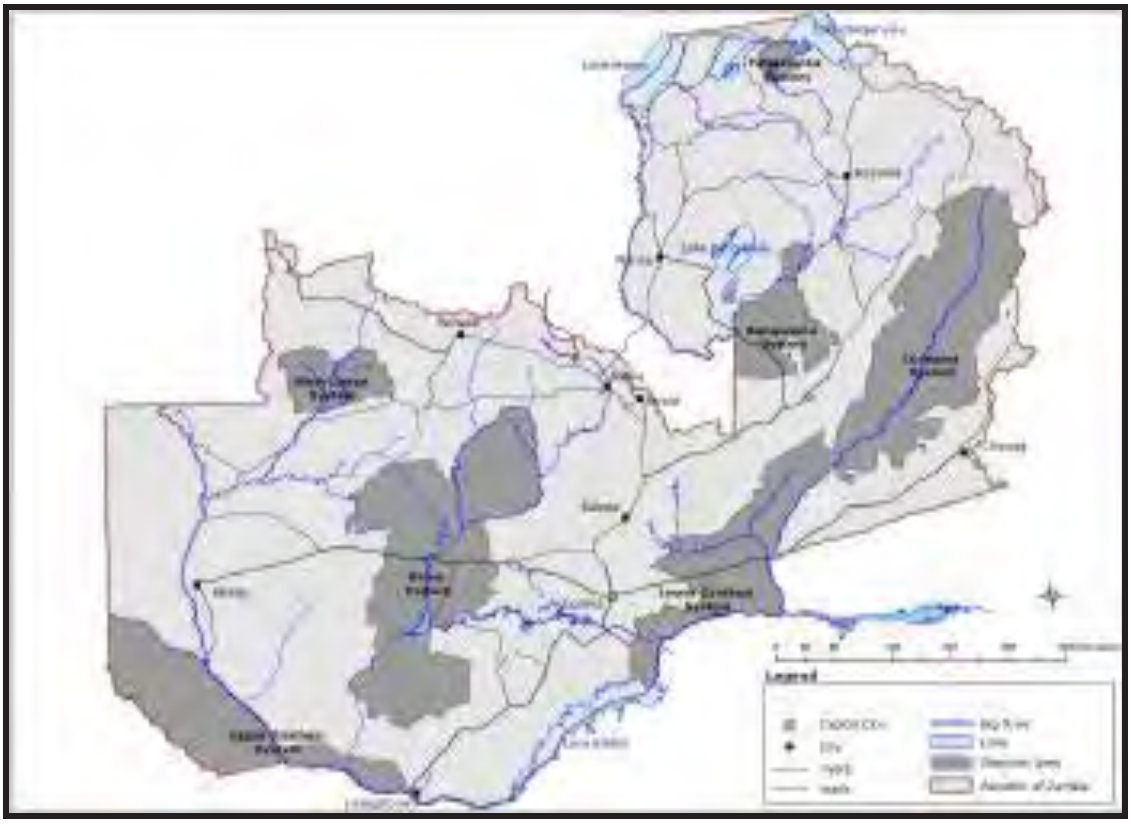


Figure 2 map of current elephant range areas

5.3 Population status

The 2008 national survey of Zambia's elephant population represents the baseline to ascertain trends in elephant numbers.

That survey covered a total of 166,712.5 Km2, which is 22 % of Zambia's land surface of which the surveyed area makes 69% of the wildlife protected areas system which constituted 17 National Parks; 25 GMAs. The 2008 survey ascertained with 95% confidence that the elephant population of Zambia was about 26,382 ± 4,405 elephants.

There are four major elephant ranges in Zambia; Luangwa system, Kafue, Lower Zambezi and the Mosi-oa-Tunya – Kazungula- Sioma areas. The Luangwa system with an estimate of 18,634

elephants represents the stronghold of the country population (72% of the population). Kafue system constituted 13% (3348) and the Lower Zambezi 5% (1299).

According to the 2008 national survey all the ecosystems showed positive trends - elephant populations were either stable or increasing – except for the Lower Zambezi ecosystem. The Tanganyika, Bangweulu and Kariba showed small but stable populations.

In 2013 ZAWA, with the assistance of stakeholders such as WWF and Conservation Lower Zambezi, undertook aerial surveys in the three major systems in the elephant range, Luangwa, Kafue and Lower Zambezi systems. These ecosystems account for 90% of the elephant population in Zambia

The attached reports show a growing population of elephants.

Luangwa system estimated elephant population is of 22,112, Kafue 9,594 and Lower Zambezi 2,200. The total elephant population estimated in these three ecosystem is 33,906.

These numbers represent the highest numbers of elephants recorded in the last 20 years. It is worth noting the increase in Kafue, which, although still under study to understand the reasons, it is possibly correlated with immigration from the Caprivi (Namibia) and Chobe (Botswana) systems.

The 2013 survey reports have not yet been submitted to IUCN/AfESG .

5.4 Population monitoring

Population monitoring is carried out through regular census methods approved by MIKE. Three methods have been employed to determine the elephant population in Zambia namely; aerial transects sampling techniques, aerial total counts and ground counts/field observations. Sampling intensities have varied between 4% and 50% depending on the size of area being surveyed. In areas where visibility from the area is poor such as Nsumbu and West Lunga National Parks, ground methods, particularly the dung count method has been introduced.

Zambia is fully involved in the CITES Monitoring of Illegal Killing of Elephants (MIKE) programme which has been operational in the South Luangwa National Park since 2000. More effort has been put by introducing similar monitoring programmes in all key elephant areas including;

North Luangwa, Sioma Ngwezi, Lower Zambezi, Kafue National Parks and their surrounding GMAs in order to obtain a national status on the illegal activities on the African elephant in Zambia. These satellite areas have been monitored according to the requirements of MIKE since 2002 and the office of the CITES MIKE National Coordinator stores data from these areas.
Zambia proposed to MIKE CITES to include Lower Zambezi National Park to Minimising the Illegal Killing of Elephants and other Endangered Species (MIKES) site. This will help improve the monitoring and management of the Elephant population in the area.

5.5 Habitat availability

The habitat currently available to elephants in Zambia is about 30% of the total land mass which is set aside as Protected Areas in form of National Parks and Game Management Areas. Most of the elephants in Zambia are found in the following areas; Luangwa valley (in National Parks and Game Management Areas) dominated by *mopane* woodlands on the valley floor and *miombo* woodlands on the plateau; Mid Zambezi Valley (National Park and GMAs), dominated by Acacia woodlands, *mopane* and *miombo* woodlands; Kafue areas (National Park and GMAs) dominated by miombo woodlands and some *Baikea plurijuga* woodlands on Kalahari sands in the southern parts; Sioma Ngwezi and West Zambezi GMA and other areas put together, mainly *miombo* and some *Baikea plurijuga* woodland and flood plains; Bangweulu and Nsumbu are mainly covered by miombo and thickets. Minor elephant areas include; the West Lunga National Park, and Mweru wa Ntipa areas (Figure 3).

5.6 Threats

The major threats to the elephant population are the increasing human-elephant conflicts as the population recovers from the heavy poaching scourge of the early 1970s. As elephant populations start to increase country wide, more range is reclaimed and most of the elephant's traditional movement routes that have been over taken by human settlements become focal areas of conflict. Damage to various crops caused by feeding and trampling as well as being a threat to human life are problems that cannot be ignored particularly in areas with high elephant densities such as the Luangwa Valley.

6.0 Elephant Management Measures

6.1 Zambia Wildlife Act No. 12 of 1998

In enforcing the law, ZAWA has adopted zero tolerance policy to all incidences of poaching. Under this new policy, violation of the Zambia Wildlife Act is prosecuted to the fullest extent of the law including the confiscation of any equipment used in the commission of an offence. Currently anyone convicted of killing or possessing any elephant product under this Act is sentenced to a minimum of 5 years and a maximum of 7 years imprisonment without an option of a fine. For repeat offenders, the minimum sentence is 7 years imprisonment without option of a fine.

6.2 The Elephant Policy

Zambia formulated an elephant Conservation Management Plan in 2005. This was a product of consultative meetings among stakeholders in the wildlife industry, including local communities and government agencies that met to discuss the way forward for the African elephant in terms of policy, management strategies, actions and legislation. The Elephant Conservation Management Plan has been aligned to the African Elephant Action Plan formulated by African Elephant range States in 2010 under the MIKE programme.

The policy and conservation plan constitutes the first effort to develop specific guidelines on how the elephant will be managed in Zambia and was issued for reasons as follows:

- ≠ That the Government of the Republic of Zambia considers elephant as an economic asset in terms of non-consumptive and consumptive tourism,
- ≠ Proper management of the species is critical so that it realizes its full potential to generate significant income for the nation and local community in particular.
- ≠ As a keystone species in the environment and critical to the maintenance of biodiversity.

6.3 Statutory Instrument for elephant protection

Currently, the Zambia Wildlife Act No. 12 of 1998, part XIV *Section 131,* provides general penalties ranging from fines to imprisonment. The Statutory Instrument for elephant sport hunting number 107 of 2010 and the Statutory Instrument for International trade in Endangered Species of Wild Fauna and Flora number 61 of 2007 provides stricter domestic measures on the conservation and management of the African elephant. This instrument has in the past been used to discipline professional hunters who have hunted Elephants below the prescribed minimum required weight of 15kg for legal hunted Ivory.

6.4 On-going and planned elephant research and monitoring Programmes

Zambia has been working with various organizations in the conservation of the African elephant. Given the scarcity of resources suffered by the Zambia Wildlife Authority, research has been focused on surveys to estimate population size of elephants in the country as a basis for the creation of trend patterns. These surveys have focused on key elephant range ecosystems of Luangwa, Lower Zambezi, Upper Zambezi, Kafue and the Nsumbu Systems, and have been largely been funded by the Government of the Republic of Zambia with occasional aid from other cooperating partners such as WWF and Norwegian Agency for International Development (NORAD).

In the Lower Zambezi landscape, there is an on-going collaborative Elephant Research and Conservation Project, an initiative of the African Wildlife Foundation (AWF) working in conjunction with the Zambia wildlife Authority. The project's overall goal is to contribute to the conservation of a viable population of elephants in the lower Zambezi landscape through the provision of accurate scientific data on which management decisions can be made.

The project documents population, locations and movement patterns of elephants in Zimbabwe and Zambia's Lower Zambezi landscape, which includes Lower Zambezi National Park, Chiawa and Rufunsa GMAs. The United States Fish and Wildlife Service together with

Safari Club International have also donated equipment ranging from GPS sets, camping equipment and service to vehicles, to the conservation programmes in the same area.

In order to monitor data on elephant movements, sightings and mortality, a Ranger Based Monitoring System (SMART Database) has been implemented as an initiative of the Monitoring of Illegal Killing of Elephant (MIKE) programme. This programme is fully operational in South Luangwa Area Management Unit while similar monitoring activities are on-going in Kafue, North Luangwa and Lower Zambezi and Nyika ecosystems.

6.5 Monitoring trophy quality

ZAWA records trophy measurements of tusks for analysis of trophy quality of the sport hunted elephants. Analysis of trophy quality is used as an indicator of sustainability of hunting. There was a slight improvement on the trophy quality from 17 kg in 2011 to 17.2 kg in 2012 (figure 4). To mitigate this, Zambia is considering introducing hunting of tuskless elephants as a management measure to minimize the impact on large tuskers. Whilst serving as a management tool to minimize the impact on trophy bulls, the measure will also result in an increase in revenue to ZAWA and the communities.

As stated above, ZAWA will gradually expand hunting areas and will include tusk-less elephants in the quota with close monitoring as a precautionary measure. To this effect, even though, Zambia is allowed to export tusks and trophies from 80 elephants since 2011 as personal effects, it maintained a precautionary harvest quota of 20 elephants in 2011 and increased the harvest quota to 39 elephants in 2012 and 36 have been included for 2015 hunting year.

The government of Zambia is still reviewing hunting in general in Zambia; to that effect the government imposed a two-year moratorium on hunting in 2013 and 2014 in hunting blocks where concessions had expired in 2012. Elephant was removed on the 2013 and 2014 hunting quotas and has been resumed in 2015. The 2013 ~~game count~~ aerial surveys affirm that hunting of elephants may continue, as populations were found stable and growing.

The hunting quota of 80 animals per year is within standing population guidelines (0.5% of the total population) for elephants' quotas (CITES 2010c, Martin 1986), and is necessary to allow for

the harvesting of trophy quality elephant bulls and will not in any way threaten the survival of the species in Zambia. In particular, the export quota is actually less than half (0,22%) of the standing guidelines being the Zambian population of about 36,000 elephants. Furthermore, as stated above, out of a CITES voluntary export quota of 80 elephants only 36 elephants (0,10% of the total population) have been allocated to safari companies. This precautionary measure reaffirms the commitment of Zambia to sustainable hunting as a conservation tool. Therefore, the off-take from sport hunting on the elephant population is negligible.

In addition, professional hunters who hunt below minimum requirement of trophy ivory are penalized by ZAWA. In 2013 all hunters involved in hunting undersized elephants were fined and hunting licenses suspended for three years. This measure is aimed at preventing hunting of young elephants by licensed hunters.

7.0 Utilization

7.1 National utilization

Zambia banned elephant sport hunting in 1989 but local trade in elephant products continued until 1992 when the species was up lifted to Appendix I of CITES. Since 1989 Zambia has not exploited its elephant population for commercial trade or domestic consumption. However, elephants originating from Zimbabwe were imported into Zambia's Victoria Falls area for elephant back-ride safaris.

7.2 Legal International Trade

Elephants in Zambia are in Appendix I of the CITES Listing, prohibiting commercial trade in elephant and elephant products. Since the listing in 1989, Zambia has not had any commercial trade activities.

7.3 Sport hunting

Zambia initiated sport hunting of elephants in 2005. A voluntary annual export quota of 40 tusks and other trophies from 20 individual elephants was approved for export as personal effects. However, from 2011, Zambia has increased its annual elephant trophy voluntary quota for non-commercial hunting purposes of tusks and trophies from 20 to 80 elephants per year.

The elephant quota is largely determined by the 0.5% of standing population guideline (Martin 1986), which implies that the maximum annual adult male off-take through sport hunting at present should not exceed 180 individuals at current population size.

Between 2010 and 2012 the USA allowed the import of tusks and other trophies for non-commercial purposes from Zambia. This resulted into an increase in the number of elephants hunted and subsequent revenues generated for ZAWA and the communities.

7.4 Hunted trophies

The ZAWA CITES office maintains a register of all sport hunted ivory. All sport hunted ivory is stored by ZAWA and measurements of all ivory are recorded in the ivory dispatch vouchers and are punch dyed in readiness for export with indelible ink, using the following formula: country-of-origin two-letter ISO code, the last two digits of the year / the serial number for the year in question / and the weight in kilograms, according to Res Conf. 10. 10 (Rev. CoP12). Thereafter, a certificate of ownership, bearing details of the client and the trophy is granted to the owner of the trophy. On production of CITES import permit of the importing country, the export permit is processed in readiness for export. The statutory instrument No. 61 of 2010 on Elephants Sport hunting stipulates a weight of not less than 15 kg of ivory can be hunted which prevents the hunting of underage elephants. At least 50% of all meat from elephants hunted during sport hunting is given to the local communities in the Game Management Area in which the hunting takes place as a much needed source of protein.

7.5 Benefit sharing

As already stated, benefit sharing mechanisms of revenue from sustainable consumptive utilization in Zambia exist where animal fees is shared between ZAWA and the local communities on a 50% ratio. During the last hunting in 2012, a total of ZMK 1,820,008.60 was raised from 29 elephants hunted on sport hunting in selected hunting blocks as indicated in table 2 below.

Table 2 Table of revenue disbursements to Community Resource Boards

Hunting block	Elephants Hunted	Revenue (ZMK)
Chiawa	4	285,120
Chifunda	1	71,280
Luembe - West Petauke	1	71,280
Lupande Lower	8	570,240
Mulobezi	1	71,280
Mumbwa West	3	213,840
Munyamadzi - Luwawata	1	71,280
Mwanya - Lumimba	3	213,840
Nyakolwe GR	1	71,280
Nyampala - Munyamadzi	1	71,280
Nyamvu GR	1	71,280
Rufunsa	2	142,560
West Musalangu	2	142,560
Total	29	2,067,120

Income generated through elephant sport hunting formed part of the wildlife revenue realized in 2012 and shared between ZAWA and local communities falling in hunting blocks where hunting licenses were sold. Due to suspension of elephant hunting in 2013 and 2014, communities lost critical revenue which could have been ploughed back into conservation and community projects including local conservation initiatives.

8.0 Law Enforcement units

To enhance its law enforcement capacity, the Zambia Wildlife Authority has split its law enforcement section into 3 units. The Operations department dealing with field patrols and acting as the armed response wing of the organization, the Intelligence and Investigations Unit dealing with providing intelligence data to the operations wing and investigating any suspicious activities within the Wildlife Act and the Firearms Act, and the Legal and Prosecutions unit that makes sure that offenders are brought before court and prosecuted accordingly, give legal advice to the organization and also help the organization with forfeiture procedures for all items involved in illegal activities.

ZAWA's elephant protection strategies were enhanced through law enforcement and human elephant conflict operation funding to elephant range area management units. The elephant fund distribution criteria were based on operational needs that aimed at holistic ecosystems protection rather than single species protection. Range areas with alternative operational funding received relatively lower funding than those entirely dependent on ZAWA central funding. The source of funds was not limited to elephant fund only, but other safari and photographic activities.

8.1 Law enforcement operations

The capacity of the Authority to enforce the law has been improving by year. Wildlife law enforcement, unlike civil policing is a dynamic field that needs constant adaptive management. This is achieved through constant analysis and ongoing capacity building and placement of the correct individuals to drive operations. The research and monitoring unit of ZAWA analyses law enforcement data from the field and advise the operations unit on preferable areas of adaptation.

Often times, wildlife police officers have to deal with and arrest armed gangs of poachers in National Parks and Game Management Areas. This requires specialized training and endurance

for the personnel to be able to do their job efficiently. The Zambia wildlife Authority provides equipment and ration to the staff on a regular basis to keep operations going. During the year 2014 a total of 10 312 field patrols, 2516 intelligence operations and 524 road blocks where conducted by the Law enforcement units of ZAWA. On average, each of the at least 1100 law enforcement staff conducted 10 patrols in 2014.

Year	Patrols	Home search and Recovery operations	Investigation and investigations	Roadblocks	Total
2013	10,590	304	715	771	13,202
2014	10 312		2516	524	13352

The minimum required patrol man day for field officers is 15 days per month. On average a wildlife police officer is out on patrol for at least 10 (Ten) days during each patrol.

8.2 Arresting of offenders

The law enforcement efforts resulted into the encounter and subsequent arrests of 1671 suspects and 1912 Suspects from the field in 2013 and 2014 respectively. The number of arrests was increasing due to the increased enforcement and investigation efficiency and capabilities of the various law enforcement units within ZAWA.

8.3 Recoveries of items used in illegal activities

Increased arrests thus result in increased forfeitures and recoveries of items used for illegal purposes. 580 firearms were recovered in 2014; this is the main poaching weapon used against elephants by poachers. Removing this quantity of weapons in circulation will greatly reduce the poaching of elephants in the country.

The authority also has the capacity to detect illegal Ivory and Elephant products traded on the black market as can be seen from the recovery of 226 pieces of Ivory during 2014 and 135 pieces in 2013. As can be seen recoveries of both ivory and other items increased in 2014 due

to the improved capacity building and operational funding provided by the Central Government The following is a summary of various items recovered from law enforcement operations:

No	Items recovered	Number/quantity	
		2013	2014
01	Fire Arms	524	580
02	wire snares	8,406	9885
03	Ivories	135	226 piece
04	Game meat (various)	13,542.70	22,834 kg
05	bicycles	17	144
06	motor vehicles	0	14
07	motorbikes	4	12

8.4 Prosecution of offenders

Below is a summary of prosecution data for the years 2013 and 2014. All the prosecutions are done by the Zambia Wildlife Authority prosecutions unit. Suspects are charged and arrested by the intelligence and investigations unit.

	Description	2013	2014
01	Number of persons indicted	1,323	1607
02	Number convicted	1,338	1316
03	Number of individual fined	465	749
04	Amount realized from fines imposed on convicts in Zambia Kwacha	K766,207	K1 053,826
05	Cases pending as at 31 December	280	441

With money realized from the hunting of Elephant taken back into conservation and law enforcement, ZAWA would likely see a further improvement in its law enforcement capacity

and general illegal Ivory detection. Trends currently show an increase in general aspects of enforcement for the wildlife sector in the country.

9.0 Conclusions

This Non-detriment Findings (NDF), made in accordance with Article III of CITES and CITES Resolution Conf.16.7 concludes that the low level of off-take generated by trophy hunting is not detrimental to the survival and the species and the amount of revenues generated by this low level of off-take are of crucial importance for the conservation of the species also because of the benefits it provides to local communities.

The CITES Scientific Authority of Zambia underlines that it expects CITES Parties to implement CITES Resolution Conf. 2.11 with particular reference to paragraph b) that states: "*in order to achieve the envisaged complementary control of trade in Appendix-I species by the importing and exporting countries in the most effective and comprehensive manner, the Scientific Authority of the importing country accept the finding of the Scientific Authority of the exporting country that the exportation of the hunting trophy is not detrimental to the survival of the species, unless there are scientific or management data to indicate otherwise;* "

10.0 References

Chansa, W, & Kampamba, G. (2005). National Elephant Conservation Plan. Zambia Wildlife Authority.Chilanga, Zambia.

Chomba C. et. al (2012). Population status of African elephant in Zambia. Journal of Ecology and Natural Environment, vol. 4 (7), pp. 186 -193.

CITES (2002).Report of the Panel of Experts on the African Elephant on the review of the proposal submitted by Zambia to transfer its national population of *Loxodonta africana* from Appendix I to Appendix II. Document CoP12 Doc. 66 Annex 4 (http://www.cites.org/eng/cop/12/doc/E12-66A4.pdf)

CITES (2010a). Document CoP15 Doc. 68 Annex 6b - Report of the Panel of Experts on the African Elephant on the review of the proposal submitted by Zambia to transfer its national population of *Loxodonta africana* from Appendix I to Appendix II. (http://www.cites.org/eng/cop/15/doc/E15-68A06b).pdf)

CITES (2010b). Document CoP15 Info 68 – African Elephant Action Plan. Submitted by African Range State (http://www.cites.org/common/cop/15/inf/E15i-68.pdf)

CITES (2010c).Proposals to amend Appendices I and II Cop15 Prop. 5. (http://www.cites.org/eng/cop/15/prop/E-15-Prop-05.pdf)

Douglas-Hamilton I, Hillma AKK (1981). Elephant carcasses and skeleton as indicators of population trends. From low-level aerial survey techniques workshop. African Monograph No. 4, Addis Ababa,

Frederick, H. (2011). Aerial survey: Kafue Ecosystem 2011. Zambia Wildlife Authority, Chilanga, Zambia

Martin, R.B. (1986). Establishment of African ivory export quotas and associated control procedures. Report to CITES Secretariat.

Simukonda, C. (2011).Wet season Survey of the African Elephant and other Large Mammals in selected Areas of Luangwa Valley. Zambia Wildlife Authority supported by World Wide Fund for Nature.

Viljoen, P. (2014) Lower Zambezi National Park Rufunsa & Chiawa GMAs Aerial Wildlife Survey October 2013. Conservation Lower Zambezi & Zambia Wildlife Authority

Zambia Wildlife Authority (2014) Report on the 2013 Dry Season Survey of Large Herbivores for Kafue and Luangwa Ecosystems. Zambia Wildlife Authority, Chilanga, Zambia

Zambia Wildlife Authority (2009). Elephant Aerial Survey – A country Report, 2008.Zambia Wildlife Authority Chilanga, Zambia.

Zambia Wildlife Authority (2013). Director – Conservation & Management 2012 Annual Report, Zambia Wildlife Authority, Chilanga, Zambia

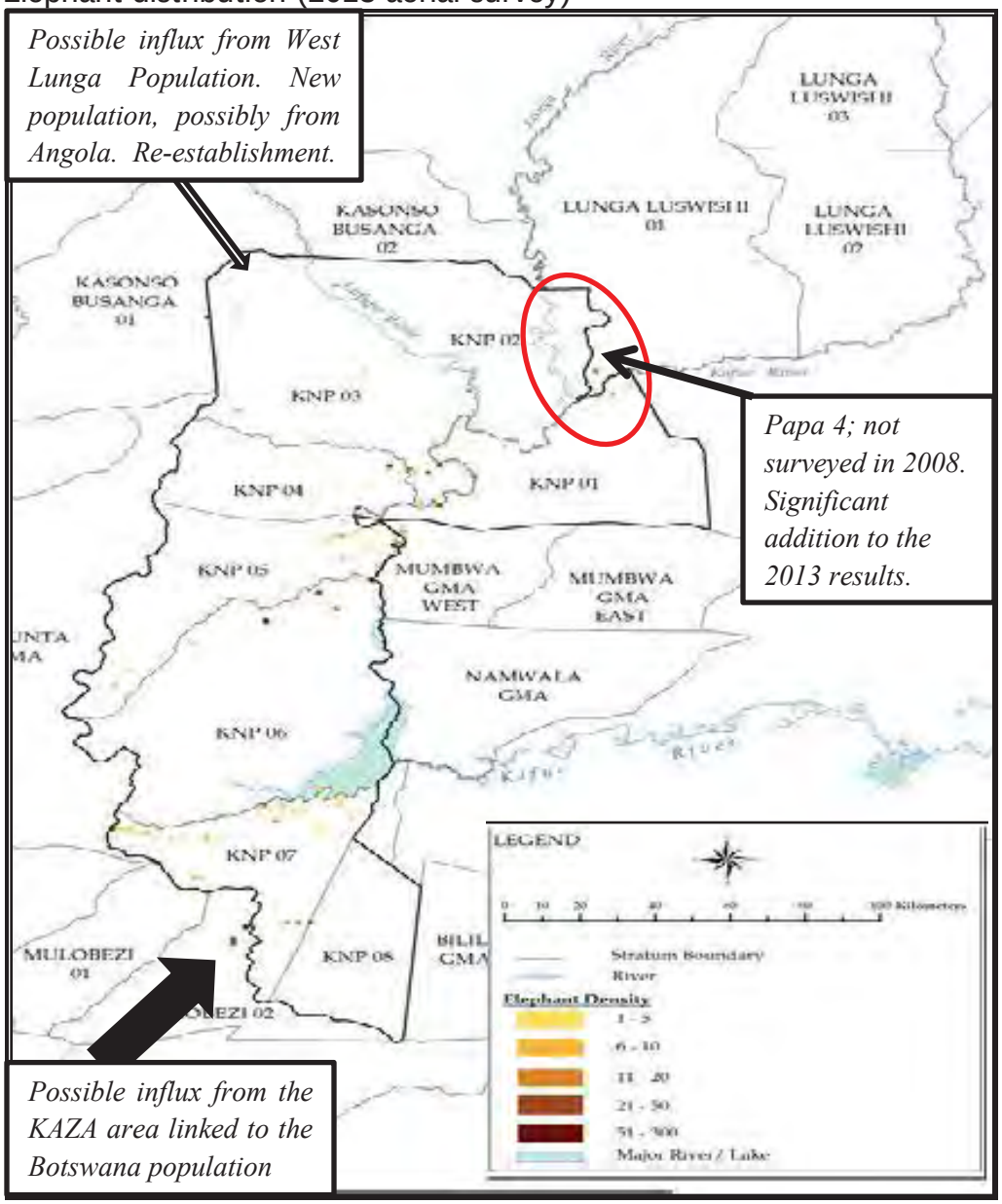
Zambia Wildlife Authority (2015). Director – Conservation & Management 2014 Annual Report, Zambia Wildlife Authority, Chilanga, Zambia

Zambia Wildlife Authority (2012). Enhancement and Non detriment findings for African Elephant sport hunting in Zambia, Zambia Wildlife Authority, Chilanga, Zambia

POSSIBLE EXPLANATION FOR THE ELEPHANT INCREASE IN THE KAFUE AREA

1. It is possible that the elephant population in the Kafue Area has increased because more areas were surveyed in the 2013 surveys than in 2008. Areas like Lunga Luswishi, Mushingashi and Papa 4 were not covered in the 2008 but were covered in 2013.

Elephant distribution (2013 aerial survey)



2. The sampling intensity also increased from an average of 7% to an average of 20%. This increased the search intensity and could account for a significant increase. Even though this might imply an increase in population, the population might not have increased this much because it cannot be explained biologically, but might reveal the actual population in the area. This can be ascertained with the coming surveys, if the search intensity and area coverage are maintained.
3. There is evidence, from field reports, that there is an influx of elephant groups in the Sioma Ngwezi and the west Lunga areas; it is possible that these elephant groups could be migrating into the Kafue Area. This is yet to be ascertained with more ground surveys.
4. None of the above reasons alone can provide solid basis for the increase of numbers from the estimated 3348 in 2008 to over 9000 in 2013. This year a country wide survey shall be conducted in all the key elephant areas (Kafue area included). In the 2015 surveys, the sampling intensities and area coverage have been planned to be the same as 2013. This will give us chance to compare with the results of the 2013 surveys.

Vargas, Darcy <darcy_vargas@fws.gov>

Fwd: Fw: Non Detriment Findings 2015; African Elephant Zambia and other documents

Vannorman, Tim <tim_vannorman@fws.gov> Mon, Feb 1, 2016 at 1:44 PM
To: Darcy Vargas <darcy_vargas@fws.gov>

Darcy,

Here are some documents regarding elephants from Zambia. Some of the information may be valuable for your analysis of lion hunting.

Tim

---------- Forwarded message ----------
From: **Andrew Chomba** <rhinorangerzawa@yahoo.co.uk>
Date: Sun, Jan 31, 2016 at 3:05 AM
Subject: Fw: Non Detriment Findings 2015; African Elephant Zambia and other documents
To: "tim_vannorman@fws.gov" <tim_vannorman@fws.gov>

Dear Tim,
See email attached documents Zambia provided to the EU regarding NDF for Elephants that was sent to you after the AWCF meeting in South Africa but appears may have bounced back. Please contact me if you will need any further clarification. I am also informed that the USFWS may request us to provide similar information on lions following the recent listing of lions in the ESA.
Kind regards,
Andrew

On Sunday, 31 January 2016, 9:58, Andrew Chomba <andrew.chomba@zawa.org.zm> wrote:

Principal Warden-Operations
Wildlife Law Enforcement Unit
Department of National Parks and Wildlife
Private Bag 1,
Chilanga
ZAMBIA
Tel: +260 211 278 501
Cell: +260 978 176 078

From: Terry Basabeka Njovu
Sent: Tuesday, December 22, 2015 12:32 PM
To: tim_vannorman@fws.gov
Cc: Andrew Chomba

Subject: Non Detriment Findings 2015; African Elephant Zambia and other documents

Dear Timothy
Please find attached the Elephant NDF for 2015 for Zambia and other document. I am sending these documents on behalf of Mr Andrew Chomba Eldred herein copied. The documents were also sent to the EU.
Regards

Terry Basabeka Njovu
Park Ranger-CITES
Zambia Wildlife Authority HQ
CITES Management Authority Zambia
P/Bag 1
Chilanga
Zambia

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Timothy J. Van Norman, Chief
Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
(703) 358-2350

***Sign up** for our e-newsletter to learn how we're working around the globe to protect species and their habitats!*

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4 attachments

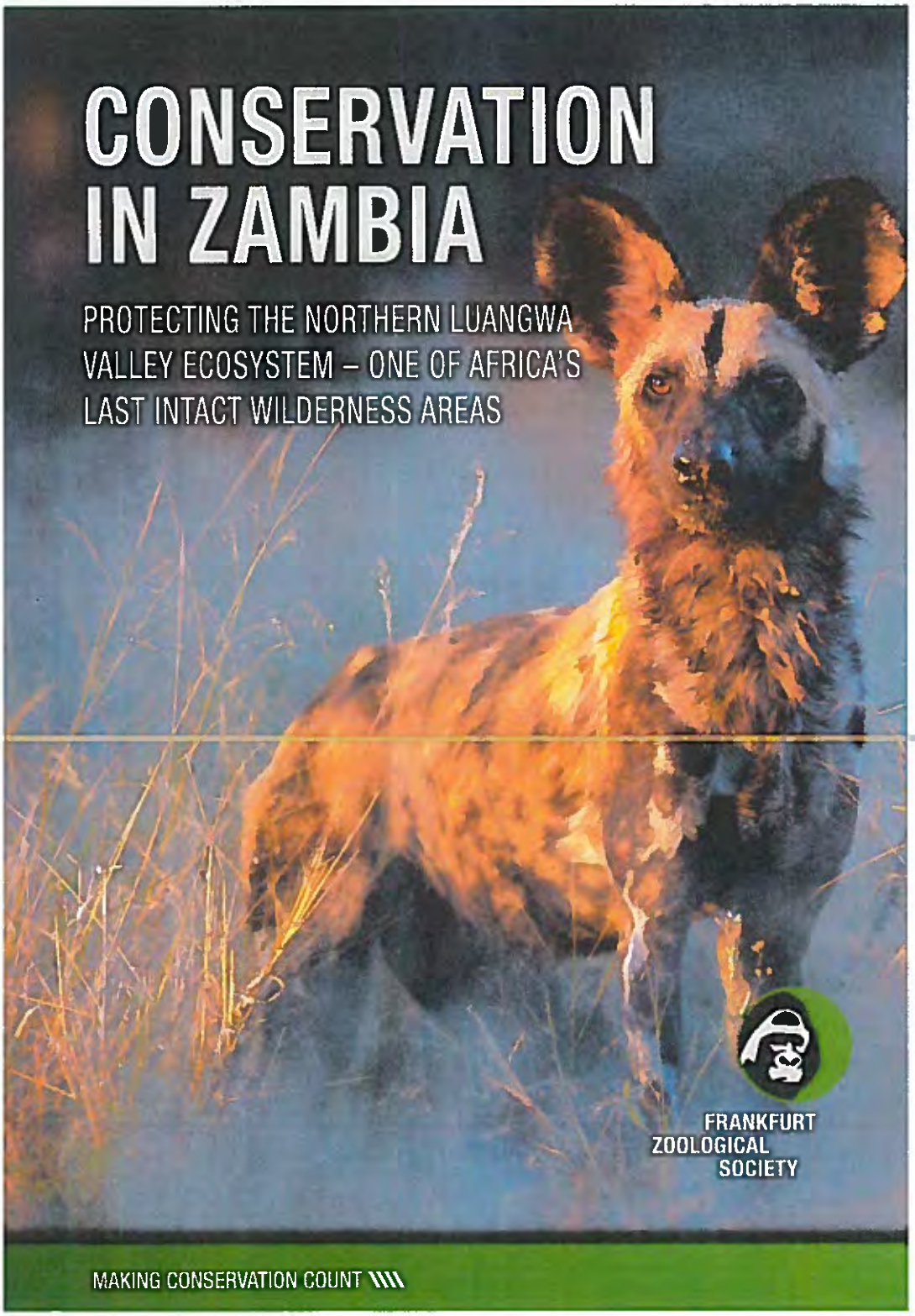
POSSIBLE EXPLANATION FOR THE ELEPHANT INCREASE IN THE KAFUE AREA.pdf
132K

NDF for African Elephant sport hunting in Zambia_draft 2015rev.pdf
619K

DRY SEASON SURVEY OF LARGE HERBIVORES FOR KAFUE AND LUANGWA ECOSYSTEMS_for Ministry.pdf
2311K

IUCN Summary Report SC65 July 2014.pdf

726K


CONSERVATION
IN ZAMBIA
PROTECTING THE NORTHERN LUANGWA VALLEY ECOSYSTEM – ONE OF AFRICA'S LAST INTACT WILDERNESS AREAS
FRANKFURT ZOOLOGICAL SOCIETY
MAKING CONSERVATION COUNT

THE LUANGWA VALLEY.

The Luangwa Valley is the oldest section of Africa's famous Great Rift Valley and is the oldest part of the Rift on the continent. The Luangwa River, bordering four national parks, is one of Africa's longest unaltered river systems, and home to the world's largest concentration of hippos. The geographic location and associated isolation, as a result of the topography, gives rise to a unique ecosystem and species diversity. The North Luangwa National Park and adjacent five Game Management Areas (21,000km²) in northeastern Zambia harbour significant wildlife populations, including Zambia's only black rhinos.

FZS has implemented conservation-based initiatives aimed at promoting and protecting the area threatened by human population growth, habitat loss and fragmentation, unsustainable utilisation of natural resources, and the upswing in illegal hunting for ivory, rhino horn and bush meat. These initiatives promote both sustainable socio-economic development and support to protect Zambia's natural heritage.

PIONEERING

CONSERVATION.

CREATE

With funding from the European Union, Frankfurt Zoological Society's Conservation Research for East Africa's Threatened Ecosystems (CREATE) project investigates key questions on inter-relationships between poverty, human-wildlife conflict, resilience to shocks, and environmental conservation in two ecosystems: North Luangwa in Zambia and Serengeti in Tanzania. The research aims to find effective long-term solutions for sustaining wildlife, natural resources, and local human communities to inform conservation management and policy. More information can be found at: www.fzs-create.org

NORTH LUANGWA CONSERVATION PROGRAMME

The Frankfurt Zoological Society's North Luangwa Conservation Programme (NLCP) is a partnership with the Zambia Wildlife Authority (ZAWA) that has been active in North Luangwa National Park (NLNP) and the wider ecosystem since 1986. The programme focuses its support on NLNP and the surrounding Game Management Areas, primarily with protected area management and law enforcement, while simultaneously ensuring the area is sustainably managed and generating benefits that contribute to the long-term security and resilience of local communities. NLCP engages with local communities through a conservation education programme, maintains airstrips and roads, builds schools, digs boreholes for drinking water and meets other infrastructural needs to strengthen community development, natural resource management and tourism activities.

DEDICATED

RHINOS.

Once home to the third largest population of black rhino on the continent, the species became extinct in Zambia in the mid / late 1990s as a result of poaching for its horn. From 2003 to 2010, following concerted conservation and law enforcement efforts, the Zambia Wildlife Authority, with support from Frankfurt Zoological Society, reintroduced twenty-five black rhinos to form a viable founder population.

The recent dramatic rise in rhino poaching in southern Africa reflects a greatly increased demand for horns, driven by emerging affluent Asian markets. Organised criminal gangs are using increasingly sophisticated methods to obtain rhino horn and meet the burgeoning demand. Wildlife authorities are generally under-resourced, under-capacitated and less sophisticated in their anti-poaching tactics to combat the threat.

With more than 90% of all recent rhino poaching occurring in southern Africa and elephant ivory poaching in Zambia escalating to levels not seen for over a decade, the potential for an organised threat to the North Luangwa Ecosystem black rhinos is very real. Ensuring effective monitoring and protection of rhino populations is a top priority.

BECOME A MEMBER

By becoming a contributing member to Frankfurt Zoological Society you help support conservation work through your membership fee. All members also receive our GORILLA magazine (in German) four times a year. It contains enthralling articles and keeps you up to date on our project work.

Membership forms can be requested by email or you can register online at **www.fzs.org**

LEAVE A LEGACY

Make an everlasting commitment to wildlife by giving an endowment contribution. All legacies and donations entrusted to us will be used to save biodiversity for future generations.

Please contact: **legacy@fzs.org**

DONATE

We believe our partners and supporters are crucial for success. We appreciate every dollar of support. We accept online donations as well as direct deposits in Austria, Germany, Switzerland and the United States.

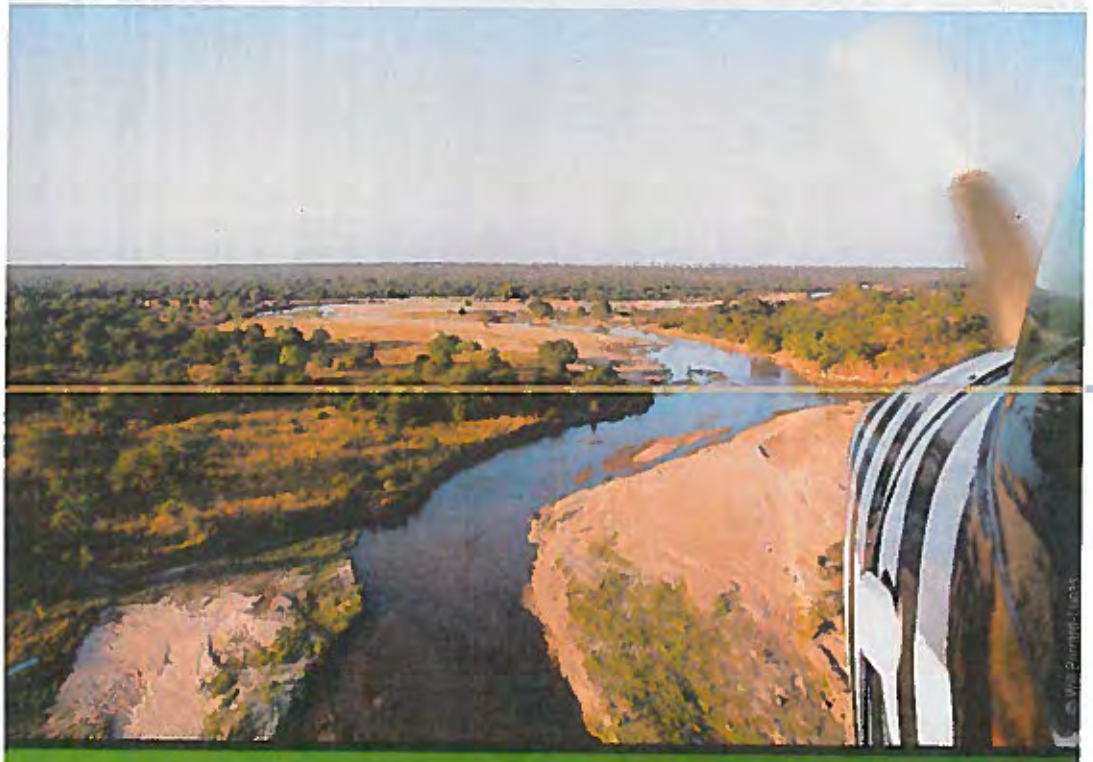
For more information, please visit:
www.fzs.org

ABOUT US

We believe that wildlife and wild lands should be cherished and sustainably protected for their intrinsic and economic value to present and future generations.

FZS conserves wildlife and ecosystems focusing on protected areas and outstanding wild places. FZS is currently involved in over 40 conservation projects in 18 countries. We believe that our ground-based approach and field expertise is an important component of success.

Our work is committed to conserving biological diversity. Join us in taking on one of the greatest challenges of the 21st century, the preservation of the world's natural environments.



CONTACT US

PLEASE CONTACT US FOR MORE INFORMATION
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info@fzs.org | www.fzs.org

Cover photo: Will Burrard-Lucas

DAPU

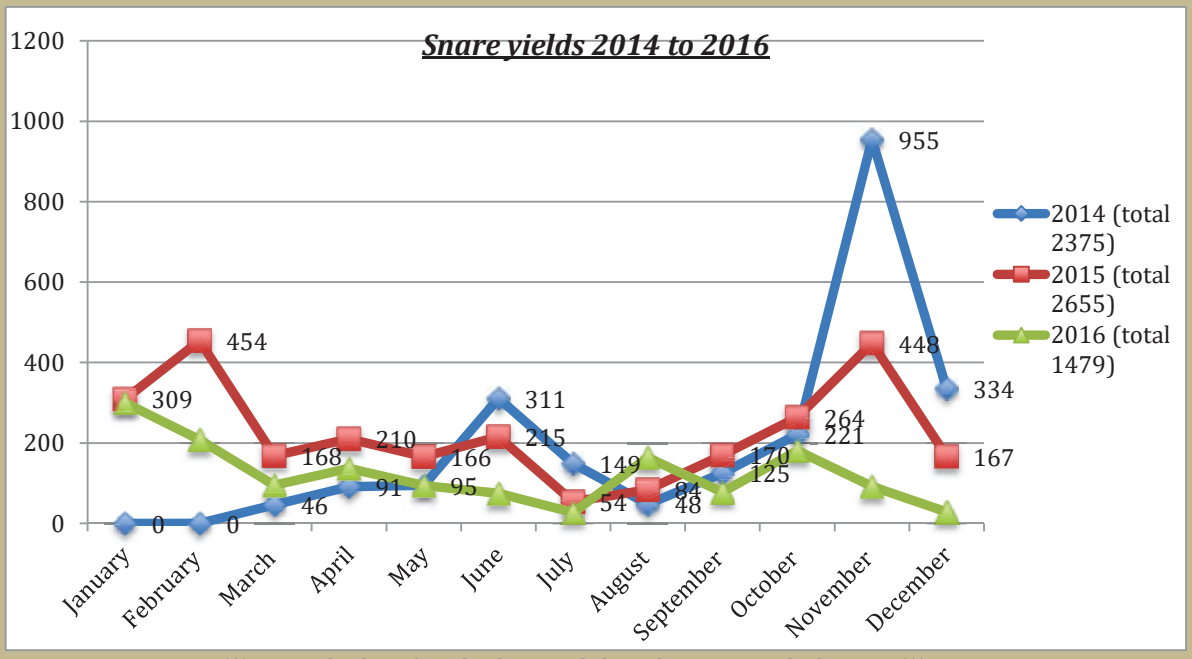
DANDE ANTI POACHING UNIT

End of year 2016

Dear Friends,

We have had a good 2016 – in fact after 7 years of running in DAPU Buzz and I can finally say for the first time we have really noticed the positive effects of our efforts. Every patrol report and every hunter or visitor is reporting more and more game. We estimate that we have consistently in excess of 2000 resident buffalo now – up from the 1200 in 2010 so the population has increased over 60% in 7 years (nearly 10% per annum).
With the exception of waterbuck it is safe to say that all game populations have increased nicely – so in theory, our year on year gains now should really accelerate as the math is finally on our side!

Snaring & general poaching.
We have long used "snaring" as an index with which to measure our general poaching, and we are happy to report that in 2016 our total snare yield of 1479 snares was 60% less than the 2375 snares found in 2014. Bongi and his teams have managed to really keep on top of their patrols.



****One can clearly see from the above graph the peak in snaring in the dry season****

2016 DAPU summary (12 months).

Month	No. of snares	Dogs shot	Meat Poachers convicted	Elephant poachers	Weapons retrieved	Rewards paid
January	300	0	3	0	0	US$821
February	208	0	0	2	0	US$978
March	95	0	0		0	US$97
April	137	0	1	0	2	US$321
	740	**0**	**4**	**2**	**2**	**US$2,217**
May	94	0	5	0	4	US$1,310
June	75	0	0	0	0	US$83
July	27	0	0	0	2	US$67
August	164	1	0	0	0	US$254
	360	**1**	**5**	**0**	**6**	**US$1,714**
September	78	0	0	0	1	US$97
October	181	0	1	0	1	US$447
November	92	0	2	0	0	US$442
December	28	0	0	0	0	US$532
	379	**0**	**3**	**0**	**2**	**US$1,518**
Total 2016	**1479**	**1**	**12**	**2**	**10**	**US$5,449**

**** It is clear to see the decline in poaching during the hunting season and also … the impending increase in poaching activity as hunting slows down and we head towards Christmas. ****

****DAPU call sign posing proudly with "their" poacher and "his" warthog! ****

**** A typical haul of snares****

****Third time offender – kudu cow****

Elephant poaching.

Dande North and East (180,000 ha/ 462,000 acres) total loss for 2016 was 7 elephants. It is still too high a number but a fraction of those suffered by our surrounding areas (including Mana Pools National Park). There is most certainly a gang still operating in Dande and surrounding areas that we have failed to account for.

National Parks had a lucky break on Friday 25th November at 2250 hours when they arrested a gentleman with "1.8kgs of cyanide at Dande River Bridge. The accused was en route to Angwa where the cyanide was to be bought by a poaching syndicate and to be used on elephants for their ivory"

**** The accused with his Cyanide****

**** poached bull found by DAPU on neighbouring concession October 2017 – what a waste.****

Year	No. of Elephant Carcasses
2010	40
2011	36
2012	16
2013	4
2014	9
2015	4
2016	7

Pushing the boundaries.

Now that the core areas of Dande North and East are much better controled and managed we have started "pushing the boundaries" which basically means DAPU along with National Parks has begun to conduct offensive partols in:

1. *Our neighbouring (Zim) concessions South of us and*
2. *Along the Zambezi river from Kanyemba way up into Chewore – and area that has been to long neglected. Considering that 75% of elephant poachers and ivory trade originates in Zambia – it only makes sense. Squirrel Merredith of Masau camp has been the driving force behind the initiative and DAPU/ CMS assisted with $500.00 which was used for rewards. DAPU will continue to be involved and help grow in this initiative .*

Area	Meters of nets	Dugouts	Banana boats	Arrests
Tunsa (Chewore)	600	0	4	2
DDF Kanyemba	1200	2	0	2

*** Haul of nets – Tunsa river mouth, Chewore***

lioness and kudu remains – neighboring concession

Horror scene

53 dead buffalo – in Mozambique close to our Zim border. An entire village turned out and chased the buffalo into the mud then killed them.

Problem Animal Control.

Duties for DAPU scouts also include attending to Problem Animal reports (PAC).

a. Elephant – There were not many serious reports in 2016 mostly because of the drought. Bongi and crew managed to successfully chase all elephant's out of crops and avoided shooting any which was great.

b. Lions – No loss of life reported in 2016 but a fair number of cattle were killed. No lions shot.

c. Buffalo – One man was seriously injured in the East in April, another killed in Kanyemba on the 14th August by a dagga boy and a second person injured by the same bull two weeks prior. As the buffalo population increases so there is more and more conflict.

d. Crocodiles – One person killed 2016.

e. Snake bites – One person killed 2016.
f. Hyenas – there are consistent and accurate reports of hyenas killing livestock especially in the East. It is a problem that is going to be addressed in 2017.

"Patrol Kit"

In the previous newsletters we mentioned that we were expecting some boots from the USA. Well they have arrived and have been issued so we have VERY happy Scouts!!! There is a second shipment expected with still more boots, handcuffs and water bottles. A HUGE thank you to Duke McCall who single handedly organized this!!!

Goals for 2016	*Completed?*
1. Continue with anti-poaching patrols.	Yes
2. Replace scouts that are not performing.	Yes
3. Early burning	Yes
4. Repair firearms where possible or replace	No
5. New boots and patrol kit.	Yes

Cost savings.

One of our biggest costs is obviously, vehicles, which are all but irreplaceable. In order to optimize our DAPU vehicle mileage we have had satellite-tracking units fitted to AAX 9832 as well as ABK 7074. The tracking units were both sponsored and fitted by "Trackit" – so a huge thank you to Richard Tennant and Hannes Scholtz of Trackit for their extremely valuable and useful donation.
If any of you are interested in specifically sponsoring one of these vehicles we will supply you with the login details and you can track the vehicle live!

Outreach work and general improvements.

In addition to our normal annual social programs, CMS drilled 7 boreholes in 2016 – of which 3 were successful and consequently equipped. The best of them was at Sende Village in the East and it will improve immeasurably the quality of life for those folk. One borehole was in the DSA for game. We are constantly looking for ways to improve Dande – ultimately the better managed the area is, and the more it yields then clearly it is easier to:

1. *Better afford anti poaching efforts.*
2. *Easier to push home long-term arguments to continue to protect the environment.*
3. *Easier to push forward long-term arguments to look after the animals – as they are worth looking after.*

**** Sende Village 30,000 liters/ hr.****

****Bongi at pumped pan in DSA – water is life****

The year behind us – 2016.

As I mentioned earlier 2016 has been our best year to date. The poaching trend has continued to decline and game populations have really started to improve quite quickly now. Elephant poaching trends continue to be stable. As DAPU has managed to really get on top of our local poaching, so they have begun to build momentum with offensive external patrols. In the end it is not enough for only Dande to be safe and healthy – we need our neighbors to be in the same state!

Massive thankyous to

Buzz and I would like to extend our eternal gratitude to so many well wishers, without whose help - none of what DAPU has achieved would have been possible. Our company sales have been down 40% since 2014 (thanks to USFWS) BUT we still to met our own annual commitments to DAPU and thanks entirely to the generosity of folk listed below actually received $15,000.00 more than we anticipated allowing us to exceed our budget by 18% (or … $15,000!).

The list seems endless and includes but is not limited to:
Safari club International, The National Capital Chapter of Safari Club, The Chisholm Trail Chapter of Safari Club, The Sylvarnus Charitable Trust, Trackit, Flying for Wildlife,
Jytte Merjentsen, Juel Granum, Barry Shaw, Ike Ikeguchi, William Shores, Carl Frederick Nagel, Robert Keeler, Duke McCall, Mike Core, Bob Keeler, David Adams, Jerry Jurena, Marty Vick, Morten Skarra, Jerry Beardmore and Bob Schofield.

And every client that hunted with us in 2016 – they all contributed generously.

Special mention to three young Zimbabwean farmers, Charl Grobbelar, Pieter Greytenbach and Pip Madinson – who have helped suppliment rations and fuel. We know how tough it is for them so that makes their help even more special and shows the broad support DAPU has earned for itself.

Artsits. Gareth Hook and Peter Stewart who donated stunning work to be auctioned – proceeds to DAPU.

We must not forget National Parks and the DAPU Scouts, who are the ones that are actually out there, often in dangerous and uncomfortable conditions. Not only do they run the risk of being hurt by poachers but also by the wildlife.

Lastly a big thank you to Bongani Ndebele – aka "Bongi" who is a true leader and is responsible in no small part for the success. Bongi was deputized by Muno and Alfa both of whom made very positive impacts in their own way.

The year ahead 2017.

Bongi will continue to lead DAPU and our mission is to continue to improve our patrols and their effectiveness to help ensure the long-term viability of Dande North and East (.46% of Zimbabwe's total area!). With DAPU's help we are well on the way to making Dande the Zimbabwean flagship model for responsible sustainable use conservation.

All the very best for 2017.

Buzz and Myles

DAPU Income and Expenses 2016 - End of Year.

Income

Safari Club International	**US$8,900.00**
National Capital Safari Club	**US$1,500.00**
Chisolm trail Chapter of Safari Club	**US$500.00**
Sylvarnus Trust	**US$6,000.00**
Clients and Individual donations	**US$33,671.20**
Total.	**US$50,571.20**
C.M.S s	**US$44,435.05**
Total Income	**US$95,006.25**

Expenses

 # 1 Wages, rewards and rations.

	Game Scouts	Bongi Muno & Alfa	Rations	Rewards	Total
January	US$1,100	US$1,605	US$770	US$821	US$4,296
February	US$1,100	US$1,605	US$770	US$978	US$4,453
March	US$1,100	US$1,605	US$770	US$97	US$3,572
April	US$1,100	US$1,605	US$770	US$321	US$3,796
	US$4,400	US$6,420	US$3,080	US$2,217	**US$16,117**
May	US$1,100	US$1,605	US$770	US$1,310	US$4,785
June	US$1,100	US$1,605	US$770	US$83	US$3,558
July	US$1,100	US$1,605	US$770	US$67	US$3,542
August	US$1,100	US$1,605	US$770	US$254	US$3,729
	US$4,400	US$6,420	US$3,080	US$1,714	**US$15,614**
September	US$1,100	US$1,605	US$770	US$97	US$3,572
October	US$1,100	US$1,605	US$770	US$447	US$3,922
November	US$1,100	US$1,605	US$770	US$442	US$3,917
December	US$2,200	US$3,210	US$770	US$532	US$6,712
	US$5,500	US$8,025	US$3,080	US$1,518	**US$18,123**

 # 2 2016 DAPU equipment expenses

DAPU Ammunition - National Cartridges	US$362.00
DAPU tents - Mabels Canvas	US$2,242.50
Uniform downsizing	US$330.00
Uniforms	US$1,078.00
Dapu # 1Toyota Land Cruiser AAX 9832 - Grease Junky	US$2,230.75
Dapu # 1Toyota Land Cruiser AAX 9832 - Tineo Enterprises	US$1,078.00
Dapu # 2 ABK 7074 - Alpine panel beaters	US$1,437.00
DAPU # 2 ABK 7074 Burj Auto	US$1,425.00
DAPU # 2 ABK 7074 Grease Junky	US$3,974.00
DAPU # 2 ABK 7074 Windscreen	US$60.00
DAPU # 2 ABK 7074 injector pump Geribran services	US$720.00
	US$14,937.25

 # 3 Vehicles (2).

Mileage ABM 5149 Jan - April 3400 +10297 km,s = 13697 x $.5/ km	US$6,849
Mileage AAX 9832/ABK 7074 january - April = 8000+ 6783 = 14,783 *.5/km	US$7,392
Mielage AAX 9832 May - December 2016 = 17350 kms * $.05/km=	US$8,675
Mileage ABK 7074 May- December 2016 = 14,600km *$.5/km =	US$7,300
	US$30,215

Total expenses		**US$95,006**
Total Income	**US$95,006**	
Shortfall		**US$0**

DAPU actual 2016 BUDGET and proposed 2017.

	2017 Budget	% Variance	2016 actual	2016 (proposed)	2015 (actual)	2014 (actual)
Reciepts						
From Sylvarnus Trust, SCI & clients	US$50,571	48%	US$50,571	US$34,056.00	US$34,956.00	US$35,904.00
Charlton McCallum Safaris	US$44,435	-5%	US$44,435	US$46,653.00	US$49,756.70	US$36,064.00
	US$95,006	**18%**	**US$95,006**	**US$80,709**	**US$84,713**	**US$71,968**
Less Expenses						
Wages (scouts)	US$14,300	0%	US$14,300	US$14,300.00	US$14,300.00	US$13,075.00
Management	US$20,865	15%	US$20,865	US$18,200.00	US$18,200.00	US$18,200.00
Rations (from January x 22 scouts).	US$9,240	0%	US$9,240	US$9,240.00	US$9,240.00	US$7,980.00
Rewards	US$5,449	-43%	US$5,449	US$9,582.00	US$9,582.00	US$9,602.00
Equipment	US$14,937	76%	US$14,937	US$8,500.00	US$2,603.00	US$6,861.00
Landcruiser opperating costs	US$30,215	45%	US$30,215	US$20,888.00	US$20,888.00	US$16,250.00
	US$95,006	**18%**	**US$95,006**	**US$80,710.00**	**US$74,813.00**	**US$71,968.00**
Shortfall	**US$0**	**0%**	**US$0**	**-US$1.00**	**US$0.00**	**US$0.00**

*** Thanks to extra income we were able to go 18% over budget and we spent that money on deployments and vehicles***

*** We hope to be able to achieve in 2017 exactly what we were able to in 2016 hence our budget is same as 2016 actual***

United States Department of the Interior

FISH AND WILDLIFE SERVICE
International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA

Memorandum

To: The File

From: Chief, Branch of Permits

Subject: Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zambia On or After January 1, 2016 and On or Before December 31, 2018

The African elephant (*Loxodonta africana*) is listed as threatened under the U.S. Endangered Species Act (ESA) and is regulated under section 4(d) special rule [50 CFR 17.40(e)]. The 4(d) special rule provides the requirements for the import of sport-hunted trophies. Under paragraph 17.40(e)(6)(i)(B), in order for the U.S. Fish and Wildlife Service (Service) to issue a threatened species permit under 50 CFR 17.32 authorizing the import of a sport-hunted elephant trophy, the Service must make a determination that the killing of the trophy animal will enhance the survival of the species. After evaluating the available data as of the date of this finding on elephant hunting in Zambia, including information provided by the Government of Zambia, current applications to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service, under the regulatory requirements provided by 17.40(e)(6)(i)(B**), the Service is able to make a determination that the killing of the trophy animal in Zambia, on or after January 1, 2016, and on or before December 31, 2018, will enhance the survival of the African elephant.** Applications to import trophies hunted during this time period will be considered to have met the enhancement requirement unless we issue a new finding based on available information. The Service may replace this finding at any time that this finding no longer reflects the available information consistent with the regulatory requirements. The Service reviews each application received for import of such specimens and evaluates the information provided in the application as well as other information available to the Service on the status of the elephant population and the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

General Considerations:

In evaluating whether the killing of the trophy animal will enhance the survival of African elephants in accordance with 50 CFR 17.40(e)(6)(i)(B), the Service considers the permit issuance criteria outlined in 50 CFR 17.32(a)(2). These include, in addition to the general permitting criteria in 50 CFR 13.21(b):

(i) Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit;

(ii) The probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit;

(iii) Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed;

(iv) Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit;

(v) The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application; and

(vi) Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application.

As with all permit applications submitted under 50 CFR 17.32(a), the individual requesting authorization to import a sport-hunted elephant trophy bears the burden of providing information in their application showing that the activity meets the requirements for issuance criteria under 50 CFR 17.32(a). In some cases, such as for import of sport-hunted trophies, it is not always possible for the applicant to provide all of the necessary information needed by the Service to make a positive determination under the Act to authorize the activity. In such cases, the Service may consult with the range country and other interested parties to the extent practicable to obtain necessary information. The Service has the discretion to make the required findings on sport-hunted elephant trophy imports on a countrywide basis, although individual import permits will be evaluated and issued or denied for each applicant. While the Service may make enhancement findings for sport-hunted elephant trophy imports on a countrywide basis, the Service encourages the submission of information from individual applicants. We rely on the information available to the Service and may rely on information from sources other than the applicant when making a permitting decision.

Neither the African elephant 4(d) rule nor 50 CFR 17.32(a)(2) specify what would constitute the enhancement of survival of a species regarding the authorization for the importation of an African elephant sport-hunted trophy. Therefore, when making a determination of whether the killing of the trophy animal will enhance the survival of African elephants, the Service

examines the overall conservation and management of the species in the country where the specimen originated and whether that management addresses the threats to the species (*i.e.,* that it is based on sound scientific principles and that the management program is actively addressing the current and longer term threats to the species). In that review, we evaluate whether the import contributes to the overall conservation of the species by considering whether the biological, social, and economic aspects of a program from which the specimen was obtained provide a net benefit to the species and its ecosystem.

As stated in previous findings, in evaluating whether the killing of the trophy animal will enhance the survival of African elephants within a country, the Service looks at a number of factors. We evaluate whether a country has a valid national or regional management plan and if the country has the resources and political will to enact the plan. If there is a plan, what government entities implement the plan and how often is it reviewed and updated? Does the plan have clear, achievable objectives? Are the objectives measurable and are they being achieved? Is there an adaptive management approach within the plan so that enacting agencies can quickly respond to changing environmental or social issues?

The Service also evaluates the status of the elephant population within a country and trends over time. Particularly, we are interested in population numbers, sex and age-class distribution, and mortality rates (both natural and human-induced). Are standardized surveys being conducted and, if so, what are the timing, census methodology, and coverage? Since elephant populations can move across international borders, what level of cooperation is there between neighboring countries in management and surveying efforts for shared populations? How is poaching accounted for within survey efforts?

The Service takes into account all forms of offtake when evaluating population viability and sustainability, including human-elephant conflicts, problem animal control, poaching, and sport hunting. While recognizing that there may be limited resources available for elephant management, the Service considers what national policies are in place to address human-elephant conflicts and problem elephant control. Is there a policy on culling surplus animals and removal of nuisance animals? Does domestic harvesting of elephants occur for local consumption or use? The amount of protected area either set aside for elephants or managed for elephant populations and the level of protection provided are also important in the Service's evaluation of whether imports of trophies could be authorized.

Finally, the Service considers the country's sport-hunting program and whether it contributes to the conservation and management of the species. Is the hunting program scientifically based and has it been incorporated into national/regional management strategies, particularly in light of data on population numbers and trends and levels of utilization (both legal and illegal)? Are the funds generated by hunters going directly to in-situ conservation and management efforts or deposited into a general treasury fund? How are hunting quotas distributed? If there are concession areas, how are they managed and allocated? Do U.S. hunters, through their participation in the hunting program, contribute funds used to help address management needs of the species, and are those funds utilized in a meaningful manner?

In short, the Service is looking to determine if a country has sufficient numbers of elephants to support a hunting program, if the country has a management plan and adequate laws and regulations to effectively implement a hunting program, and if the participation of U.S. hunters in the program provides a clear benefit to the species to meet the requirements for the import of sport-hunted trophies under paragraph 17.40(e)(6)(i)(B).

The Service's approach to enhancement findings for the importation of sport-hunted trophies of African elephants is consistent with the purpose and intent of the Endangered Species Act. Well-managed trophy hunting can benefit conservation by generating funds to be used for conservation, including for habitat protection, population monitoring, wildlife management programs, and law enforcement efforts. We are, of course, aware that not all trophy hunting is part of a well-managed, well-run program, and we evaluate import of sport-hunted trophies carefully to ensure that all legal requirements are met before allowing import.

We note that our approach is also consistent with the approach provided in the *IUCN Species Survival Commission (SSC) Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives, Ver. 1.0* (IUCN SSC 2012). The SSC document provides useful principles and sets out guidance from international experts in the field on the use of trophy hunting as a tool for "creating incentives for the conservation of species and their habitats and for the equitable sharing of the benefits of use of natural resources" (IUCN SSC 2012, p. 2) and recognizes that recreational hunting, particularly trophy hunting, can contribute to biodiversity conservation and more specifically, the conservation of the hunted species. The SSC document lays out the following five guiding principles:

(a) *Biological sustainability:* The hunting program cannot contribute to the long-term decline of the hunted species. It should not alter natural selection and ecological function of the hunted species or any other species that share the habitat. The program should not inadvertently facilitate poaching or illegal trade in wildlife by acting as a cover for such illegal activities. The hunting program should also not manipulate the ecosystem or its component elements in a way that alters the native biodiversity.

(b) *Net Conservation Benefit:* The biologically sustainable hunting program should be based on laws, regulations, and scientifically based quotas, established with local input, that are transparent and periodically reviewed. The program should produce income, employment, and other benefits to create incentives for reducing the pressure on the target species. The program should create benefits for local residents to co-exist with the target species and other species. It is also imperative that the program is part of a legally recognized governance system that supports conservation.

(c) *Socio-Economic-Cultural Benefit:* A well-managed hunting program can serve as a conservation tool when it respects the local cultural values and practices. It should be accepted by most members of the community, involving and benefiting local residents in an equitable manner. The program should also adopt business practices that promote long-term economic sustainability.

(d) *Adaptive Management: Planning, Monitoring, and Reporting:* Hunting can enhance the species when it is based on appropriate resource assessments and monitoring (*e.g.,* population counts, trend data), upon which specific science-based quotas and hunting programs can be established. Resource assessments should be objective, well documented, and use the best science available. Adaptive management of quotas and programs based on the results of resource assessments and monitoring is essential. The program should monitor hunting activities to ensure that quotas and sex/age restrictions of harvested animals are met. The program should also generate reliable documentation of its biological sustainability and conservation benefits.

(e) *Accountable and Effective Governance:* A biologically sustainable trophy-hunting program should be subject to a governance structure that clearly allocates management responsibilities. The program should account for revenues in a transparent manner and distribute net revenues to conservation and community beneficiaries according to properly agreed decisions. All necessary steps to eliminate corruption should be taken and to ensure compliance with all relevant national and international requirements and regulations by relevant bodies such as administrators, regulators and hunters.

We explained in our final rule revising the 4(d) Rule for the African elephant, 81 FR 36388, 36394 (June 6, 2016) that, "[w]hen a trophy hunting program incorporates the following Guiding Principles, IUCN considers that trophy hunting can serve as a conservation tool: Biological sustainability; net conservation benefit; socio-economic-cultural benefit; adaptive management—planning, monitoring, and reporting; and accountable and effective governance. We support this approach."

Basis for Finding for African Elephants in Zambia:

In December 2012, the Service made a positive enhancement finding for the import of sport-hunted elephant trophies from Zambia. The Government of Zambia subsequently suspended elephant hunting from 2013 to 2014. In 2015, information arose that the suspension of the elephant sport-hunting program in Zambia had been lifted. On March 4, 2015, the Service sent a letter to the Zambian Department of National Parks and Wildlife (DNPW)[1] with a list of questions that would aid the Service in evaluating the overall conservation and management of African elephants in Zambia and confirm if a sport-hunting season for elephants had been opened for 2015. In response to our March 4, 2015, letter, DNPW provided a letter on April 28, 2015, that laid out current legislation governing elephant management, an explanation for the elephant sport-hunting suspension, and clarification of the 2015 elephant sport-hunting quota. In addition, on April 30, 2015, they provided a copy of Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia (March 2015), as well as a list of responses to the questions in our March 4, 2015, letter. On December 22, 2015, DNPW sent the Service additional information about an apparent increase in the elephant population in the Kafue area and a comparison of population estimates in 2008 compared to 2015. In addition, DNPW sent an updated version of the Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia (July 2015), a preliminary report of the Dry Season Survey of Large

[1] At the time the letter was sent, the wildlife department was called the Zambia Wildlife Authority (ZAWA).

Herbivores for Kafue and Luangwa Ecosystems (2013), and the 65th Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Standing Committee Meeting Summary. At the Safari Club International meeting held in Las Vegas, NV, in February 2017, the Service provided a letter to a DNPW official, requesting any new and updated information regarding the management and conservation of elephants in Zambia, as well as a list of questions that would aid the Service in making a required enhancement finding under the ESA and non-detriment finding under CITES. In response to our February 2017 letter, DNPW provided a list of responses to our questions on March 31, 2017. These aforementioned documents, relevant information obtained separately through open sources such as IUCN documents, and contained in comments received from interested parties, were the basis of this finding.

Governance of African Elephants in Zambia: The responsibility for implementing wildlife conservation laws in Zambia dates back to the 1930s or 1940s with the establishment of the Department of Tsetse, Fisheries, and Wildlife. In the late 1950s, this agency became the Department of Game and Fisheries and operated under this designation until the mid-1970s when it became the Department of National Parks Wildlife Service (DNPWS) who was responsible for the protected area network. In 1999, the Government of Zambia transformed this agency into the Zambia Wildlife Authority (ZAWA), a semi-autonomous agency responsible for the management and protection of this network, with statutory powers derived through the Zambia Wildlife Act No. 12 of 1998.

For much of the time since its inception in 1999, due partly to its semi-autonomy, ZAWA did not appear to have had adequate resources to conduct their functions fully due to a low funding capability, relying primarily on revenue from tourism, which also included sport hunting. Between 1999 and 2005, ZAWA struggled with their law enforcement capabilities. The costs associated with transforming DNPWS to ZAWA continued to affect the financial and staff allocations for law enforcement activities. Large sums of money that could have been utilized by law enforcement were apparently channeled into tasks involved in the transformation process. From the information provided to the Service when we were making our 2012 finding, between 2005 and 2008, there were shortages in work force and a need for proper staff training, as well as a lack of material resources to enable staff to carry out their duties. Although ZAWA continued to pay salaries for staff throughout the country, ZAWA appear to have had to rely largely on outside donor organizations to recover from the costs associated with its transformation from the DNPWS to ZAWA. There was a need for suitable vehicles, radios or other means of communication, field staff accommodations, uniforms, weapons and other patrol equipment. The financial resources were also inadequate in terms of providing funding for management operations and projects. One organization, the Norwegian Agency for Development Cooperation (NORAD), through the Emergency Support Programme (ESP), provided funding to cover both management and law enforcement operations, allowing ZAWA to procure uniforms, patrol equipment, boats, and vehicles for resource protection in the Western and Central regions, where a majority of the hunting areas are situated. Another organization, the United Nations Development Program (UNDP) supported the Nsumba – Mweru Wa Ntipa Ecosystem, providing vehicles to Law Enforcement, as well as funding for the preparation of general management plans for the three national parks located in this area.

On September 19, 2006, the Service provided a grant to the Wildlife Conservation Society, through the African Elephant Conservation Act (AECA), for $5,038 to provide support to village scouts in the Rufunsa GMA in southern Zambia, one of three GMAs designated for elephant sport hunting, to help strengthen conservation efforts by providing basic equipment and supplies to the community game scouts. This grant helped provide basic field equipment and rations to fourteen village scouts to improve their ability to patrol their community area outside the Lower Zambezi National Park. On September 16, 2008, the Service provided grant money to the Frankfurt Zoological Society, through the AECA, in the amount of $74,646 to provide support for law enforcement and protection of elephants in North Luangwa National Park, to better equip security teams protecting wildlife in eastern Zambia. This project was designed to provide equipment for trained ZAWA patrols in the Park, including rations for 10-day field patrols, base radios and solar equipment, handheld radios and GPS equipment for patrol teams, and conducting regular maintenance and upkeep of equipment and vehicles.

The lack of resources available to ZAWA since this transformation previously raised questions about their ability to monitor and control poaching, as well as their enforcement capabilities in addressing the ongoing illegal ivory trade within their own borders.[2] This was part of the rationale for the Service not finding that elephant hunting and the subsequent importation of trophies taken between 2005 and 2010 enhances the survival of the species. In 2011, however, it appears that the situation improved. Management of ZAWA appeared to have stabilized and funding improved. ZAWA appeared to have made efforts to improve their overall management and control. There was also evidence of an increase in the cooperation between ZAWA and community groups for the betterment of elephant management. Further, the Service reported in its 2012 finding that ZAWA has established a stronger domestic network with other law enforcement agencies to control illegal trade at the national level by collaborating with other law enforcement agencies, such as the Drug Enforcement Commission (DEC), Anti-Corruption Commission (ACC), and Zambia Police and Customs, to make numerous seizures (CITES 2010). All seizures were reported to the Elephant Trade Information System (ETIS). These improvements appear to have continued into 2012; therefore, import permits for trophies taken in 2011 and 2012 were granted.

In 2013, the Zambian government established an elephant-hunting moratorium (some trophies apparently taken before the moratorium were exported during this time, however). The moratorium was established to allow time to restructure Zambia's governance of elephant management and to carry out population surveys. The moratorium was extended through 2014 to allow additional time for evaluating the country's elephant management and population status (DNPW 2016). In 2015, after completing their evaluation, the moratorium was lifted.

[2] Documents CoP14 Doc. 53.2 ("Monitoring of Illegal Trade in Ivory and Other Elephant specimens") and CoP15 Doc. 44.1 Annex ("The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory") appear to support DMA's statement regarding ZAWA's inability to monitor and control poaching. While the number of seizures reported in ETIS were low between 2004 (CoP13) and 2009 (CoP15), the volumes of the seizures were very high (e.g., few seizures of very high quantities). The ETIS documents indicate that such occurrences are indicative of highly organized criminal activity is a major feature of the illicit ivory trade out of Zambia.

In 2015, ZAWA was disbanded and reincorporated as a government department, the Department of National Parks and Wildlife (DNPW 2016). In addition, the Zambia Wildlife Act No. 12 of 1998 was repealed, but it is the Service's understanding that the statutory instruments enacted under this act, as well as the Zambia Wildlife Regulations No. 107 of 2010, and Zambia Wildlife Regulations No. 60 of 2007, are the regulatory framework for the Zambia Wildlife Act (Wildlife Act) No. 14 of 2015, currently the main law under which elephants are protected within Zambia. Revised statutory instruments on elephant sport hunting were submitted to the Ministry of Justice, and the Service is awaiting a copy of these changes (DNPW 2017). However, the Wildlife Act is the principle legislation guiding the management of wildlife in Zambia through a system implemented and enforced by DNPW with assistance from stakeholders (DNPW 2016).

The Wildlife Act is administered by DNPW under the Ministry of Tourism. DNPW is headed by a Director, with assistant directors who command four elements of the department: Principal Warden-Operations Wildlife Law Enforcement Unit, Principal Warden-Conservation Unit, Principal Engineer Infrastructure Development Unit, and Principal Natural Resource Management Officer Community-based Natural Resource Management Unit. *The Wildlife Law Enforcement Unit* is comprised of 1,250 Wildlife Police Officers who are responsible for investigating and enforcing wildlife crimes within 236,376 km^2 of wildlife area (average 189 km^2 per officer). The Zambian government has also committed to adding an additional 850 officers by 2018 (600 new officers were reportedly added in 2016). *The Wildlife Conservation Unit* is responsible for mitigating human-wildlife conflict, facilitating wildlife officer trainings, regulating private wildlife estate operations, managing ecosystems, managing landscape conservation of certain species, and both developing and implementing park regulations. *The Infrastructure Development Unit* is responsible for construction and maintenance of infrastructures and machinery within protected areas. *The Community-based Natural Resource Management Unit* is responsible for co-managing Game Management Areas (GMAs) with local communities. Duties include providing technical support to Community Resource Boards regarding the management of human-natural resources in GMAs and open areas. This unit facilitates the election of the Community Resources Board members and the election of Village Action Groups. Responsibilities also include monitoring the use of funds disbursed to Community Resources Boards and training village scouts and Community Resources Board members.

The African elephant is a protected species under the Wildlife Act. It is a criminal offense to hunt, kill, capture, or possess an elephant without a license. The elephant is also protected under private wildlife estate legislation and statutory instruments implemented with the (now repealed) Wildlife Act of 1998 and carried over to the Wildlife Act. Additionally, in 2016, four new statutory regulations were reportedly enacted to address various aspects of elephant management to complement the operation of the new Wildlife Act. They included the Zambia wildlife regulations for granting of hunting concessions, elephant sport hunting, and conducting ecological or research wildlife assessments (DNPW 2016).

In addition to Zambia's domestic laws, it is also a Party to CITES. The African elephant in Zambia is listed in Appendix I of the Convention. As an Appendix-I species, certain criteria must be met before such species can be exported, including findings from the exporting country's CITES Management Authority that the specimen was legally acquired and the

country's Scientific Authority that the export will not be detrimental to the survival of the species in the wild. In addition, the importing country's CITES Management Authority must determine that the import is not for primarily commercial purposes and the importing country's Scientific Authority must determine that the import is not for purposes that are detrimental to the species. In their reply to our inquiry, Zambia provided a copy of their March 2015 non-detriment finding for elephants. This finding states that the CITES Scientific authority of Zambia has considered the population of elephants in Zambia and concluded "that the low level of off-take generated by trophy hunting is not detrimental to the survival [of elephants] and the amount of revenues generated by this low level of off-take are of critical importance for the conservation of the species, also because of the benefit it provides to local communities."

Current Population Status: To manage any population to ensure an appropriate population level and determine whether sport hunting is having a positive effect on the survival of African elephants, it is vital to have sufficient data on population numbers and population trends to base management decisions. Without current population data, it is not clear how one can calculate the number to offtake. Without information on population demography and mortality, it is not possible to determine accurately what impact hunting, in conjunction with other offtakes, including problem animal control and poaching, is having on Zambia's elephant population.

During the 1970s, Zambia experienced a severe decline in their elephant populations due, in part, to increased human population, conversion of land for agricultural activities, and excessive hunting for ivory. The increase in poaching brought about by international demands for ivory also contributed to this decline (CITES 2010). Since the early 1980s, most of the elephants have been restricted to National Parks, Game Management Areas and adjacent lands.

Currently, the range for the elephant in Zambia can be considered in seven subregions as follows: Luangwa Valley system, Mid/Lower Zambezi system, Kafue system, Mosi oa Tunya, Sioma - upper Zambezi system, Bangweulu system, Nsumbu – Mweru wa Ntipa, Lusenga - Tanganyika system, and West Lunga system. Each of the sub regions is larger than 10,000km^2 and has a total area exceeding 200,000km^2. These elephant sub regions cover a diverse landscape and land tenure systems encompassing National Parks, Game Management Areas and some open areas creating an almost contiguous landscape in which elephants can roam between habitats (CITES 2010, Thouless et al. 2016 p. 191). Habitat varies throughout the major elephant areas, but most is dominated by miombo or mopane woodlands (CITES 2010; ZAWA 2015).

In 1982, the Government of Zambia instituted a ban on elephant sport hunting. By 1989, it was estimated that Zambia's elephant population had fallen below 18,000 from an estimated 200,000 in the 1970s (CITES 2002). In the 1990s and 2002, Zambia's elephant population was estimated to be 22,000 and 25,000, respectively, indicating a stable and/or increasing population (CITES 2010). As a result, in 2005, elephant sport hunting, which had been banned since 1982, was re-opened. Under the Zambia Wildlife Act, the sport hunting of elephant was authorized for non-commercial purposes. According to a DNPW's April 28, 2015, e-mail, elephant sport hunting was again suspended from 2013 to 2014, as the Zambian Government was interested in ascertaining the status of wildlife populations in the Game Management Areas where hunting occurs.

Aerial population surveys conducted in 2008 covered approximately 166,712.51 km^2 of the major elephant range, representing about 80% of the total range and resulted in a population estimate of 26400 ± 4400 elephants, indicating a stable population in reference to previous estimates of 2002 and the 1990s when estimates were 25000±3000 and 22000±3000 elephants respectively. In 2013, a survey conducted by DNPW (then ZAWA) in the Kafue and Luangwa Ecosystems alone revealed a population of 9,594 and 22,112 respectively, for a total of approximately 32,000 animals (ZAWA 2013). In a December 22, 2015, e-mail, DNPW provided a possible explanation for the elephant increase in the Kafue area, noting more areas were surveyed in 2013 than 2008, increased average sampling intensity, and influx of elephant groups from Sioma Ngwezi and west Lunga to Kafue.

The Government of Zambia's proposal for the 15th meeting of the CITES Conference of the Parties (CoP 15 - Doha, Qatar, March 2010) to transfer its elephant population from Appendix I to Appendix II, contained a report on the illegal killing of elephants indicating that between 2002 and 2008, there were 327 elephants illegally killed. Although elephant poaching trends indicated an increase in poaching levels, the estimated illegal annual off-take was said to be less than 0.3% of the elephant population estimates. The increasing trend in elephant poaching was attributed to increased poaching levels in Lower Zmbezi and areas of the Luangwa Valley system where resources for law enforcement were considered inadequate. The high level of human-elephant conflicts taking place in these areas also exacerbated elephant poaching. Over 67% of problem elephant reports involved crop and property damages, as well as human injuries and deaths (CITES 2010). However, there was no information given on the number of animals taken during this same timeframe in relation to problem animal control measures undertaken by ZAWA, leading to a potential increase in the percentage of annual off-take from both illegal and problem animal control activities.

In 2014, the Pan African Aerial Elephant Survey (http://www.greatelephantcensus.com/), or the Great Elephant Census (GEC), was carried out over a significant portion of the savanna elephant's range in Africa. The GEC developed standardized survey methodology to establish a consistent continent-wide population basis line. The 2014 survey that was part of the Great Elephant Census, covering nearly 85,000 km^2 in the Luangwa, Kafue, Sioma, and Lower Zambezi ecosystems, revealed the elephant population in Zambia to be an estimated 21,760 ± 4,523 (DNPW 2016, GEC 2016); this was not significantly different from the 2008 estimate, and may not have accounted for elephants in Sioma-Ngwezi that regularly migrate into neighboring countries during the dry season. However, this is a decrease of about 10,000 animals since the 2013 survey. Thouless et al. (2016) reports an estimate of 21,967 ± 4,704, although this contains 214-314 educated guesses from areas not systematically surveyed.

Carcass ratios may help indicate present levels of poaching in different areas; a carcass ratio of 2-8% is indicative of stable or increasing populations, while a ratio of over 9% indicates a declining population (Douglas-Hamilton & Hillman 1981, Douglas-Hamilton & Burril 1991). The 2008 aerial survey apparently showed low carcass ratios in Kafue (0.97%), Luangwa (1.57%) and Upper Zambezi (3.20%), with Lower Zambezi (>5%) as the only exception (CITES 2010); these ratios indicate stable or increasing populations. The 2015 survey showed decreased

carcass ratios from the 2008 survey in Luangwa (1.2%), but an increased ratio in Kafue (7.02%), and Lower Zambezi (6.3%); it is possible that not all carcasses were counted in the survey, and these percentages are higher in reality. While these ratios are still considered sustainable, several poaching camps were detected: six in Kafue, two in South Luangwa, one in North Luangwa, and one in Lower Zambezi National Parks. GEC (2016), as well as DNPW (2016), report 85% and 85.5% carcass ratios in Sioma Ngwezi National Park, respectively, with the rest of Zambia being a 3% overall ratio (GEC 2016). For Sioma Ngwezi, this ratio suggests a recent or ongoing problem of illegal hunting, which has led to a loss of most of the original population (DNPW 2016). However, this National Park makes up a small proportion of the national population (Thouless et al. 2016). With the help of World Wide Fund for Nature (WWF) and the Peace Parks Foundation, DNPW recruited an additional 30 rangers and built new housing for them in Sioma Ngwezi, with the intent of aiding anti-poaching efforts in the National Park (DNPW 2017).

According to Thouless et al. (2016), Zambia's elephant population appears to be relatively stable apart from losses in the southwest of the country, which amounts to approximately 2% of the overall population. Available range also appears to be increasing due to the Southern African Development Community (SADC) Trans-Frontier Conservation Areas[3] (TFCAs) initiative, and law enforcement representation in major protected areas has led to a rise in arrests from poaching incidents.

It is possible that population fluctuations in Lower Zambezi could be explained by the movements of elephants between Zambia, Zimbabwe, and Mozambique. Additionally, most of the subpopulations within Zambia are contiguous with populations in neighboring countries, hence the formation and implementation of the modern concept of TFCAs in southern Africa to promote the maintenance of movement corridors for elephants between countries in the region (CITES 2010). A main goal for TFCAs is to make fragments of protected areas in adjacent countries interconnected in order to "facilitate and enhance the free movement of animals across international boundaries" (NASCO, undated). A memorandum of understanding regarding the establishment of Kavango Zambezi (KAZA) TFCA, which stretches into southwestern Zambia, was signed in December 2006. A master integrated development plan (IDP), which is a five-year strategy that began in 2014 to steer development of the TFCAs at a regional level, was approved by partner countries in 2015 (PPF, undated). Protected Areas alone cover approximately 27% of Zambia in the form of National Parks and Game Management Areas (Thouless et al. 2016). With TFCA initiatives in and around Zambia, elephant habitat is growing due to the increased interconnectedness of protected areas in neighboring countries.

Human settlements and activities appear to be impacting the distribution of elephants, especially in southern portions of the Kafue ecosystem and Sioma-Ngwezi ecosystem (DNPW 2016). The primary risks to the long-term survival of the elephant in Zambia appear to be increasing human-elephant conflict, loss of habitat for agriculture use, and poaching. Zambian law requires that the government is responsible to the rural communities by conserving wildlife resources for the benefit of its people (CITES 2010). There were 10 and 16 elephants killed through problem

[3] TFCAs were founded through SADC with the aim of collaboratively managing shared natural and cultural resources across international boundaries for improved biodiversity conservation and socio-economic development. http://www.sadc.int/themes/natural-resources/transfrontier-conservation-areas/

animal controls in 2015 and 2016, respectively. In that same time period, poaching occurred in Lower Zambezi, Sioma, South Luangwa, Lukusuzi, and Kafue National Parks as well as Rufunsa, Chiawa, West Petauke and Mulobezi Game Management Areas (GMAs). In 2015, 168 elephants were reported as being poached, and 155 were reported in 2016; there were 50 fresh and 22 recent carcasses recorded in national parks and GMAs across the country in recent patrols, indicating a need to address possible poaching (DNPW 2017).

African Elephant Management in Zambia: Zambia elephant hunting occurs in Game Management Areas (GMAs) and Open Game Ranches (OGRs). OGRs are unfenced private lands reserved for the wildlife conservation management of an individual or local community and are buffered by GMAs. DNPW issues annual non-resident hunting quotas to the OGRs in exchange for managing the wildlife; although all animals remain the property of the State (DNPW 2016).

GMAs are primarily designated for safari (tourist) and resident hunting, but some GMAs also include photographic tourism. There are 36 GMAs in Zambia covering 177,404 km^2 (DNPW 2016). Most, but not all, GMAs have General Management Plans outlining basic management practices. All 20 of Zambia's national parks are surrounded by GMAs, but currently, elephant hunting only occurs within hunting blocks located in the GMAs that surround the National parks in the Luangwa and Lower Zambezi ecosystems. In 2015, DNPW stated that it was their policy that GMAs be managed with the guidance of management plans. At that time, land use plans had been developed for most GMAs and National Parks. All GMAs allow settlement. Community-Based Natural Resource Management (CBNRM) is implemented within GMAs through Community Resource Boards (CRBs) (DNPW 2016). The CRBs focus on the economic and social well-being of local communities. There are currently 75 registered CRBs within Zambia that employ approximately 750 community scouts and 79 support staff.

DNPW, in consultation with the local community, is mandated to grant hunting concessions within specific hunting blocks within GMAs. Hunting concessions must be registered in Zambia, have a tourism enterprise license, have a valid tax clearance certificate, provide proof that the company is not bankrupt, and they must meet any additional conditions set by an evaluation committee (DNPW 2016). Leases are stated to range from 7 - 15 years, with the length of lease time dependent on the abundance of species classified within the individual hunting block (DNPW 2016). Prime hunting blocks have greater species abundance and are generally awarded shorter lease agreements in comparison to secondary hunting blocks. Secondary hunting blocks are generally given longer lease periods in an effort to provide incentives for the concessionaire to invest greater resources and allow wildlife populations to increase before offering hunting (DNPW 2016).

Hunting block concessions are awarded through a bid process in accordance with the Zambia Public Procurement Act No 12 of 2008. Bids are taken from companies through a "two envelop system." The bids consist of a technical proposal and a financial proposal being placed in separate clearly marked envelopes. The technical bid is required to be evaluated by criteria outlined in Zambia's Wildlife Act before the envelope containing the financial bid is opened. Financial envelopes will only be opened for bidders that received meet a specific technical

expertise (e.g., a score of over 80 on the established criteria). The lease is awarded to the bidder that qualified with a minimum technical rating of 80 and whom submitted the highest financial bid (DNPW 2016).

Successful bidders must address statutory obligations to communities and provide enforcement contributions when developing Concessionary Agreements. Concessionary Agreements are developed through a partnership between the communities, safari operators, professional hunters, and DNPW. As such, a hunting concession agreement is not valid without the signature of the Chief(s) or CRB associated with the hunting block (DNPW 2016). Concessionaires are required to use collected fees to support resource protection by providing community scouts, vehicles, fuel, patrols, and equipment. They must provide infrastructure development to local communities and also offer resource monitoring and fire management. Some concessionaires further benefit community development by supporting the employment of teachers and nurses, purchasing ambulances, building classrooms and clinics, and providing houses for teachers and health personnel. Moreover, they are mandated to provide 50% of the meat from hunted animals to the local community. Concessionaires are evaluated annually and those that do not comply with their obligations can have their concession terminated before the end of the agreement's term (DNPW 2016).

According to an April 30, 2015, e-mail, Zambia is managing its elephant population using the 2005 National Strategy for Elephant Management in Zambia (However, this management plan is under review, with a new strategy scheduled for release in late 2017). DNPW has implemented several actions in the Elephant Management Plan, including but not limited to, building and implementing a management system for a central strong room for ivory, coordination of elephant management in TFCAs, carrying out Monitoring Illegal Killing of Elephants (MIKE) and Spatial Monitoring and Reporting Tool (SMART) systems in protected areas, as well as the improvement of funding. ZAWA's reincorporation as DNPW now allows the government to pay DNPW staff salaries while allowing the department to retain all revenue, which has improved resources for anti-poaching efforts. One hundred and sixty-eight elephants were reported to have been poached in 2015 and another 155 in 2016 (DNPW 2017). The government allocates K40 million (USD3.8 million) to DNPW annually, of which 75% is used for anti-poaching. The level of effort to curb poaching increased after the Presidential order for all security wings (Zambia Army, Air force, National Service, Police, Intelligence, Department of National Parks and Wildlife) to be involved in anti-poaching efforts. This led to increased number of man-days spent on patrol as well as the number of poaching arrests (DNPW 2017).

A major threat to the survival of elephants in Zambia appears to be increasing human-elephant conflicts. An increase in human elephant conflicts may imply that the species will continue to reclaim its former range; however, human settlements continue to expand in the GMAs and human-elephant conflicts will continue to be a management challenge (CITES 2010). From 2012 to 2014, there were 1,780, 2,400, and 1,261 reported human elephant conflicts, respectively (ZAWA 2015). A total of 26 elephants were killed through controls 2015-2016 (DNPW 2017 pers. comm., March 31). DNPW (ZAWA 2015) notes that an integrated elephant control approach is better than any single method. It is believed, however, that poor perception of elephants by HEC-affected communities could be counteracted if elephants are perceived to have value (CITES 2010).

Hunting and Utilization: Sport hunting of elephants, banned in Zambia between 1982 and 2004, was re-opened in 2005 under the Zambia Wildlife Act (Act No. 12 of 1998/Statutory Instrument No. 40 of 2005), authorizing the sport hunting of elephants for non-commercial purposes. From 2005 through 2010, the export quota was set at 20 elephants annually (Thouless et al. 2016). This quota apparently did not include elephants taken as part of problem elephant control. In 2011 and 2012, the export quota was increased to 80 elephants (Thouless et al. 2016). This quota, however, including hunting of problem animals involved in human-elephant conflicts (ZAWA 2015). In a letter to the Service, dated April 28, 2015, ZAWA explained elephant hunting had again been suspended in Zambia from 2013 to 2014. The Zambian Government was interested in ascertaining the status of wildlife populations in the Game Management Areas where hunting is done (ZAWA 2015, pers. comm., April 28). After re-opening elephant hunting in 2015, Zambia again established a quota of 80 individuals per year for trophy hunting for noncommercial purposes. The level of sport hunting appears to be based largely on the 0.5% of standing population guideline (Martin 1986 and 2005).

While Zambia has established an export quota under CITES of 80 animals (160 tusks), the actual hunting quota has been established at a lower level. In 2015, different reports indicated that the hunting quota was set at 36 elephants (ZAWA 2015) and 12 elephants (DNPW 2017). However, DNPW (2017) reported that only three elephants were harvested that year. In 2016, the hunting quota established at 30 sport-hunted elephants, but only 12 elephants were harvested; all were males. The elephant-hunting quota for 2017 was again set at 30 (DNPW 2017). Only hunting blocks located in the Luangwa and Zambezi Valley have allocated elephants to hunt. It is unclear if private wildlife estates are also regarded as private concessions in Zambia; ZAWA (2015) notes that there is no private hunting concession done by local communities, however, hunting is permitted in private wildlife estates. According to DNPW, hunting quotas are now set based on population size, distribution, trophy quality, occurrence of human-elephant conflicts, and demand from the community or outfitter. However, it does not exceed 1% of the total population. Hunters that harvest elephants with underweight tusks (below 15kg) are penalized; the average trophy weight for 2015-2016 was 19.2kg (DNPW 2017).

The information used to by develop quotas includes data from ground counts, patrol sightings, local and expert opinion, and hunting monitoring. CRBs use the information they collect to determine what the maximum hunting quota could be in GMA managed by them. Their proposals are submitted to DNPW for approval. Once a proposal is received, DNPW accepts feedback from field staff and safari hunting outfitters, before the quotas are approved by the Wildlife Conservation and Management Unit. The quotas are then distributed by DNPW's Licensing Unit to the CRBs and hunting companies. DNPW is required to share the approved quotas with other government agencies, including the Auditors General Office and Anti-Corruption Commission. For 2016 and 2017, Zambia established a quota of one elephant per hunting concession. Quotas are set for individual hunting blocks within the GMAs (DNPW 2017).

Besides a professional hunter, a wildlife officer from DNPW must also accompany hunters on all hunts (DNPW 2016). The officer is responsible for recording hunt activities on specified forms such as the Safari Hunting Monitoring form and Trophy Measurement form. The officer

endorses licenses to ensure that they are not used more than once and the officer ensures that all harvested trophies are registered (DNPW 2016).

The season commences on May 1st and ends on December 31st each calendar year. According to DNPW (2017) only hunting blocks in Luangwa and Zambezi valley are allocated elephants to hunt, and it appears hunting may also take place on private game ranches.

Hunting-generated Revenue: Prior to the 1980s, wildlife management in GMAs was the sole responsibility of the Zambian Government, with little or no local community involvement or stake in the management of these wildlife resources. According to information obtained from ZAWA when evaluating Zambia's hunting program for the 2012 enhancement finding, this approach led to an escalation in the illegal harvesting of these resources. In the early 1980s, this reportedly changed with the development of the Administrative Management Design (ADMADE) program, a government initiative to guide and encourage the participation of local communities in managing wildlife in GMAs. In return for their participation in this program, the Government, under the ADMADE program, provided communities financial incentives derived from wildlife utilization in their respective areas. The revenue generated from safari hunting activities was divided in half with 50% going to the central treasury and 50% going to wildlife management.

Under the Zambia Wildlife Act No. 12 of 1998, with the transformation of the DNPWS to ZAWA, the concept of community participation in wildlife management was further advanced by providing a framework for the formation of Community Resource Boards (CRBs) in GMAs and open areas. The CRBs are local institutional bodies composed of elected community representatives, as well as representatives of the Chief and the local authorities, providing a link between the central government and local communities. In many rural areas where elephants exist in Zambia, there has been a steady rise in human-elephant conflicts that in turn creates a negative attitude toward elephant conservation efforts. This is of great relevance in rural communities where livelihoods are most affected by the presence of elephants (CITES 2010). Through this community-based approach to natural resource management, the creation of CRBs in designated GMAs is intended to give local communities a direct say in how these areas are managed and operated.

In 2008, a letter was sent to the Director General of ZAWA requesting a detailed accounting of the amount of funds generated in a given year associated with safari hunting, and details on how those funds were allocated and spent. The Service received a response that each CRB operated a bank account where the 50% allotment of funds accrued from wildlife hunting was deposited. The administration of these accounts was supervised by the Auditor General's Office. According to this response, between 2005 and 2007, a total of 44 elephants were taken in the four hunting blocks through licensed safari outfitters. The total income generated from this activity was $594,000, with $297,000 being the community share. Of that total income, 5% was paid to the Chiefs as the patrons of the CRBs. The remaining $267,300 was paid to the CRBs, with revenue amounting to $120,285 spent on wildlife management within the GMAs, $93,355 spent on community projects, and $53,460 spent on CRB administrative activities. While a detailed breakdown was received for several of the hunting blocks and the community projects undertaken with this funding, an accounting of the revenue ZAWA received during this same

timeframe, and how it was utilized to further elephant conversation and management programs within Zambia, was not provided. This puts into question whether the revenue ZAWA collected from elephant sport hunting during this timeframe in any way furthered Zambia's efforts to establish a sustainable management program for elephants. These questions persisted until 2011 leading, in part, to the Service being unable to make a positive enhancement finding for the import of elephant trophies from Zambia.

In 2011, through ongoing discussion with the Zambian government, additional information on what percentage of elephant hunting revenue retained by ZAWA went towards activities involving elephant management, protection, and conservation in the National Parks and GMAs. Hunting fees for all species accounted for 32% of revenues that ZAWA received during 2010 - 2012. With improved accounting of received revenue and how it was being utilized, along with other factors being considered at that time, the Service was able to make a positive enhancement finding in 2012. However, that amount was reduced to about 4% during the 2013 and 2014 moratorium (DNPW 2016). Safari hunting creates other revenue for Zambia during this time, including activities such as tipping, eating in restaurants, staying at lodges, purchasing souvenirs, and paying for taxidermy. However, with the voluntary moratorium placed on elephant hunting by the Zambian government in 2013 and 2014, the Service did not request or receive any additional information from Zambia on revenue generated through hunting during this time.

With the lifting of the moratorium in 2015, the transition of ZAWA into DNPW, and renewed discussion between the Service and the Zambian government, there is a better understanding of the revenue generated and how it is distributed. According to DNPW (2016), they receive revenue by charging GMA fees per elephant hunt. They also receive funds from annual professional hunter fees, certificate of valuation of trophies fees, certificate of ownership of trophies fees, permit fees, handling fees, and CITES security stamp fees. Hunting license fees in Zambia are statutory. The foreign hunter looking to take an elephant must pay the fee directly to the outfitter, with the minimum amount currently set at $4,200. DNPW collects these fees from the outfitter/concession and does not deal with the foreign hunter directly. Therefore, the outfitter may choose to charge the foreign hunter any amount greater than $4,200. The revenue generated from license fees (also referred to as Animal fees by DNPW) is mandated to be shared with CRBs under the Zambia Wildlife Act No. 14 of 2015. The fees are shared with CRBs and DNPW as follows:

License fees (animal fees):

- 5% of funds go to the CRB chief/leader.
- 45% of funds go to CRB community funds.
    - According to Zambia's "Guideline on the use of Community funds accrued from wildlife management", 45% of these community funds should go to wildlife protections and patrols, 35% should go to community projects such as constructing clinics, roads, schools, and wells, and 20% of the funds should go towards CRB administration costs.
- 50% of funds go to DNPW (mandated under the *Zambia* Wildlife Act No. 12 of 1998 and continued in the Wildlife Act) in the form of conservation funds, including, but are not limited to: scout/wildlife officer salaries, resource protection, consultancy and legal fees,

animal surveys, staff training, administrative and operational expenses, repair and maintenances, and other conservation expenses.

According to Zambia's hunting guidelines, hunts involving elephants are required to be a minimum of 21 days (DNPW 2016). A daily conservation fee of $150 per hunter and $100 per observer is collected for monitoring purposes (DNPW 2016). These daily hunt fees typically cover combined hunt packages that include hunting elephant, along with other species such as hippos and impalas. The fees are allocated by percentages to CRBs and DNPW as follows:

Daily fees (Concession fees):

- 5% of funds go to the CRB chief/leader.
- 15% of funds go to CRB community funds.
    - Based on recommended guidelines, 45% of these community funds go to wildlife protections and patrols, 35% goes to community projects such as constructing clinics, roads, schools, and wells, and 20% of the funds go to CRB administration costs.
- 80% of funds go to DNPW in the form of conservation funds, including, but are not limited to: scout/wildlife officer salaries, resource protection, consultancy and legal fees, animal surveys, staff training, administrative and operational expenses, repair and maintenances, and other conservation expenses.

A total of USD150,000 was raised from elephant sport hunting in 2015-2016. As per Zambia's approved budget, DNPW retains all revenue from elephant sport hunting and distributed it proportionately to the CRBs and DNPW (DNPW 2017). Community funds have been used for instances such as paying children's school fees and repairing classrooms and health centers. Current concession agreements require at least 80% of outfitter's employees be from local communities; outfitters also share 50% of meat from elephant hunting with the local communities as well as provide agricultural produce (DNPW 2017). As such, communities in wildlife areas are eager to conserve elephants as they earn income from doing so, both directly and indirectly.

Evaluation:

As explained earlier in General Considerations, the Service evaluates a number of factors to determine whether the killing of the trophy animal taken in a range country will enhance the survival of African elephants under 50 CFR 17.40(e)(6)(i)(B). The Service evaluates applications in accordance with the African elephant 4(d) rule and the permit issuance criteria outlined in 50 CFR 17.32(a)(2). In evaluating each of these criteria the Service has considered the information currently available to the Service as of the date of this finding on elephant hunting in Zambia, including information provided by the Government of Zambia, current applicants to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service. In accordance with the regulatory requirements, the Service is able to make a determination that the killing of the trophy animal in Zambia, on or after January 1, 2016, and on or before December 31, 2018, will enhance the survival of the African elephant. Therefore, with the information currently available, applications to import

trophies hunted during this time period will be considered to have met this requirement unless we issue a new finding based on available information. In accordance with the 4(d) rule for the African elephant, 50 CFR 17.40(e), the Service will review each application received for import of such specimens on a case-by-case basis and each application also needs to meet all other applicable permitting requirements before it may be authorized. On an ongoing basis and as it evaluates each application, the Service will continue to monitor the status of the elephant population, the total management program for elephants in the country to ensure that the program is promoting the conservation of the species, and whether the participation of U.S. hunters in the program provides a clear benefit to the species. Accordingly, the Service may modify its determination based on available information consistent with the regulatory requirements. Further discussion for each of the criteria follows:

17.32(a)(2)(i): Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit:

Communities that bear the burden of dealing with problem elephants are more likely to support the conservation of the species as a whole if they benefit from them in some way. Sixty-seven percent of problem elephant reports involve crop and property damages; however, many community projects are made possible by encouraging the conservation and sustainable sport hunting of elephants, as Zambia has a scientifically based quota system. In addition, the TFCA initiative is linking several protected areas across international borders, which promotes regional support of elephant conservation and movement by expanding habitat availability.

Therefore, the purpose for which the permit is required is adequate to justify removing elephants from the wild or otherwise changing the status thereof.

In evaluating this criterion, the Service assesses whether the hunting program established for elephants has demonstrated the ability to contribute toward positive conservation outcomes that mitigate or improve the status of elephants throughout their range within Zambia, while addressing the main threats of habitat loss, human-elephant conflicts, and poaching.

The IUCN's 2012 Guiding principles on trophy hunting support the concept that hunting can provide a conservation benefit if it is part of a governance system that provides both implementation and enforcement at a level that adequately supports conservation. The Service also believes that conservation hunting can assist the elephant populations if managed well. Elephant hunting, if managed properly, could meet the Service's enhancement criteria under the Act. There must be adequate information and data clearly showing that removing elephants from the wild for trophy hunting will be done at a level and with sufficient oversight such that it improves the current status of elephants in the wild (50 CFR 17.32).

Zambia has demonstrated their desire to maintain the long-term conservation of their elephant population with their 2013-2014 moratorium on elephant hunting. When the Zambian government realized that population numbers were declining to an unstainable level, they applied the moratorium for 2 years, until they determined that their elephant population increased enough to tolerate a limited offtakes (DNPW 2016).

The Zambian government has done a good job of identifying how resources from hunting-generated revenue would be shared with communities. The local communities receive funds from concessions and license (animal) hunting fees. As outlined in the license fee distribution above, 35% of the funds allocated to CRBs help support community projects such as constructing clinics, roads, schools, and wells, thereby providing incentives for the local community to ensure the long-term conservation of elephants. In addition, 45% of the CRB license fees go to wildlife management, including resource protection and patrols.

Zambia's human population growth has contributed to conflicts within the GMAs. As clarified in detail on pages 16 and 17 of this document, DNPW contributes 50% of the license fees (animal fees) and 20% of the Concession fees to local communities. These financial benefits received from living in a GMA have provided incentives for newcomers to illegal squat in the GMAs looking to capitalize on the financial benefits. Consequently, the illegal squatting has caused enough conflict with local people to trigger the Zambian government to take action. In August of 2015, over 2,000 squatter households within the Mumbwa GMA were evicted so that the registered local communities could receive the full benefits of living within a conservation area (DNPW 2016). The long-term results of the eviction will need to be addressed in future analysis of Zambia's trophy hunting.

Based on the information available to the Service and provided that hunted elephants are properly permitted and in compliance with national and provincial regulations, we conclude that the purpose for which a permit being requested is adequate to justify changing the status (i.e., exporting trophy elephants) of animals taken in accordance to Zambian laws and regulations. Therefore, provided that elephants harvested in the 2016, 2017or 2018 season were properly permitted and in compliance with international, national and provincial regulations, we find that the requirements of 17.32(a)(2)(i) is met.

17.32(a)(2)(ii): <u>The probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit:</u>

The elephant population appears to be stable or increasing, apart from Sioma-Ngwezi, which makes up a small portion of the national population, and where law enforcement efforts have been increased. Zambia's sport hunting quotas also do not exceed 1% of the total population. The subsequent increase in funds provided by U.S. sport hunters would allow DNPW to further vital conservation activities for elephants and incentivize local communities to protect them.

The two separate quotas that seem to exist for elephants in Zambia are a source of some confusion. Documents provided to the Service from Zambia note that there is both an export quota under CITES, which is 80 animals (160 tusks), and hunting quotas, for which conflicting information on the 2015 quota was reported (12 elephants in DNPW (2017 pers. comm., March 31) and 36 elephants in ZAWA (2015 pers. comm., April 30)). However, if looking at the GEC (2016) population estimate, the higher quota of 80 animals does not exceed the 1% mark that Zambia appears to use as a limit and, to date, does not appear to have ever been met. Provided that the off-take of elephants continues to be monitored, the participation of U.S. hunters in elephant hunts would provide an indirect benefit to wild populations by helping to support the areas where elephants are found. Therefore, based on the information available to

the Service and provided that elephant hunting remains at a sustainable level in Zambia, the probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit would be positive.

17.32(a)(2)(iii): Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed:

Zambia said in a personal communication that they are managing the elephant population using the National Strategy for Elephant Management, and that a new version of this strategy was going to be reviewed sometime this year (in 2017). It is clear, however, from the documents provided to the Service, that Zambia is actively implementing management actions to ensure sustainable sport hunting of elephants to further their conservation in the wild.

Issuing an import permit would not in any way conflict with the Zambia Wildlife Regulations No. 60 of 2007, providing all U.S. sport hunters obtain the proper permit and provided Zambia with pertinent information related to each hunt. In Wildlife Regulations No. 107 of 2010, it is required that at least 50% of meat and 45% of profits from elephant sport hunting be given to the local community in the game management area which the hunt(s) takes place.

Therefore, based on the information currently available to the Service, the issuance of import permits for legally hunted elephants will not conflict with known conservation programs and rules.

17.32(a)(2)(iv): Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit:

In evaluating this criterion, the Service assesses whether the hunting program established for elephants is subject to a governance structure that clearly allocates management responsibilities and supports regulatory pathways in support of positive conservation outcomes. Zambia's elephant management program is based on a precautionary quota and direct community benefits (DNPW 2016).

Currently, as per Zambia’s approved budget, DNPW retains all revenue from sport hunting. A total of USD150,000 was raised from elephant sport hunting from 2015-2016. Fifty percent of animal fees, and 80% of concession fees, go to DNPW as conservation funds. This is a vital source of funding for ensuring the continued existing of elephants in the wild in Zambia; also important is the 45% of animal fees and 15% of concession fees that go to communities where the hunts take place. If local communities continue to benefit from the sport hunting of elephants, through job opportunities, funded community projects, and sharing of meat post-hunt, they will have incentive to protect it.

Therefore, based on the information available to the Service, the purposes for which import permits would be issued would likely reduce the threat of extinction facing elephants in Zambia.

17.32(a)(2)(v): The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application:

Based on our review of information obtained through personal conversations and literature, there is a general agreement that hunting, done properly and well managed, would not have an adverse effect on elephant populations. Researchers and others with substantial knowledge of elephant management have stated that, whether or not they support hunting in general, they see that benefits can be had through a scientifically based hunting program for elephants.

The IUCN Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives (Ver.1.0, August 2012) state that well-managed trophy hunting can "assist in furthering conservation objectives by creating the revenue and economic incentives for the management and conservation of the target species and its habitat, as well as supporting local livelihoods" and, further, that well-managed trophy hunting is "often a higher value, lower impact land use than alternatives such as agriculture or tourism." Lindsey et al. (2007), in their paper on the economic and conservation significance of the trophy hunting industry in sub-Saharan Africa, state their belief that, from a conservation perspective, "the provision of incentives which promote wildlife as a land use is the single most important contribution of the trophy hunting industry." In addition, they note that trophy hunting generates revenues in areas where alternatives, such as ecotourism, may not be viable. More recently, Di Minin et al. (2016) assert that trophy hunting "strongly contributes" to conservation in sub-Saharan Africa, where large areas currently allocated to use for trophy hunting support important biodiversity. They also note that, if revenue cannot be generated from trophy hunting, these natural habitats will be converted to other forms of land use. While recognizing that the degree to which trophy hunting contributes to conservation is a subject of debate, Mallon (2013), in his report on trophy hunting of CITES-listed species in Central Asia, states that "well-run hunting concessions have an economic interest in maintaining the resource (*i.e.,* conserving the species) so will also aim to manage the area to conserve high-quality habitat that supports high numbers of the hunting species, and also to prevent unregulated use by others (poaching, overgrazing)." Naidoo et al. (2015) describe the complementary benefits of tourism and hunting to communal conservancies in Namibia.

We have reviewed a number of comments from NGOs and the public opposing hunting any elephants. This opposition, however, is primarily based on the perceived ethics of hunting. While these comments are an indication of concerns from some members of the public over hunting, they are not germane to our review process.

Therefore, based on the information available to the Service, there is general support for scientists and other persons or organizations having expertise concerning elephants that the legal well managed, science-based harvest of elephants, and the subsequent import of these trophies, would not have an adverse effect on the species, but would further efforts to conserve the species in the wild into the future.

17.32(a)(2)(vi): Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application:

Based on our understanding of the hunting program within Zambia, U.S. hunters must be accompanied by a professional hunter on land that is being managed by the landowner, concessionaire, or representatives of the communal land where the hunt occurs. Although the U.S. hunter may not have the expertise to ensure adequate and proper management of elephants on that land, the professionals associated with the hunt have the expertise and resources to successfully accomplish DNPW management goals. Along with oversight established by the DNPW, there are expertise and facilities available to U.S. hunters to accomplish the stated objective of their application that the killing of an elephant in Zambia whose trophy is intended for import into the United States would enhance the survival of the species in the wild. Therefore, based on the information available to the Service, that applicants that are hunting on properly permitted reserves that carry out their management practices in accordance with national and provincial regulations, have the expertise, facilities, or other resources available to them to successfully accomplish the objective of their application; i.e., the long-term survival of elephants in Zambia. In its evaluation of each application, the Service will further ensure that this criterion, along with the other criteria, is met by each applicant before issuing an import permit.

Conclusion:

Sport hunting of elephants is integral to ensuring the long-term survival of this species in Zambia; funding provided by U.S. sport hunters will further aid in the implementation of conservation objectives and the realization of community projects. These reasons, as well as the implementation of a scientifically based quota system, and clear regulations provided in Wildlife Regulations No. 107 of 2010, have enabled the Service to determine that **permits for sport-hunted elephants taken from Zambia on or after January 1, 2016 and on or before December 31, 2018 meet the enhancement requirements under 50 CFR 17.32 and 50 CFR 17.40(e)(6)(i)(B).**

The Service may replace this finding at any time that this finding no longer reflects the available information consistent with the regulatory requirements. While the Service is currently satisfied that U.S. hunters taking elephants in Zambia at this time and the subsequent import of such trophies meets the enhancement requirements, there are several areas where additional information and follow-up would be required before the Service could make another finding for the 2019 hunting season and beyond. Specifically, the Service would like to receive an update on the status of revision to the 2005 National Strategy for Elephant Management in Zambia that was scheduled for release in late 2017. While DNPW provided an accounting of the amount of revenue generated through elephant hunting in 2015 and part of 2016, additional information on 2017 revenue would be needed. The same would be true for 2018 revenue when such data is available. Further, current information on the success of CBR's implementation of elephant management and how DNPW addressing poaching, human-elephant conflicts, and increasing human populations would be needed before future findings could be completed. The Service will formally reach out to Zambia in the beginning of 2018 to request such information.

REFERENCES:

CITES (2002). Consideration of Proposals for Amendment of Appendices I and II. Prop. 12.9.

CITES (2007). Monitoring of Illegal Trade in Ivory and other Elephant Specimens. CoP14 Doc. 53.2.

CITES (2009). The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory. CoP15 Doc. 44.1.

CITES (2010). Consideration of Proposals for Amendment of Appendices I and II. Fifteenth meeting of the Conference of the Parties.

DNPW (2016), *The 2015 Aerial Survey in Zambia. Population Estimates of African Elephants (Loxodonta africana) in Zambia. Vol. 1.* Chilanga, Zambia.

Douglas-Hamilton I. & A. Hillman (1981). Elephant carcasses and skeletons as indicators of population trends in low-level aerial survey technique. ILCA Monograph.

Douglas-Hamilton I. & A Burril (1991). Using carcass ratios to determine trends. In: Proceedings of the International symposium on African Wildlife: Research and Management.

Government of Zambia (2010). Zambia Wildlife (Elephant Sport Hunting) Regulations.

Government of Zambia (2015). The Zambia Wildlife Act.

Great Elephant Census (GEC) (2016). The Great Elephant Census: Country-by-Country Findings.

IUCN Species Survival Commission (2012). Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives, Ver. 1.0. IUCN SSC 2012.

Martin, R.B. (2005). Elephants. Transboundary Mammal Project. Ministry of Environment and Tourism. Windhoek, Namibia.

Martin, R.B. (1986). Establishment of African ivory export quotas and associated control procedures. Report to CITES Secretariat.

Namibian Association of CBNRM Support Organizations (NACSO). Trans frontier conservation areas.

Peace Parks Foundation (PPF). Kavango Zambezi: Background and Progress.

Republic of Zambia (undated). Game Management Areas. Web: http://www.mota.gov.zm/index.php/features/tourism-information/wildlife/game-management-areas

Thouless, C.R., H.T. Dublin, J.J. Blanc, D.P. Skinner, T.E. Daniel, R.D. Taylor, F. Maisel's, H.L. Frederick and P. Boucher (2016). African Elephant Status Report 2016: an update from the African Elephant Database. Occasional Paper Series of the IUCN Species Survival Commission, No. 60 IUCN / SSC Africa Elephant Specialist Group. IUCN, Gland, Switzerland. vi + 309pp.

USFWS (2016) Final rule on revision of 4(d) rule for *Loxodonta africana*. 81 Fed. Reg. 36387.

USFWS (2015) Proposed revision of 4(d) rule for *Loxodonta africana*. 80 Fed. Reg. 45154.

World Bank (2016). Official exchange rate (LCU per US$, period average) – Zambia. Web: http://data.worldbank.org/indicator/PA.NUS.FCRF?locations=ZM&page=5

ZAWA (2013). Preliminary Report: Dry Season Survey of Large Herbivores for Kafue and Luangwa Ecosystems.

ZAWA (2015). Enhancement and Non-Detriment Findings for African Elephant Sport Hunting in Zambia.

Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia (March 2015), as well as a list of responses to the questions in our March 4, 2015, letter. On December 22, 2015, DNPW sent the Service additional information about an apparent increase in the elephant population in the Kafue area and a comparison of population estimates in 2008 compared to 2015. In addition, DNPW sent an updated version of the Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia (July 2015), a preliminary report of the Dry Season Survey of Large Herbivores for Kafue and Luangwa Ecosystems (2013), and the 65th Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Standing Committee Meeting Summary.

the 4(d) Rule for the African elephant, 81 FR 36388, 36394 (June 6, 2016)

In response to our February 2017 letter, DNPW provided a list of responses to our questions on March 31, 2017.

In response to our March 4, 2015, letter, DNPW provided a letter on April 28, 2015, that laid out current legislation governing elephant management, an explanation for the elephant sport-hunting suspension, and clarification of the 2015 elephant sport-hunting quota. In addition, on April 30, 2015, they provided a copy of Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia (March 2015), as well as a list of responses to the questions in our March 4, 2015, letter. On December 22, 2015, DNPW sent the Service additional information

(DNPW 2016).

DNPW 2017

NASCO, undated

DNPW 2016

April 30, 2015, e-mail, Zambia

United States Department of the Interior

FISH AND WILDLIFE SERVICE
International Affairs
5275 Leesburg Pike, MS: IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA

Memorandum

To: The File

From: Chief, Branch of Permits

Subject: Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zambia On or After January 1, 2016 and On or Before December 31, 2018

The African elephant (*Loxodonta africana*) is listed as threatened under the U.S. Endangered Species Act (ESA) and is regulated under section 4(d) special rule [50 CFR 17.40(e)]. The 4(d) special rule provides the requirements for the import of sport-hunted trophies. Under paragraph 17.40(e)(6)(i)(B), in order for the U.S. Fish and Wildlife Service (Service) to issue a threatened species permit under 50 CFR 17.32 authorizing the import of a sport-hunted elephant trophy, the Service must make a determination that the killing of the trophy animal will enhance the survival of the species. After evaluating the available data as of the date of this finding on elephant hunting in Zambia, including information provided by the Government of Zambia, current applications to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service, under the regulatory requirements provided by 17.40(e)(6)(i)(B**), the Service is able to make a determination that the killing of the trophy animal in Zambia, on or after January 1, 2016, and on or before December 31, 2018, will enhance the survival of the African elephant.** Applications to import trophies hunted during this time period will be considered to have met the enhancement requirement unless we issue a new finding based on available information. The Service may replace this finding at any time that this finding no longer reflects the available information consistent with the regulatory requirements. The Service reviews each application received for import of such specimens and evaluates the information provided in the application as well as other information available to the Service on the status of the elephant population and the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

General Considerations:

In evaluating whether the killing of the trophy animal will enhance the survival of African elephants in accordance with 50 CFR 17.40(e)(6)(i)(B), the Service considers the permit issuance criteria outlined in 50 CFR 17.32(a)(2). These include, in addition to the general permitting criteria in 50 CFR 13.21(b):

(i) Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit;

(ii) The probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit;

(iii) Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed;

(iv) Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit;

(v) The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application; and

(vi) Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application.

As with all permit applications submitted under 50 CFR 17.32(a), the individual requesting authorization to import a sport-hunted elephant trophy bears the burden of providing information in their application showing that the activity meets the requirements for issuance criteria under 50 CFR 17.32(a). In some cases, such as for import of sport-hunted trophies, it is not always possible for the applicant to provide all of the necessary information needed by the Service to make a positive determination under the Act to authorize the activity. In such cases, the Service may consult with the range country and other interested parties to the extent practicable to obtain necessary information. The Service has the discretion to make the required findings on sport-hunted elephant trophy imports on a countrywide basis, although individual import permits will be evaluated and issued or denied for each applicant. While the Service may make enhancement findings for sport-hunted elephant trophy imports on a countrywide basis, the Service encourages the submission of information from individual applicants. We rely on the information available to the Service and may rely on information from sources other than the applicant when making a permitting decision.

Neither the African elephant 4(d) rule nor 50 CFR 17.32(a)(2) specify what would constitute the enhancement of survival of a species regarding the authorization for the importation of an African elephant sport-hunted trophy. Therefore, when making a determination of whether the killing of the trophy animal will enhance the survival of African elephants, the Service examines the overall conservation and management of the species in the country where the specimen originated and whether that management addresses the threats to the species (*i.e.,* that it is based on sound scientific

principles and that the management program is actively addressing the current and longer term threats to the species). In that review, we evaluate whether the import contributes to the overall conservation of the species by considering whether the biological, social, and economic aspects of a program from which the specimen was obtained provide a net benefit to the species and its ecosystem.

As stated in previous findings, in evaluating whether the killing of the trophy animal will enhance the survival of African elephants within a country, the Service looks at a number of factors. We evaluate whether a country has a valid national or regional management plan and if the country has the resources and political will to enact the plan. If there is a plan, what government entities implement the plan and how often is it reviewed and updated? Does the plan have clear, achievable objectives? Are the objectives measurable and are they being achieved? Is there an adaptive management approach within the plan so that enacting agencies can quickly respond to changing environmental or social issues?

The Service also evaluates the status of the elephant population within a country and trends over time. Particularly, we are interested in population numbers, sex and age-class distribution, and mortality rates (both natural and human-induced). Are standardized surveys being conducted and, if so, what are the timing, census methodology, and coverage? Since elephant populations can move across international borders, what level of cooperation is there between neighboring countries in management and surveying efforts for shared populations? How is poaching accounted for within survey efforts?

The Service takes into account all forms of offtake when evaluating population viability and sustainability, including human-elephant conflicts, problem animal control, poaching, and sport hunting. While recognizing that there may be limited resources available for elephant management, the Service considers what national policies are in place to address human-elephant conflicts and problem elephant control. Is there a policy on culling surplus animals and removal of nuisance animals? Does domestic harvesting of elephants occur for local consumption or use? The amount of protected area either set aside for elephants or managed for elephant populations and the level of protection provided are also important in the Service's evaluation of whether imports of trophies could be authorized.

Finally, the Service considers the country's sport-hunting program and whether it contributes to the conservation and management of the species. Is the hunting program scientifically based and has it been incorporated into national/regional management strategies, particularly in light of data on population numbers and trends and levels of utilization (both legal and illegal)? Are the funds generated by hunters going directly to in-situ conservation and management efforts or deposited into a general treasury fund? How are hunting quotas distributed? If there are concession areas, how are they managed and allocated? Do U.S. hunters, through their participation in the hunting program, contribute funds used to help address management needs of the species, and are those funds utilized in a meaningful manner?

In short, the Service is looking to determine if a country has sufficient numbers of elephants to support a hunting program, if the country has a management plan and adequate laws and regulations

to effectively implement a hunting program, and if the participation of U.S. hunters in the program provides a clear benefit to the species to meet the requirements for the import of sport-hunted trophies under paragraph 17.40(e)(6)(i)(B).

The Service's approach to enhancement findings for the importation of sport-hunted trophies of African elephants is consistent with the purpose and intent of the Endangered Species Act. Well-managed trophy hunting can benefit conservation by generating funds to be used for conservation, including for habitat protection, population monitoring, wildlife management programs, and law enforcement efforts. We are, of course, aware that not all trophy hunting is part of a well-managed, well-run program, and we evaluate import of sport-hunted trophies carefully to ensure that all legal requirements are met before allowing import.

We note that our approach is also consistent with the approach provided in the *IUCN Species Survival Commission (SSC) Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives, Ver. 1.0* (IUCN SSC 2012). The SSC document provides useful principles and sets out guidance from international experts in the field on the use of trophy hunting as a tool for "creating incentives for the conservation of species and their habitats and for the equitable sharing of the benefits of use of natural resources" (IUCN SSC 2012, p. 2) and recognizes that recreational hunting, particularly trophy hunting, can contribute to biodiversity conservation and more specifically, the conservation of the hunted species. The SSC document lays out the following five guiding principles:

> (a) *Biological sustainability:* The hunting program cannot contribute to the long-term decline of the hunted species. It should not alter natural selection and ecological function of the hunted species or any other species that share the habitat. The program should not inadvertently facilitate poaching or illegal trade in wildlife by acting as a cover for such illegal activities. The hunting program should also not manipulate the ecosystem or its component elements in a way that alters the native biodiversity.
>
> (b) *Net Conservation Benefit:* The biologically sustainable hunting program should be based on laws, regulations, and scientifically based quotas, established with local input, that are transparent and periodically reviewed. The program should produce income, employment, and other benefits to create incentives for reducing the pressure on the target species. The program should create benefits for local residents to co-exist with the target species and other species. It is also imperative that the program is part of a legally recognized governance system that supports conservation.
>
> (c) *Socio-Economic-Cultural Benefit:* A well-managed hunting program can serve as a conservation tool when it respects the local cultural values and practices. It should be accepted by most members of the community, involving and benefiting local residents in an equitable manner. The program should also adopt business practices that promote long-term economic sustainability.
>
> (d) *Adaptive Management: Planning, Monitoring, and Reporting:* Hunting can enhance the species when it is based on appropriate resource assessments and monitoring (*e.g.,* population counts, trend data), upon which specific science-based quotas and hunting

programs can be established. Resource assessments should be objective, well documented, and use the best science available. Adaptive management of quotas and programs based on the results of resource assessments and monitoring is essential. The program should monitor hunting activities to ensure that quotas and sex/age restrictions of harvested animals are met. The program should also generate reliable documentation of its biological sustainability and conservation benefits.

(e) *Accountable and Effective Governance:* A biologically sustainable trophy-hunting program should be subject to a governance structure that clearly allocates management responsibilities. The program should account for revenues in a transparent manner and distribute net revenues to conservation and community beneficiaries according to properly agreed decisions. All necessary steps to eliminate corruption should be taken and to ensure compliance with all relevant national and international requirements and regulations by relevant bodies such as administrators, regulators and hunters.

We explained in our final rule revising the 4(d) Rule for the African elephant, 81 FR 36388, 36394 (June 6, 2016) that, "[w]hen a trophy hunting program incorporates the following Guiding Principles, IUCN considers that trophy hunting can serve as a conservation tool: Biological sustainability; net conservation benefit; socio-economic-cultural benefit; adaptive management—planning, monitoring, and reporting; and accountable and effective governance. We support this approach."

Basis for Finding for African Elephants in Zambia:

In December 2012, the Service made a positive enhancement finding for the import of sport-hunted elephant trophies from Zambia. The Government of Zambia subsequently suspended elephant hunting from 2013 to 2014. In 2015, information arose that the suspension of the elephant sport-hunting program in Zambia had been lifted. On March 4, 2015, the Service sent a letter to the Zambian Department of National Parks and Wildlife (DNPW)[1] with a list of questions that would aid the Service in evaluating the overall conservation and management of African elephants in Zambia and confirm if a sport-hunting season for elephants had been opened for 2015. In response to our March 4, 2015, letter, DNPW provided a letter on April 28, 2015, that laid out current legislation governing elephant management, an explanation for the elephant sport-hunting suspension, and clarification of the 2015 elephant sport-hunting quota. In addition, on April 30, 2015, they provided a copy of Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia (March 2015), as well as a list of responses to the questions in our March 4, 2015, letter. On December 22, 2015, DNPW sent the Service additional information about an apparent increase in the elephant population in the Kafue area and a comparison of population estimates in 2008 compared to 2015. In addition, DNPW sent an updated version of the Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia (July 2015), a preliminary report of the Dry Season Survey of Large Herbivores for Kafue and Luangwa Ecosystems (2013), and the 65th Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Standing Committee Meeting Summary. At the Safari Club International meeting held in Las Vegas, NV, in February 2017, the Service provided a letter to a DNPW official, requesting any new and updated information regarding the management and conservation of

[1] At the time the letter was sent, the wildlife department was called the Zambia Wildlife Authority (ZAWA).

elephants in Zambia, as well as a list of questions that would aid the Service in making a required enhancement finding under the ESA and non-detriment finding under CITES. In response to our February 2017 letter, DNPW provided a list of responses to our questions on March 31, 2017. These aforementioned documents, relevant information obtained separately through open sources such as IUCN documents, and contained in comments received from interested parties, were the basis of this finding.

Governance of African Elephants in Zambia: The responsibility for implementing wildlife conservation laws in Zambia dates back to the 1930s or 1940s with the establishment of the Department of Tsetse, Fisheries, and Wildlife. In the late 1950s, this agency became the Department of Game and Fisheries and operated under this designation until the mid-1970s when it became the Department of National Parks Wildlife Service (DNPWS) who was responsible for the protected area network. In 1999, the Government of Zambia transformed this agency into the Zambia Wildlife Authority (ZAWA), a semi-autonomous agency responsible for the management and protection of this network, with statutory powers derived through the Zambia Wildlife Act No. 12 of 1998.

For much of the time since its inception in 1999, due partly to its semi-autonomy, ZAWA did not appear to have had adequate resources to conduct their functions fully due to a low funding capability, relying primarily on revenue from tourism, which also included sport hunting. Between 1999 and 2005, ZAWA struggled with their law enforcement capabilities. The costs associated with transforming DNPWS to ZAWA continued to affect the financial and staff allocations for law enforcement activities. Large sums of money that could have been utilized by law enforcement were apparently channeled into tasks involved in the transformation process. From the information provided to the Service when we were making our 2012 finding, between 2005 and 2008, there were shortages in work force and a need for proper staff training, as well as a lack of material resources to enable staff to carry out their duties. Although ZAWA continued to pay salaries for staff throughout the country, ZAWA appear to have had to rely largely on outside donor organizations to recover from the costs associated with its transformation from the DNPWS to ZAWA. There was a need for suitable vehicles, radios or other means of communication, field staff accommodations, uniforms, weapons and other patrol equipment. The financial resources were also inadequate in terms of providing funding for management operations and projects. One organization, the Norwegian Agency for Development Cooperation (NORAD), through the Emergency Support Programme (ESP), provided funding to cover both management and law enforcement operations, allowing ZAWA to procure uniforms, patrol equipment, boats, and vehicles for resource protection in the Western and Central regions, where a majority of the hunting areas are situated. Another organization, the United Nations Development Program (UNDP) supported the Nsumba – Mweru Wa Ntipa Ecosystem, providing vehicles to Law Enforcement, as well as funding for the preparation of general management plans for the three national parks located in this area.

Between 1999 and 2011, the Service provided $1,279,085 through the African Elephant Conservation Act (AECA) to a number of organizations conducting activities in Zambia. Organizations such as the Wildlife Conservation Society, Southern African Wildlife Trust, African Wildlife Trust, and South Luangwa Conservation Society have used such funds to conduct elephant crop damage control, anti-poaching, community law enforcement efforts, and addressing human-elephant conflicts. Two projects in particular include a grant in 2006 to the Wildlife Conservation Society for $5,038 to provide support to village scouts in the Rufunsa GMA in southern Zambia, one of three GMAs designated for elephant sport hunting, to help strengthen conservation efforts by

providing basic equipment and supplies to the community game scouts. This grant helped provide basic field equipment and rations to fourteen village scouts to improve their ability to patrol their community area outside the Lower Zambezi National Park. On September 16, 2008, the Service provided grant money to the Frankfurt Zoological Society, through the AECA, in the amount of $74,646 to provide support for law enforcement and protection of elephants in North Luangwa National Park, to better equip security teams protecting wildlife in eastern Zambia. This project was designed to provide equipment for trained ZAWA patrols in the Park, including rations for 10-day field patrols, base radios and solar equipment, handheld radios and GPS equipment for patrol teams, and conducting regular maintenance and upkeep of equipment and vehicles.

The lack of resources available to ZAWA since this transformation previously raised questions about their ability to monitor and control poaching, as well as their enforcement capabilities in addressing the ongoing illegal ivory trade within their own borders.[2] This was part of the rationale for the Service not finding that elephant hunting and the subsequent importation of trophies taken between 2005 and 2010 enhances the survival of the species. In 2011, however, it appears that the situation improved. Management of ZAWA appeared to have stabilized and funding improved. ZAWA appeared to have made efforts to improve their overall management and control. There was also evidence of an increase in the cooperation between ZAWA and community groups for the betterment of elephant management. Further, the Service reported in its 2012 finding that ZAWA has established a stronger domestic network with other law enforcement agencies to control illegal trade at the national level by collaborating with other law enforcement agencies, such as the Drug Enforcement Commission (DEC), Anti-Corruption Commission (ACC), and Zambia Police and Customs, to make numerous seizures (CITES 2010). All seizures were reported to the Elephant Trade Information System (ETIS). These improvements appear to have continued into 2012; therefore, import permits for trophies taken in 2011 and 2012 were granted.

In 2013, the Zambian government established an elephant-hunting moratorium (some trophies apparently taken before the moratorium were exported during this time, however). The moratorium was established to allow time to restructure Zambia's governance of elephant management and to carry out population surveys. The moratorium was extended through 2014 to allow additional time for evaluating the country's elephant management and population status (DNPW 2016). In 2015, after completing their evaluation, the moratorium was lifted.

In 2015, ZAWA was disbanded and reincorporated as a government department, the Department of National Parks and Wildlife (DNPW 2016). In addition, the Zambia Wildlife Act No. 12 of 1998 was repealed, but it is the Service's understanding that the statutory instruments enacted under this act, as well as the Zambia Wildlife Regulations No. 107 of 2010, and Zambia Wildlife Regulations No. 60 of 2007, are the regulatory framework for the Zambia Wildlife Act (Wildlife Act) No. 14 of 2015, currently the main law under which elephants are protected within Zambia. Revised statutory instruments on elephant sport hunting were submitted to the Ministry of Justice, and the Service is

[2] Documents CoP14 Doc. 53.2 ("Monitoring of Illegal Trade in Ivory and Other Elephant specimens") and CoP15 Doc. 44.1 Annex ("The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory") appear to support DMA's statement regarding ZAWA's inability to monitor and control poaching. While the number of seizures reported in ETIS were low between 2004 (CoP13) and 2009 (CoP15) (CITES 2009), the volumes of the seizures were very high (e.g., few seizures of very high quantities). The ETIS documents indicate that such occurrences are indicative of highly organized criminal activity is a major feature of the illicit ivory trade out of Zambia.

awaiting a copy of these changes (DNPW 2017). However, the Wildlife Act is the principle legislation guiding the management of wildlife in Zambia through a system implemented and enforced by DNPW with assistance from stakeholders (DNPW 2016).

The Wildlife Act is administered by DNPW under the Ministry of Tourism. DNPW is headed by a Director, with assistant directors who command four elements of the department: Principal Warden-Operations Wildlife Law Enforcement Unit, Principal Warden-Conservation Unit, Principal Engineer Infrastructure Development Unit, and Principal Natural Resource Management Officer Community-based Natural Resource Management Unit. *The Wildlife Law Enforcement Unit* is comprised of 1,250 Wildlife Police Officers who are responsible for investigating and enforcing wildlife crimes within 236,376 km^2 of wildlife area (average 189 km^2 per officer). The Zambian government has also committed to adding an additional 850 officers by 2018 (600 new officers were reportedly added in 2016). *The Wildlife Conservation Unit* is responsible for mitigating human-wildlife conflict, facilitating wildlife officer trainings, regulating private wildlife estate operations, managing ecosystems, managing landscape conservation of certain species, and both developing and implementing park regulations. *The Infrastructure Development Unit* is responsible for construction and maintenance of infrastructures and machinery within protected areas. *The Community-based Natural Resource Management Unit* is responsible for co-managing Game Management Areas (GMAs) with local communities. Duties include providing technical support to Community Resource Boards regarding the management of human-natural resources in GMAs and open areas. This unit facilitates the election of the Community Resources Board members and the election of Village Action Groups. Responsibilities also include monitoring the use of funds disbursed to Community Resources Boards and training village scouts and Community Resources Board members.

The African elephant is a protected species under the Wildlife Act. It is a criminal offense to hunt, kill, capture, or possess an elephant without a license. The elephant is also protected under private wildlife estate legislation and statutory instruments implemented with the (now repealed) Wildlife Act of 1998 and carried over to the Wildlife Act. Additionally, in 2016, four new statutory regulations were reportedly enacted to address various aspects of elephant management to complement the operation of the new Wildlife Act. They included the Zambia wildlife regulations for granting of hunting concessions, elephant sport hunting, and conducting ecological or research wildlife assessments (DNPW 2016).

In addition to Zambia's domestic laws, it is also a Party to CITES. The African elephant in Zambia is listed in Appendix I of the Convention. As an Appendix-I species, certain criteria must be met before such species can be exported, including findings from the exporting country's CITES Management Authority that the specimen was legally acquired and the country's Scientific Authority that the export will not be detrimental to the survival of the species in the wild. In addition, the importing country's CITES Management Authority must determine that the import is not for primarily commercial purposes and the importing country's Scientific Authority must determine that the import is not for purposes that are detrimental to the species. In their reply to our inquiry, Zambia provided a copy of their March 2015 non-detriment finding for elephants. This finding states that the CITES Scientific authority of Zambia has considered the population of elephants in Zambia and concluded "that the low level of off-take generated by trophy hunting is not detrimental to the survival [of elephants] and the amount of revenues generated by this low level of off-take are

of critical importance for the conservation of the species, also because of the benefit it provides to local communities."

Current Population Status: To manage any population to ensure an appropriate population level and determine whether sport hunting is having a positive effect on the survival of African elephants, it is vital to have sufficient data on population numbers and population trends to base management decisions. Without current population data, it is not clear how one can calculate the number to offtake. Without information on population demography and mortality, it is not possible to determine accurately what impact hunting, in conjunction with other offtakes, including problem animal control and poaching, is having on Zambia's elephant population.

During the 1970s, Zambia experienced a severe decline in their elephant populations due, in part, to increased human population, conversion of land for agricultural activities, and excessive hunting for ivory. The increase in poaching brought about by international demands for ivory also contributed to this decline (CITES 2010). Since the early 1980s, most of the elephants have been restricted to National Parks, Game Management Areas and adjacent lands.

Currently, the range for the elephant in Zambia can be considered in seven subregions as follows: Luangwa Valley system, Mid/Lower Zambezi system, Kafue system, Mosi oa Tunya, Sioma - upper Zambezi system, Bangweulu system, Nsumbu – Mweru wa Ntipa, Lusenga -Tanganyika system, and West Lunga system. Each of the sub regions is larger than 10,000km^2 and has a total area exceeding 200,000km^2. These elephant sub regions cover a diverse landscape and land tenure systems encompassing National Parks, Game Management Areas and some open areas creating an almost contiguous landscape in which elephants can roam between habitats (CITES 2010, Thouless et al. 2016 p. 191). Habitat varies throughout the major elephant areas, but most is dominated by miombo or mopane woodlands (CITES 2010; ZAWA 2015).

In 1982, the Government of Zambia instituted a ban on elephant sport hunting. By 1989, it was estimated that Zambia's elephant population had fallen below 18,000 from an estimated 200,000 in the 1970s (CITES 2002). In the 1990s and 2002, Zambia's elephant population was estimated to be 22,000 and 25,000, respectively, indicating a stable and/or increasing population (CITES 2010). As a result, in 2005, elephant sport hunting, which had been banned since 1982, was re-opened. Under the Zambia Wildlife Act, the sport hunting of elephant was authorized for non-commercial purposes. According to a DNPW's April 28, 2015, e-mail, elephant sport hunting was again suspended from 2013 to 2014, as the Zambian Government was interested in ascertaining the status of wildlife populations in the Game Management Areas where hunting occurs.

Aerial population surveys conducted in 2008 covered approximately 166,712.51 km^2 of the major elephant range, representing about 80% of the total range and resulted in a population estimate of 26400 ± 4400 elephants, indicating a stable population in reference to previous estimates of 2002 and the 1990s when estimates were 25000±3000 and 22000±3000 elephants respectively. In 2013, a survey conducted by DNPW (then ZAWA) in the Kafue and Luangwa Ecosystems alone revealed a population of 9,594 and 22,112 respectively, for a total of approximately 32,000 animals (ZAWA 2013). In a December 22, 2015, e-mail, DNPW provided a possible explanation for the elephant increase in the Kafue area, noting more areas were surveyed in 2013 than 2008, increased average sampling intensity, and influx of elephant groups from Sioma Ngwezi and west Lunga to Kafue.

The Government of Zambia's proposal for the 15th meeting of the CITES Conference of the Parties (CoP 15 - Doha, Qatar, March 2010) to transfer its elephant population from Appendix I to Appendix II, contained a report on the illegal killing of elephants indicating that between 2002 and 2008, there were 327 elephants illegally killed. Although elephant poaching trends indicated an increase in poaching levels, the estimated illegal annual off-take was said to be less than 0.3% of the elephant population estimates. The increasing trend in elephant poaching was attributed to increased poaching levels in Lower Zmbezi and areas of the Luangwa Valley system where resources for law enforcement were considered inadequate. The high level of human-elephant conflicts taking place in these areas also exacerbated elephant poaching. Over 67% of problem elephant reports involved crop and property damages, as well as human injuries and deaths (CITES 2010). However, there was no information given on the number of animals taken during this same timeframe in relation to problem animal control measures undertaken by ZAWA, leading to a potential increase in the percentage of annual off-take from both illegal and problem animal control activities.

In 2014, the Pan African Aerial Elephant Survey (http://www.greatelephantcensus.com/), or the Great Elephant Census (GEC), was carried out over a significant portion of the savanna elephant's range in Africa. The GEC developed standardized survey methodology to establish a consistent continent-wide population basis line. The 2014 survey that was part of the Great Elephant Census, covering nearly 85,000 km^2 in the Luangwa, Kafue, Sioma, and Lower Zambezi ecosystems, revealed the elephant population in Zambia to be an estimated 21,760 ± 4,523 (DNPW 2016, GEC 2016); this was not significantly different from the 2008 estimate, and may not have accounted for elephants in Sioma-Ngwezi that regularly migrate into neighboring countries during the dry season. However, this is a decrease of about 10,000 animals since the 2013 survey. Thouless et al. (2016) reports an estimate of 21,967 ± 4,704, although this contains 214-314 educated guesses from areas not systematically surveyed.

Carcass ratios may help indicate present levels of poaching in different areas; a carcass ratio of 2-8% is indicative of stable or increasing populations, while a ratio of over 9% indicates a declining population (Douglas-Hamilton & Hillman 1981, Douglas-Hamilton & Burril 1991). The 2008 aerial survey apparently showed low carcass ratios in Kafue (0.97%), Luangwa (1.57%) and Upper Zambezi (3.20%), with Lower Zambezi (>5%) as the only exception (CITES 2010); these ratios indicate stable or increasing populations. The 2015 survey showed decreased carcass ratios from the 2008 survey in Luangwa (1.2%), but an increased ratio in Kafue (7.02%), and Lower Zambezi (6.3%); it is possible that not all carcasses were counted in the survey, and these percentages are higher in reality. While these ratios are still considered sustainable, several poaching camps were detected: six in Kafue, two in South Luangwa, one in North Luangwa, and one in Lower Zambezi National Parks. GEC (2016), as well as DNPW (2016), report 85% and 85.5% carcass ratios in Sioma Ngwezi National Park, respectively, with the rest of Zambia being a 3% overall ratio (GEC 2016). For Sioma Ngwezi, this ratio suggests a recent or ongoing problem of illegal hunting, which has led to a loss of most of the original population (DNPW 2016). However, this National Park makes up a small proportion of the national population (Thouless et al. 2016). With the help of World Wide Fund for Nature (WWF) and the Peace Parks Foundation, DNPW recruited an additional 30 rangers and built new housing for them in Sioma Ngwezi, with the intent of aiding anti-poaching efforts in the National Park (DNPW 2017).

According to Thouless et al. (2016), Zambia's elephant population appears to be relatively stable apart from losses in the southwest of the country, which amounts to approximately 2% of the overall population. Available range also appears to be increasing due to the Southern African Development Community (SADC) Trans-Frontier Conservation Areas[3] (TFCAs) initiative, and law enforcement representation in major protected areas has led to a rise in arrests from poaching incidents.

It is possible that population fluctuations in Lower Zambezi could be explained by the movements of elephants between Zambia, Zimbabwe, and Mozambique. Additionally, most of the subpopulations within Zambia are contiguous with populations in neighboring countries, hence the formation and implementation of the modern concept of TFCAs in southern Africa to promote the maintenance of movement corridors for elephants between countries in the region (CITES 2010). A main goal for TFCAs is to make fragments of protected areas in adjacent countries interconnected in order to "facilitate and enhance the free movement of animals across international boundaries" (NASCO, undated). A memorandum of understanding regarding the establishment of Kavango Zambezi (KAZA) TFCA, which stretches into southwestern Zambia, was signed in December 2006. A master integrated development plan (IDP), which is a five-year strategy that began in 2014 to steer development of the TFCAs at a regional level, was approved by partner countries in 2015 (PPF, undated). Protected Areas alone cover approximately 27% of Zambia in the form of National Parks and Game Management Areas (Thouless et al. 2016). With TFCA initiatives in and around Zambia, elephant habitat is growing due to the increased interconnectedness of protected areas in neighboring countries.

Human settlements and activities appear to be impacting the distribution of elephants, especially in southern portions of the Kafue ecosystem and Sioma-Ngwezi ecosystem (DNPW 2016). The primary risks to the long-term survival of the elephant in Zambia appear to be increasing human-elephant conflict, loss of habitat for agriculture use, and poaching. Zambian law requires that the government is responsible to the rural communities by conserving wildlife resources for the benefit of its people (CITES 2010). There were 10 and 16 elephants killed through problem

animal controls in 2015 and 2016, respectively. In that same time period, poaching occurred in Lower Zambezi, Sioma, South Luangwa, Lukusuzi, and Kafue National Parks as well as Rufunsa, Chiawa, West Petauke and Mulobezi Game Management Areas (GMAs). In 2015, 168 elephants were reported as being poached, and 155 were reported in 2016; there were 50 fresh and 22 recent carcasses recorded in national parks and GMAs across the country in recent patrols, indicating a need to address possible poaching (DNPW 2017).

African Elephant Management in Zambia: Zambia elephant hunting occurs in Game Management Areas (GMAs) and Open Game Ranches (OGRs). OGRs are unfenced private lands reserved for the wildlife conservation management of an individual or local community and are buffered by GMAs. DNPW issues annual non-resident hunting quotas to the OGRs in exchange for managing the wildlife; although all animals remain the property of the State (DNPW 2016).

[3] TFCAs were founded through SADC with the aim of collaboratively managing shared natural and cultural resources across international boundaries for improved biodiversity conservation and socio-economic development. http://www.sadc.int/themes/natural-resources/transfrontier-conservation-areas/

GMAs are primarily designated for safari (tourist) and resident hunting, but some GMAs also include photographic tourism. There are 36 GMAs in Zambia covering 177,404 km^2 (DNPW 2016). Most, but not all, GMAs have General Management Plans outlining basic management practices. All 20 of Zambia's national parks are surrounded by GMAs, but currently, elephant hunting only occurs within hunting blocks located in the GMAs that surround the National parks in the Luangwa and Lower Zambezi ecosystems. In 2015, DNPW stated that it was their policy that GMAs be managed with the guidance of management plans. At that time, land use plans had been developed for most GMAs and National Parks. All GMAs allow settlement. Community-Based Natural Resource Management (CBNRM) is implemented within GMAs through Community Resource Boards (CRBs) (DNPW 2016). The CRBs focus on the economic and social well-being of local communities. There are currently 75 registered CRBs within Zambia that employ approximately 750 community scouts and 79 support staff.

DNPW, in consultation with the local community, is mandated to grant hunting concessions within specific hunting blocks within GMAs. Hunting concessions must be registered in Zambia, have a tourism enterprise license, have a valid tax clearance certificate, provide proof that the company is not bankrupt, and they must meet any additional conditions set by an evaluation committee (DNPW 2016). Leases are stated to range from 7 - 15 years, with the length of lease time dependent on the abundance of species classified within the individual hunting block (DNPW 2016). Prime hunting blocks have greater species abundance and are generally awarded shorter lease agreements in comparison to secondary hunting blocks. Secondary hunting blocks are generally given longer lease periods in an effort to provide incentives for the concessionaire to invest greater resources and allow wildlife populations to increase before offering hunting (DNPW 2016).

Hunting block concessions are awarded through a bid process in accordance with the Zambia Public Procurement Act No 12 of 2008. Bids are taken from companies through a "two envelop system." The bids consist of a technical proposal and a financial proposal being placed in separate clearly marked envelopes. The technical bid is required to be evaluated by criteria outlined in Zambia's Wildlife Act before the envelope containing the financial bid is opened. Financial envelopes will only be opened for bidders that received meet a specific technical expertise (e.g., a score of over 80 on the established criteria). The lease is awarded to the bidder that qualified with a minimum technical rating of 80 and whom submitted the highest financial bid (DNPW 2016).

Successful bidders must address statutory obligations to communities and provide enforcement contributions when developing Concessionary Agreements. Concessionary Agreements are developed through a partnership between the communities, safari operators, professional hunters, and DNPW. As such, a hunting concession agreement is not valid without the signature of the Chief(s) or CRB associated with the hunting block (DNPW 2016). Concessionaires are required to use collected fees to support resource protection by providing community scouts, vehicles, fuel, patrols, and equipment. They must provide infrastructure development to local communities and also offer resource monitoring and fire management. Some concessionaires further benefit community development by supporting the employment of teachers and nurses, purchasing ambulances, building classrooms and clinics, and providing houses for teachers and health personnel. Moreover, they are mandated to provide 50% of the meat from hunted animals to the local community. Concessionaires are evaluated annually and those that do not comply with their

obligations can have their concession terminated before the end of the agreement's term (DNPW 2016).

According to an April 30, 2015, e-mail, Zambia is managing its elephant population using the 2005 National Strategy for Elephant Management in Zambia (However, this management plan is under review, with a new strategy scheduled for release in late 2017). DNPW has implemented several actions in the Elephant Management Plan, including but not limited to, building and implementing a management system for a central strong room for ivory, coordination of elephant management in TFCAs, carrying out Monitoring Illegal Killing of Elephants (MIKE) and Spatial Monitoring and Reporting Tool (SMART) systems in protected areas, as well as the improvement of funding. ZAWA's reincorporation as DNPW now allows the government to pay DNPW staff salaries while allowing the department to retain all revenue, which has improved resources for anti-poaching efforts. One hundred and sixty-eight elephants were reported to have been poached in 2015 and another 155 in 2016 (DNPW 2017). The government allocates K40 million (USD3.8 million) to DNPW annually, of which 75% is used for anti-poaching. The level of effort to curb poaching increased after the Presidential order for all security wings (Zambia Army, Air force, National Service, Police, Intelligence, Department of National Parks and Wildlife) to be involved in anti-poaching efforts. This led to increased number of man-days spent on patrol as well as the number of poaching arrests (DNPW 2017).

A major threat to the survival of elephants in Zambia appears to be increasing human-elephant conflicts. An increase in human elephant conflicts may imply that the species will continue to reclaim its former range; however, human settlements continue to expand in the GMAs and human-elephant conflicts will continue to be a management challenge (CITES 2010). From 2012 to 2014, there were 1,780, 2,400, and 1,261 reported human elephant conflicts, respectively (ZAWA 2015). A total of 26 elephants were killed through controls 2015-2016 (DNPW 2017 pers. comm., March 31). DNPW (ZAWA 2015) notes that an integrated elephant control approach is better than any single method. It is believed, however, that poor perception of elephants by HEC-affected communities could be counteracted if elephants are perceived to have value (CITES 2010).

Hunting and Utilization: Sport hunting of elephants, banned in Zambia between 1982 and 2004, was re-opened in 2005 under the Zambia Wildlife Act (Act No. 12 of 1998/Statutory Instrument No. 40 of 2005), authorizing the sport hunting of elephants for non-commercial purposes. From 2005 through 2010, the export quota was set at 20 elephants annually (Thouless et al. 2016). This quota apparently did not include elephants taken as part of problem elephant control. In 2011 and 2012, the export quota was increased to 80 elephants (Thouless et al. 2016). This quota, however, including hunting of problem animals involved in human-elephant conflicts (ZAWA 2015). In a letter to the Service, dated April 28, 2015, ZAWA explained elephant hunting had again been suspended in Zambia from 2013 to 2014. The Zambian Government was interested in ascertaining the status of wildlife populations in the Game Management Areas where hunting is done (ZAWA 2015, pers. comm., April 28). After re-opening elephant hunting in 2015, Zambia again established a quota of 80 individuals per year for trophy hunting for noncommercial purposes. The level of sport hunting appears to be based largely on the 0.5% of standing population guideline (Martin 1986 and Martin 2005).

While Zambia has established an export quota under CITES of 80 animals (160 tusks), the actual hunting quota has been established at a lower level. In 2015, different reports indicated that the

hunting quota was set at 36 elephants (ZAWA 2015) and 12 elephants (DNPW 2017). However, DNPW (2017) reported that only three elephants were harvested that year. In 2016, the hunting quota established at 30 sport-hunted elephants, but only 12 elephants were harvested; all were males. The elephant-hunting quota for 2017 was again set at 30 (DNPW 2017). Only hunting blocks located in the Luangwa and Zambezi Valley have allocated elephants to hunt. It is unclear if private wildlife estates are also regarded as private concessions in Zambia; ZAWA (2015) notes that there is no private hunting concession done by local communities, however, hunting is permitted in private wildlife estates. According to DNPW, hunting quotas are now set based on population size, distribution, trophy quality, occurrence of human-elephant conflicts, and demand from the community or outfitter. However, it does not exceed 1% of the total population. Hunters that harvest elephants with underweight tusks (below 15kg) are penalized; the average trophy weight for 2015-2016 was 19.2kg (DNPW 2017).

The information used to by develop quotas includes data from ground counts, patrol sightings, local and expert opinion, and hunting monitoring. CRBs use the information they collect to determine what the maximum hunting quota could be in GMA managed by them. Their proposals are submitted to DNPW for approval. Once a proposal is received, DNPW accepts feedback from field staff and safari hunting outfitters, before the quotas are approved by the Wildlife Conservation and Management Unit. The quotas are then distributed by DNPW's Licensing Unit to the CRBs and hunting companies. DNPW is required to share the approved quotas with other government agencies, including the Auditors General Office and Anti-Corruption Commission. For 2016 and 2017, Zambia established a quota of one elephant per hunting concession. Quotas are set for individual hunting blocks within the GMAs (DNPW 2017).

Besides a professional hunter, a wildlife officer from DNPW must also accompany hunters on all hunts (DNPW 2016). The officer is responsible for recording hunt activities on specified forms such as the Safari Hunting Monitoring form and Trophy Measurement form. The officer endorses licenses to ensure that they are not used more than once and the officer ensures that all harvested trophies are registered (DNPW 2016).

The season commences on May 1st and ends on December 31st each calendar year. According to DNPW (2017) only hunting blocks in Luangwa and Zambezi valley are allocated elephants to hunt, and it appears hunting may also take place on private game ranches.

Hunting-generated Revenue: Prior to the 1980s, wildlife management in GMAs was the sole responsibility of the Zambian Government, with little or no local community involvement or stake in the management of these wildlife resources. According to information obtained from ZAWA when evaluating Zambia's hunting program for the 2012 enhancement finding, this approach led to an escalation in the illegal harvesting of these resources. In the early 1980s, this reportedly changed with the development of the Administrative Management Design (ADMADE) program, a government initiative to guide and encourage the participation of local communities in managing wildlife in GMAs. In return for their participation in this program, the Government, under the ADMADE program, provided communities financial incentives derived from wildlife utilization in their respective areas. The revenue generated from safari hunting activities was divided in half with 50% going to the central treasury and 50% going to wildlife management.

Under the Zambia Wildlife Act No. 12 of 1998, with the transformation of the DNPWS to ZAWA, the concept of community participation in wildlife management was further advanced by providing a framework for the formation of Community Resource Boards (CRBs) in GMAs and open areas. The CRBs are local institutional bodies composed of elected community representatives, as well as representatives of the Chief and the local authorities, providing a link between the central government and local communities. In many rural areas where elephants exist in Zambia, there has been a steady rise in human-elephant conflicts that in turn creates a negative attitude toward elephant conservation efforts. This is of great relevance in rural communities where livelihoods are most affected by the presence of elephants (CITES 2010). Through this community-based approach to natural resource management, the creation of CRBs in designated GMAs is intended to give local communities a direct say in how these areas are managed and operated.

In 2008, a letter was sent to the Director General of ZAWA requesting a detailed accounting of the amount of funds generated in a given year associated with safari hunting, and details on how those funds were allocated and spent. The Service received a response that each CRB operated a bank account where the 50% allotment of funds accrued from wildlife hunting was deposited. The administration of these accounts was supervised by the Auditor General's Office. According to this response, between 2005 and 2007, a total of 44 elephants were taken in the four hunting blocks through licensed safari outfitters. The total income generated from this activity was $594,000, with $297,000 being the community share. Of that total income, 5% was paid to the Chiefs as the patrons of the CRBs. The remaining $267,300 was paid to the CRBs, with revenue amounting to $120,285 spent on wildlife management within the GMAs, $93,355 spent on community projects, and $53,460 spent on CRB administrative activities. While a detailed breakdown was received for several of the hunting blocks and the community projects undertaken with this funding, an accounting of the revenue ZAWA received during this same timeframe, and how it was utilized to further elephant conversation and management programs within Zambia, was not provided. This puts into question whether the revenue ZAWA collected from elephant sport hunting during this timeframe in any way furthered Zambia's efforts to establish a sustainable management program for elephants. These questions persisted until 2011 leading, in part, to the Service being unable to make a positive enhancement finding for the import of elephant trophies from Zambia.

In 2011, through ongoing discussion with the Zambian government, additional information on what percentage of elephant hunting revenue retained by ZAWA went towards activities involving elephant management, protection, and conservation in the National Parks and GMAs. Hunting fees for all species accounted for 32% of revenues that ZAWA received during 2010 - 2012. With improved accounting of received revenue and how it was being utilized, along with other factors being considered at that time, the Service was able to make a positive enhancement finding in 2012. However, that amount was reduced to about 4% during the 2013 and 2014 moratorium (DNPW 2016). Safari hunting creates other revenue for Zambia during this time, including activities such as tipping, eating in restaurants, staying at lodges, purchasing souvenirs, and paying for taxidermy. However, with the voluntary moratorium placed on elephant hunting by the Zambian government in 2013 and 2014, the Service did not request or receive any additional information from Zambia on revenue generated through hunting during this time.

With the lifting of the moratorium in 2015, the transition of ZAWA into DNPW, and renewed discussion between the Service and the Zambian government, there is a better understanding of the

revenue generated and how it is distributed. According to DNPW (2016), they receive revenue by charging GMA fees per elephant hunt. They also receive funds from annual professional hunter fees, certificate of valuation of trophies fees, certificate of ownership of trophies fees, permit fees, handling fees, and CITES security stamp fees. Hunting license fees in Zambia are statutory. The foreign hunter looking to take an elephant must pay the fee directly to the outfitter, with the minimum amount currently set at $4,200. DNPW collects these fees from the outfitter/concession and does not deal with the foreign hunter directly. Therefore, the outfitter may choose to charge the foreign hunter any amount greater than $4,200. The revenue generated from license fees (also referred to as Animal fees by DNPW) is mandated to be shared with CRBs under the Zambia Wildlife Act No. 14 of 2015. The fees are shared with CRBs and DNPW as follows:

License fees (animal fees):

- 5% of funds go to the CRB chief/leader.
- 45% of funds go to CRB community funds.
  - According to Zambia's "Guideline on the use of Community funds accrued from wildlife management", 45% of these community funds should go to wildlife protections and patrols, 35% should go to community projects such as constructing clinics, roads, schools, and wells, and 20% of the funds should go towards CRB administration costs.
- 50% of funds go to DNPW (mandated under the *Zambia* Wildlife Act No. 12 of 1998 and continued in the Wildlife Act) in the form of conservation funds, including, but are not limited to: scout/wildlife officer salaries, resource protection, consultancy and legal fees, animal surveys, staff training, administrative and operational expenses, repair and maintenances, and other conservation expenses.

According to Zambia's hunting guidelines, hunts involving elephants are required to be a minimum of 21 days (DNPW 2016). A daily conservation fee of $150 per hunter and $100 per observer is collected for monitoring purposes (DNPW 2016). These daily hunt fees typically cover combined hunt packages that include hunting elephant, along with other species such as hippos and impalas. The fees are allocated by percentages to CRBs and DNPW as follows:

Daily fees (Concession fees):

- 5% of funds go to the CRB chief/leader.
- 15% of funds go to CRB community funds.
  - Based on recommended guidelines, 45% of these community funds go to wildlife protections and patrols, 35% goes to community projects such as constructing clinics, roads, schools, and wells, and 20% of the funds go to CRB administration costs.
- 80% of funds go to DNPW in the form of conservation funds, including, but are not limited to: scout/wildlife officer salaries, resource protection, consultancy and legal fees, animal surveys, staff training, administrative and operational expenses, repair and maintenances, and other conservation expenses.

A total of USD150,000 was raised from elephant sport hunting in 2015-2016. As per Zambia's approved budget, DNPW retains all revenue from elephant sport hunting and distributed it proportionately to the CRBs and DNPW (DNPW 2017). Community funds have been used for

instances such as paying children's school fees and repairing classrooms and health centers. Current concession agreements require at least 80% of outfitter's employees be from local communities; outfitters also share 50% of meat from elephant hunting with the local communities as well as provide agricultural produce (DNPW 2017). As such, communities in wildlife areas are eager to conserve elephants as they earn income from doing so, both directly and indirectly.

Evaluation:

As explained earlier in General Considerations, the Service evaluates a number of factors to determine whether the killing of the trophy animal taken in a range country will enhance the survival of African elephants under 50 CFR 17.40(e)(6)(i)(B). The Service evaluates applications in accordance with the African elephant 4(d) rule and the permit issuance criteria outlined in 50 CFR 17.32(a)(2). In evaluating each of these criteria the Service has considered the information currently available to the Service as of the date of this finding on elephant hunting in Zambia, including information provided by the Government of Zambia, current applicants to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service. In accordance with the regulatory requirements, the Service is able to make a determination that the killing of the trophy animal in Zambia, on or after January 1, 2016, and on or before December 31, 2018, will enhance the survival of the African elephant. Therefore, with the information currently available, applications to import trophies hunted during this time period will be considered to have met this requirement unless we issue a new finding based on available information. In accordance with the 4(d) rule for the African elephant, 50 CFR 17.40(e), the Service will review each application received for import of such specimens on a case-by-case basis and each application also needs to meet all other applicable permitting requirements before it may be authorized. On an ongoing basis and as it evaluates each application, the Service will continue to monitor the status of the elephant population, the total management program for elephants in the country to ensure that the program is promoting the conservation of the species, and whether the participation of U.S. hunters in the program provides a clear benefit to the species. Accordingly, the Service may modify its determination based on available information consistent with the regulatory requirements. Further discussion for each of the criteria follows:

17.32(a)(2)(i): Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit:

Communities that bear the burden of dealing with problem elephants are more likely to support the conservation of the species as a whole if they benefit from them in some way. Sixty-seven percent of problem elephant reports involve crop and property damages; however, many community projects are made possible by encouraging the conservation and sustainable sport hunting of elephants, as Zambia has a scientifically based quota system. In addition, the TFCA initiative is linking several protected areas across international borders, which promotes regional support of elephant conservation and movement by expanding habitat availability.

Therefore, the purpose for which the permit is required is adequate to justify removing elephants from the wild or otherwise changing the status thereof.

In evaluating this criterion, the Service assesses whether the hunting program established for elephants has demonstrated the ability to contribute toward positive conservation outcomes that mitigate or improve the status of elephants throughout their range within Zambia, while addressing the main threats of habitat loss, human-elephant conflicts, and poaching.

The IUCN's 2012 Guiding principles on trophy hunting support the concept that hunting can provide a conservation benefit if it is part of a governance system that provides both implementation and enforcement at a level that adequately supports conservation. The Service also believes that conservation hunting can assist the elephant populations if managed well. Elephant hunting, if managed properly, could meet the Service's enhancement criteria under the Act. There must be adequate information and data clearly showing that removing elephants from the wild for trophy hunting will be done at a level and with sufficient oversight such that it improves the current status of elephants in the wild (50 CFR 17.32).

Zambia has demonstrated their desire to maintain the long-term conservation of their elephant population with their 2013-2014 moratorium on elephant hunting. When the Zambian government realized that population numbers were declining to an unstainable level, they applied the moratorium for 2 years, until they determined that their elephant population increased enough to tolerate a limited offtakes (DNPW 2016).
The Zambian government has done a good job of identifying how resources from hunting-generated revenue would be shared with communities. The local communities receive funds from concessions and license (animal) hunting fees. As outlined in the license fee distribution above, 35% of the funds allocated to CRBs help support community projects such as constructing clinics, roads, schools, and wells, thereby providing incentives for the local community to ensure the long-term conservation of elephants. In addition, 45% of the CRB license fees go to wildlife management, including resource protection and patrols.

Zambia's human population growth has contributed to conflicts within the GMAs. As clarified in detail on pages 16 and 17 of this document, DNPW contributes 50% of the license fees (animal fees) and 20% of the Concession fees to local communities. These financial benefits received from living in a GMA have provided incentives for newcomers to illegal squat in the GMAs looking to capitalize on the financial benefits. Consequently, the illegal squatting has caused enough conflict with local people to trigger the Zambian government to take action. In August of 2015, over 2,000 squatter households within the Mumbwa GMA were evicted so that the registered local communities could receive the full benefits of living within a conservation area (DNPW 2016). The long-term results of the eviction will need to be addressed in future analysis of Zambia's trophy hunting.

Based on the information available to the Service and provided that hunted elephants are properly permitted and in compliance with national and provincial regulations, we conclude that the purpose for which a permit being requested is adequate to justify changing the status (i.e., exporting trophy elephants) of animals taken in accordance to Zambian laws and regulations.
Therefore, provided that elephants harvested in the 2016, 2017or 2018 season were properly permitted and in compliance with international, national and provincial regulations, we find that the requirements of 17.32(a)(2)(i) is met.

17.32(a)(2)(ii): The probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit:

The elephant population appears to be stable or increasing, apart from Sioma-Ngwezi, which makes up a small portion of the national population, and where law enforcement efforts have been increased. Zambia's sport hunting quotas also do not exceed 1% of the total population. The subsequent increase in funds provided by U.S. sport hunters would allow DNPW to further vital conservation activities for elephants and incentivize local communities to protect them.

The two separate quotas that seem to exist for elephants in Zambia are a source of some confusion. Documents provided to the Service from Zambia note that there is both an export quota under CITES, which is 80 animals (160 tusks), and hunting quotas, for which conflicting information on the 2015 quota was reported (12 elephants in DNPW (2017 pers. comm., March 31) and 36 elephants in ZAWA (2015 pers. comm., April 30)). However, if looking at the GEC (2016) population estimate, the higher quota of 80 animals does not exceed the 1% mark that Zambia appears to use as a limit and, to date, does not appear to have ever been met.
Provided that the off-take of elephants continues to be monitored, the participation of U.S. hunters in elephant hunts would provide an indirect benefit to wild populations by helping to support the areas where elephants are found. Therefore, based on the information available to the Service and provided that elephant hunting remains at a sustainable level in Zambia, the probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit would be positive.

17.32(a)(2)(iii): Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed:

Zambia said in a personal communication that they are managing the elephant population using the National Strategy for Elephant Management, and that a new version of this strategy was going to be reviewed sometime this year (in 2017). It is clear, however, from the documents provided to the Service, that Zambia is actively implementing management actions to ensure sustainable sport hunting of elephants to further their conservation in the wild.

Issuing an import permit would not in any way conflict with the Zambia Wildlife Regulations No. 60 of 2007, providing all U.S. sport hunters obtain the proper permit and provided Zambia with pertinent information related to each hunt. In Wildlife Regulations No. 107 of 2010, it is required that at least 50% of meat and 45% of profits from elephant sport hunting be given to the local community in the game management area which the hunt(s) takes place.

Therefore, based on the information currently available to the Service, the issuance of import permits for legally hunted elephants will not conflict with known conservation programs and rules.

17.32(a)(2)(iv): Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit:

In evaluating this criterion, the Service assesses whether the hunting program established for elephants is subject to a governance structure that clearly allocates management responsibilities and supports regulatory pathways in support of positive conservation outcomes. Zambia's elephant management program is based on a precautionary quota and direct community benefits (DNPW 2016).

Currently, as per Zambia's approved budget, DNPW retains all revenue from sport hunting. A total of USD150,000 was raised from elephant sport hunting from 2015-2016. Fifty percent of animal fees, and 80% of concession fees, go to DNPW as conservation funds. This is a vital source of funding for ensuring the continued existing of elephants in the wild in Zambia; also important is the 45% of animal fees and 15% of concession fees that go to communities where the hunts take place. If local communities continue to benefit from the sport hunting of elephants, through job opportunities, funded community projects, and sharing of meat post-hunt, they will have incentive to protect it.

Therefore, based on the information available to the Service, the purposes for which import permits would be issued would likely reduce the threat of extinction facing elephants in Zambia.

17.32(a)(2)(v): The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application:

Based on our review of information obtained through personal conversations and literature, there is a general agreement that hunting, done properly and well managed, would not have an adverse effect on elephant populations. Researchers and others with substantial knowledge of elephant management have stated that, whether or not they support hunting in general, they see that benefits can be had through a scientifically based hunting program for elephants.

The IUCN Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives (Ver.1.0, August 2012) state that well-managed trophy hunting can "assist in furthering conservation objectives by creating the revenue and economic incentives for the management and conservation of the target species and its habitat, as well as supporting local livelihoods" and, further, that well-managed trophy hunting is "often a higher value, lower impact land use than alternatives such as agriculture or tourism." Lindsey et al. (2007), in their paper on the economic and conservation significance of the trophy hunting industry in sub-Saharan Africa, state their belief that, from a conservation perspective, "the provision of incentives which promote wildlife as a land use is the single most important contribution of the trophy hunting industry." In addition, they note that trophy hunting generates revenues in areas where alternatives, such as ecotourism, may not be viable. More recently, Di Minin et al. (2016) assert that trophy hunting "strongly contributes" to conservation in sub-Saharan Africa, where large areas currently allocated to use for trophy hunting support important biodiversity. They also note that, if revenue cannot be generated from trophy hunting, these natural habitats will be converted to other forms of land use. While recognizing that the degree to which trophy hunting contributes to conservation is a subject of debate, Mallon (2013), in his report on trophy hunting of CITES-listed species in Central Asia, states that "well-run hunting

concessions have an economic interest in maintaining the resource (*i.e.,* conserving the species) so will also aim to manage the area to conserve high-quality habitat that supports high numbers of the hunting species, and also to prevent unregulated use by others (poaching, overgrazing)." Naidoo et al. (2015) describe the complementary benefits of tourism and hunting to communal conservancies in Namibia.

We have reviewed a number of comments from NGOs and the public opposing hunting any elephants. This opposition, however, is primarily based on the perceived ethics of hunting. While these comments are an indication of concerns from some members of the public over hunting, they are not germane to our review process.

Therefore, based on the information available to the Service, there is general support for scientists and other persons or organizations having expertise concerning elephants that the legal well managed, science-based harvest of elephants, and the subsequent import of these trophies, would not have an adverse effect on the species, but would further efforts to conserve the species in the wild into the future.

17.32(a)(2)(vi): Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application:

Based on our understanding of the hunting program within Zambia, U.S. hunters must be accompanied by a professional hunter on land that is being managed by the landowner, concessionaire, or representatives of the communal land where the hunt occurs. Although the U.S. hunter may not have the expertise to ensure adequate and proper management of elephants on that land, the professionals associated with the hunt have the expertise and resources to successfully accomplish DNPW management goals. Along with oversight established by the DNPW, there are expertise and facilities available to U.S. hunters to accomplish the stated objective of their application that the killing of an elephant in Zambia whose trophy is intended for import into the United States would enhance the survival of the species in the wild. Therefore, based on the information available to the Service, that applicants that are hunting on properly permitted reserves that carry out their management practices in accordance with national and provincial regulations, have the expertise, facilities, or other resources available to them to successfully accomplish the objective of their application; i.e., the long-term survival of elephants in Zambia. In its evaluation of each application, the Service will further ensure that this criterion, along with the other criteria, is met by each applicant before issuing an import permit.

Conclusion:

Sport hunting of elephants is integral to ensuring the long-term survival of this species in Zambia; funding provided by U.S. sport hunters will further aid in the implementation of conservation objectives and the realization of community projects. These reasons, as well as the implementation of a scientifically based quota system, and clear regulations provided in Wildlife Regulations No. 107 of 2010, have enabled the Service to determine that **permits for sport-hunted elephants taken from Zambia on or after January 1, 2016 and on or before December 31, 2018 meet the enhancement requirements under 50 CFR 17.32 and 50 CFR 17.40(e)(6)(i)(B).**

The Service may replace this finding at any time that this finding no longer reflects the available information consistent with the regulatory requirements. While the Service is currently satisfied that U.S. hunters taking elephants in Zambia at this time and the subsequent import of such trophies meets the enhancement requirements, there are several areas where additional information and follow-up would be required before the Service could make another finding for the 2019 hunting season and beyond. Specifically, the Service would like to receive an update on the status of revision to the 2005 National Strategy for Elephant Management in Zambia that was scheduled for release in late 2017. While DNPW provided an accounting of the amount of revenue generated through elephant hunting in 2015 and part of 2016, additional information on 2017 revenue would be needed. The same would be true for 2018 revenue when such data are available. Further, current information on the success of CRB's implementation of elephant management and how DNPW is addressing poaching, human-elephant conflicts, and increasing human populations would be needed before future findings could be completed. The Service will formally reach out to Zambia in the beginning of 2018 to request such information.

REFERENCES:

CITES (2002). Consideration of Proposals for Amendment of Appendices I and II. Prop. 12.9.

CITES (2009). The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory. CoP15 Doc. 44.1.

CITES (2010). Consideration of Proposals for Amendment of Appendices I and II. Fifteenth meeting of the Conference of the Parties.

DNPW (2015). Enhancement and Non Detriment Findings for African Elephant Sport Hunting in Zambia.

DNPW (2016), *The 2015 Aerial Survey in Zambia. Population Estimates of African Elephants (Loxodonta africana) in Zambia. Vol. 1.* Chilanga, Zambia.

Douglas-Hamilton I. & A. Hillman (1981). Elephant carcasses and skeletons as indicators of population trends in low-level aerial survey technique. ILCA Monograph.

Douglas-Hamilton I. & A Burril (1991). Using carcass ratios to determine trends. In: Proceedings of the International symposium on African Wildlife: Research and Management.

Great Elephant Census (GEC) (2016). The Great Elephant Census: Country-by-Country Findings.

IUCN Species Survival Commission (2012). Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives, Ver. 1.0. IUCN SSC 2012.

Martin, R.B. (1986). Establishment of African ivory export quotas and associated control procedures. Report to CITES Secretariat.

Martin, R.B. (2005). Elephants. Transboundary Mammal Project. Ministry of Environment and Tourism. Windhoek, Namibia.

NACSO - Namibian Association of CBNRM Support Organizations (undated). Trans frontier conservation areas.

Thouless, C.R., H.T. Dublin, J.J. Blanc, D.P. Skinner, T.E. Daniel, R.D. Taylor, F. Maisel's, H.L. Frederick and P. Boucher (2016). African Elephant Status Report 2016: an update from the African Elephant Database. Occasional Paper Series of the IUCN Species Survival Commission, No. 60 IUCN / SSC Africa Elephant Specialist Group. IUCN, Gland, Switzerland. vi + 309pp.

ZAWA (2013). Preliminary Report: Dry Season Survey of Large Herbivores for Kafue and Luangwa Ecosystems.

ZAWA (2015). Enhancement and Non-Detriment Findings for African Elephant Sport Hunting in Zambia.

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31th March 2017

The Director
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RE: INFORMATION ON ELEPHANT SPORT HUNTING IN ZAMBIA

Reference is made to the letter dated 30th January 2017 in which you requested for further information on elephant sport hunting in Zambia.

Find attached a table giving responses to all the 19 questions asked for your consideration.

I first of all, wish to thank you for taking time to meet the Zambian delegation at the last SAFARI CLUB INTERNATIONAL convention held in Las Vegas Nevada last February. As mentioned in the meeting, I wish to reiterate the urgency for the US Fish and Wildlife Service to respond to the Non-Detriment Findings Report submitted in 2015 on elephant and that on Lion in 2016. The Zambian Department of National Parks and Wildlife has fully cooperated with your office and responded to all inquiries raised on elephant and lion. Our outfitters and some of the clients from your country who hunted or wish to elephant and lion are very anxious to hear your position as USFWS.

As you may be aware, trophy hunting in Zambia supports not only the outfitters businesses but also a large number of poor community members living in Game Management Areas. A prolonged or negative response will have adverse negative effects on both and consequently on wildlife conservation in Zambia. We therefore look forward to your speedy handling of the matter.

Paul Zyambo
DIRECTOR-NATIONAL PARKS AND WILDLIFE
FOR/PERMANENT SECRETARY-MINISTRY OF TOURISM AND ARTS

Cc: Permanent Secretary-Ministry of Tourism and Arts
Director-Economic Development, USAID, Zambia

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

SUMMARY

	Species	Final Quota	Harvested 1st	Harvested 2nd	Balance
4.64%	Baboon	150	53	1	96
10.33%	Buffalo	334	243	7	84
6.00%	Bushbuck	194	123	1	70
2.04%	Bushpig	66	19	0	47
0.71%	Civet	23	6	0	17
5.69%	Crocodile	184	108	1	75
0.37%	Duiker Blue	12	4	0	8
2.60%	Duiker C	84	25	0	59
0.06%	Duiker Yellow	2	0	0	2
0.87%	Eland	28	14	0	14
0.93%	Elephant Male	30	12	0	18
0.06%	Genet Cat	2	2	0	0
1.55%	Grsybok	50	15	1	34
3.15%	Hartebeest	102	51	3	48
6.03%	Hippopotamus	195	121	6	68
0.12%	Honey Badger	4	3	0	1
2.84%	Hyeana	92	60	1	31
11.75%	Impala	380	233	33	114
0.28%	Jackal	9	4	0	5
0.00%	Lechwe Black				0
0.62%	Lechwe Kafue	20	19		1
3.49%	Kudu	113	72	0	41
0.40%	Klipspringer	13	1	0	12
2.84%	Leopard	92	63	0	29
0.74%	Lion Male	24	19	0	5
0.28%	Monkey Velvet	9	3	0	6
0.03%	Monitor Lizard	1	1	0	0
1.73%	Oribi	56	29	0	27
7.02%	Puku	227	165	5	57
2.47%	Reedbuck	80	36	0	44
0.43%	Red Lechwe	14	1	0	13
2.04%	Roan Antelope	66	31	0	35
2.01%	Sable Antelope	65	43	0	22
0.99%	Sitatunga	32	14	1	17
0.00%	Tsetsebbe				0
5.72%	Warthog	185	99	4	82
1.76%	Waterbuck C	57	32	0	25
1.33%	Waterbuck Defassa	43	24	1	18
0.68%	Wildebeest Blue	22	13	1	8
1.92%	Wildebeest C	62	52	0	10
3.46%	Zebra	112	76	2	34
					0
100.00%	**Totals**	**3234**	**1889**	**68**	**1277**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Bangweulu Wetlands**
GMA: **Bangweulu**
Hunting Block: **Bangweulu**

Species	Approved Quota	Adjustments	Final Quota
Bushpig	3		3
Duiker C	2		2
Lechwe Black	33		33
Oribi	2		2
Reedbuck	4		4
Sitatunga	10		10
Tsetsebbe	7		7
Totals	**61**	**0**	**61**

Verified by:…….. Sign:…….……. Date:…….

Ractified by:…….. Sign:…….……. Date:……

Collected by:……. Sign:…….……. Date:……

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

GMA: **NORTH BANK** **SOUTH BANK**

							AMOUNTS				
Species	**10**	**SAFARI COMPANY**	**LICENCE NUMBER**	**10**	**SAFARI COMPANY**	**LICENCE NUMBER**	**NORTH**	**H/Rights**	**SOUTH**	**H/Rights**
LECHWE	1	MUCHINGA ADVENTURES	16522	1	MUCHINGA ADVENTURES	16519	$ 1,200	$ 250	$ 1,200	$ 250
LECHWE	1	PROHUNT ZAMBIA LTD	21331	1	MUCHINGA ADVENTURES	16520	$ 1,200	$ 250	$ 1,200	$ 250
LECHWE	1	IMPANGA SAFARIS	14961	1	MUCHINGA ADVENTURES	16521	$ 1,200	$ 250	$ 1,200	$ 250
LECHWE	1	MVU SAFARIS	16535	1	KAINDU NATURAL RES.TRUST	16529	$ 1,200	$ 250	$ 1,200	$ 250
LECHWE	1	MVU SAFARIS	16536	1	MVU SAFARIS	16530	$ 1,200	$ 250	$ 1,200	$ 250
LECHWE	1	KWALATA SAFARIS	17799	1	MVU SAFARIS	16531	$ 1,200	$ 250	$ 1,200	$ 250
LECHWE	1	KWALATA SAFARIS		1	MVU SAFARIS	16532	$ 1,200	$ 250	$ 1,200	$ 250
LECHWE	1	MVU SAFARIS	18031	1	MVU SAFARIS	14962	$ 1,200	$ 250	$ 1,200	$ 250
LECHWE	1	MVU SAFARIS	18032	1	LUANSEMFYA	16590	$ 1,200	$ 250	$ 1,200	$ 250
LECHWE				1	NSONGA GAME MGT & LODGES	16618			$ 1,200	$ 250
Totals	**9**	**1**		**10**	**0**		**$ 10,800**	**$ 2,250**	**$ 12,000**	**$ 2,500**

$ 12,000 **$ 2,500** **$ 12,000** **$ 2,500**

$ 4,750

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Luansemfwa Safaris Ltd**
GMA: **Nkala**
Hunting Block: **Nkala**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	4		4	3		1
Buffalo	15		15	5	1	9
Bushbuck	6		6	1		5
Bushpig	2		2	2		0
Civet	0	2	2	1		1
Crocodile	4		4	1		3
Duiker C	2		2	1		1
Eland	0	2	2	2		0
Elephant	0	2	2			2
Grysbok	0	2	2	1		1
Hartebeest	8		8	4		4
Hippopotamus	4		4	2		2
Honey Badger	0	2	2	1		1
Hyaena	2	2	4	3		1
Impala	10		10	3	2	5
Kudu	4		4	4		0
Leopard	3		3	3		0
Lion	0	1	1			1
Monkey V	2		2			2
Oribi	2	2	4	1		3
Roan	0	1	1			1
Reedbuck	3		3	3		0
Sable Antelope	2	3	5	2		3
Warthog	6		6	2		4
Waterbuck D	5		5	5		0
Wildebeest Blue	8		8	8		0
Zebra	8		8	8		0
			0			0
Totals	**100**	**19**	**119**	**66**	**3**	**50**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **MANGOMBA SAFARIS LIMITED**
GMA: **Mumbwa**
Hunting Block: **Mumbwa West**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	6	-2	4	1		3
Buffalo	4	-2	2	1		1
Bushbuck	7	-2	5	1		4
Bushpig	2	-1	1			1
Crocodile	6	-2	4	2		2
Duiker C	2		2			2
Elephant Male	2	-2	0			0
Eland	0	1	1			1
Grysbok	2		2			2
Hartebeest	8	-3	5	4		1
Hippopotamus	6	-1	5	2		3
Hyaena	2		2	2		0
Impala	15		15	15		0
Kudu	4	-2	2	1		1
Leopard	3		3	2		1
Lion Male	1	0	1	1		0
Oribi	2		2	1		1
Puku	12		12	3		9
Reedbuck	5	-1	4	1		3
Roan Antelope	2	-2	0			0
Sable Antelope	4		4	3		1
Warthog	10	-5	5	1		4
Waterbuck D	5		5	2		3
Zebra	4	1	5	2		3
Totals	**114**	**-23**	**91**	**45**	**0**	**46**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Mulobezi Hunting Outfitters**
GMA: **Mulobezi**
Hunting Block: **Mulobezi**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	2		2	1		1
Buffalo	4		4	1		3
Bushbuck	5		5	4		1
Bushpig	4		4	2		2
Duiker C	5		5	3		2
Eland	2		2	2		0
Grysbok	2		2	1		1
Hartebeest	6		6	6		0
Hyaena	2		2	2		0
Impala	12		12	7	4	1
Jackal	1		1	1		0
Kudu	5		5	5		0
Leopard	2	2	4	4		0
Lion Male	0	1	1	1		0
Oribi	4		4	2		2
Reedbuck	4		4	2		2
Roan Antelope	4		4	2		2
Sable Antelope	5	4	9	6		3
Warthog	7		7	3		4
Waterbuck D	4		4	3		1
Wilderbeest Blue	1		1	1	0	0
Zebra	3		3	2		1
Totals	**84**	**7**	**91**	**61**	**4**	**26**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **TANDALA SAFARIS**
GMA: **Mulobezi**
Hunting Block: **Bilibili**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	2	4	6	3		3
Buffalo	2	4	6	5		1
Bushbuck	4	1	5	3		2
Bushpig	3	2	5	1		4
Civet	0	2	2	1		1
Duiker C	4	-1	3	2		1
Eland	1		1	1		0
Elephant	0	1	1			1
Grysbok	2		2	2		0
Hartebeest	4	2	6	4	1	1
Hyaena	2	1	3	2		1
Impala	10		10	5	1	4
Jackal	1		1	1		0
Kudu	3	1	4	1		3
Leopard	2		2	2		0
Lion	0	1	1	1		0
Oribi	3		3	3		0
Reedbuck	3	2	5	3		2
Roan Antelope	2	2	4	1		3
Sable Antelope	2	2	4	3		1
Warthog	5	3	8	4	1	3
Waterbuck D	3	1	4	3		1
Wilderbeest B	1	3	4	1		3
Zebra	2	2	4	1		3
Totals	**61**	**33**	**94**	**53**	**3**	**38**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Mvu Safaris**
GMA: **Mufunta**
Hunting Block: **Mufunta**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	2		2			2
Buffalo	3		3			3
Bushbuck	4	-2	2			2
Bushpig	3		3	3		0
Civet	1		1			1
Duiker Blue	2	-2	0			0
Duiker C	4		4	1		3
Duiker Yellow	1	-1	0			0
Eland	0	2	2			2
Grysbok	1		1			1
Hartebeest	9		9	6		3
Impala	2		2	1		1
Jackal	1		1			1
Kudu	2		2			2
Leopard	2		2			2
Lion	0	0	0			0
Monkey V	1		1			1
Oribi	8		8	7		1
Reedbuck	7		7	3		4
Roan Antelope	4	-2	2	1		1
Sable Antelope	1	6	7	4		3
Warthog	5		5	3		2
Wildebeest Blue	0	1	1			1
						0
Totals	**63**	**2**	**65**	**29**	**0**	**36**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Mvu Safaris**
GMA: **Lumimba**
Hunting Block: **Mwanya**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	6		6	3	1	2
Buffalo	15	13	28	27	1	0
Bushbuck	10	5	15	13		2
Crocodile	15	2	17	17		0
Eland	2	-1	1			1
Elephant Male	0	2	2	1		1
Grysbok	4	-2	2	1		1
Hartebeest	8	-6	2			2
Hippopotamus	8	8	16	14	2	0
Hyeana	0	6	6	3		3
Impala	15		15	11		4
Klipspringer	1		1			1
Kudu	5		5	4		1
Leopard	4		4	4		0
Iion Male	0	1	1	1		0
Oribi	1		1	1		0
Puku	16	4	20	19		1
Reedbuck	1		1	1		0
Roan Antelope	4	-3	1			1
Warthog	8	2	10	7		3
Waterbuck C	6	-3	3	2		1
Wildebeest C	4	1	5	5		0
Zebra	6	4	10	10		0
Monkey V	0	1	1	1		0
Totals	**139**	**34**	**173**	**145**	**4**	**24**

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THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Paya Kakuli**
GMA: **Lumimba**
Hunting Block: **Nyaminga**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	6	1	7	3		4
Buffalo	15	2	17	15	2	0
Bushbuck	6		6	6		0
Bushpig	1		1			1
Civet	0	2	2			2
Crocodile	10	-2	8	6		2
Duiker C	1		1	1		0
Eland	1		1	1		0
Elephant Male	2	0	2	1		1
Grsybok	1		1		1	0
Hartebeest	1		1			1
Hippopotamus	6	3	9	7		2
Hyeana	2	2	4	3		1
Impala	10	10	20	13	7	0
Klipspringer	0	1	1			1
Kudu	4	1	5	4		1
Leopard	4	1	5	5		0
Lion	1	0	1	1		0
Oribi	1		1			1
Puku	12		12	8		4
Reedbuck	2	-1	1			1
Roan Antelope	2		2			2
Warthog	5		5	3		2
Waterbuck C	4	-2	2	1		1
Wildebeest C	6	2	8	8		0
Zebra	4	-2	2	1		1
Totals	**107**	**18**	**125**	**87**		**28**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Sitatunga Game Ranch & Safaris**
GMA: **Munyamadzi**
Hunting Block: **Luawata**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	2	2	4	1		3
Buffalo	15	10	25	22		3
Bushbuck	6		6	5		1
Bushpig	1		1			1
Civet	2		2	1		1
Crocodile	4	2	6	2		4
Duiker C	2	-1	1			1
Eland	2		2	1		1
Elephant Male	2		2	2		0
Grsybok	2		2	1		1
Hartebeest	3		3	1		2
Hippopotamus	7	4	11	6	2	3
Hyaena	5		5	3		2
Impala	15	16	31	28	3	0
Kudu	5	1	6	6		0
Leopard	4		4	3		1
Lion Male	1		1	1		0
Puku	8	4	12	12		0
Reedbuck	1	-1	0			0
Roan Antelope	3	1	4	1		3
Warthog	5		5	2		3
Waterbuck C	2		2	2		0
Wildebeest C	5		5	3		2
Zebra	4		4	4		0
Totals	**106**	**38**	**144**	**107**	**5**	**32**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Impanga Safaris Limited**
GMA: **Lumimba**
Hunting Block: **Chanjuzi**

					UTILIZATION		
Species	**Approved Quota**	**djustments**	**Adjustments 2**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	2	2		4	3		1
Buffalo	13	2		15	14		1
Bushbuck	8			8	5		3
Civet	0	0	1	1	1		0
Crocodile	10			10	5		5
Duiker C	4	-2		2	1		1
Elephant	0	1		1			1
Genet	0	1	1	2	2		0
Grsybok	2			2	2		0
Hartebeest	2	-2		0			0
Hippopotamus	4	6		10	4		6
Honey Badger	0	1		1	1		0
Hyeana	4			4	4		0
Impala	15			15	10		5
Kudu	2			2	2		0
Leopard	4			4	3		1
Lion	0	1		1	1		0
Monitor Lizard	0	1		1	1		0
Monkey V	0	1		1	1		0
Oribi	1	1		2	2		0
Puku	16	-1		15	10	1	4
Reedbuck	2	-1	1	2	2		0
Roan Antelope	4	-4		0			0
Warthog	7	-3		4	2		2
Waterbuck C	5	-3		2	2		0
Wildebeest C	4			4	3		1
Zebra	4	-2	1	3	2		1
				0			
Totals	**113**	**-1**	**4**	**116**	**83**	**1**	**32**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Mopane Safaris**
GMA: **West Petauke**
Hunting Block: **Luembe**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	5		5	1		4
Buffalo	4	5	9	4		5
Bushbuck	5	1	6	6		0
Bushpig	1		1	1		0
Crocodile	5		5	5		0
Duiker C	2		2	1		1
Eland	1		1			1
Elephant Male	0	1	1			1
Grysbok	1		1			1
Hartebeest	1	1	2	2		0
Hippopotamus	4	4	8	8		0
Hyaena	3		3	3		0
Impala	8		8	8		0
Klipspringer	1		1			1
Kudu	4	1	5	5		0
Leopard	4		4	4		0
Lion Male	0	1	1			1
Puku	3	3	6	6		0
Reedbuck	1		1			1
Roan Antelope	1	1	2	2		0
Warthog	3		3	3		0
Waterbuck C	3		3	3		0
Zebra	2		2	1		1
						0
Totals	**62**	**18**	**80**	**63**	**0**	**17**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Madabula Safaris Ltd**
GMA: **Kasonso Busanga**
Hunting Block: **Kasonso Busanga**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	5		5			5
Buffalo	4		4	4		0
Bushbuck	5		5	1		4
Bushpig	3		3			3
Civet	1		1			1
Crocodile	1		1			1
Duiker Blue	2		2	1		1
Duiker C	3		3	1		2
Duiker Yellow	1		1			1
Elephnat Male	0	2	2			2
Hartebeest	8		8	3	2	3
Hippopotamus	2		2	1		1
Hyaena	2		2			2
Impala	8		8	1	2	5
Jackal	2		2			2
Kudu	2		2	1		1
Lechwe Red	6	4	10	1		9
Leopard	3		3			3
Lion	0	1	1	1		0
Oribi	5		5	2		3
Puku	10		10	2	2	6
Reedbuck	5		5	1		4
Roan Antelope	4		4	1		3
Sable Antelope	2		2	2		0
Sitatunga	8		8	2	1	5
Warthog	6	4	10	2	2	6
Waterbuck D	4		4	1	1	2
Wildebeest Blue	3		3	1	1	1
			0			0
Totals	**105**	**11**	**116**	**29**	**11**	**76**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Southgate Investments**
GMA: **Lunga Luswishi**
Hunting Block: **Lunga Busanga**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	4	-2	2			2
Buffalo	2	2	4			4
Bushbuck	4		4			4
Bushpig	1		1			1
Civet	1	-1	0			0
Crocodile	5	-3	2			2
Duiker C	3	-1	2			2
Grysbok	1		1			1
Hartebeest	8	-3	5			5
Hippopotamus	4	-1	3			3
Hyaena	3	-3	0			0
Impala	10		10			10
Jackal	1	-1	0			0
Kudu	3	-1	2			2
Lechwe Red	3	1	4			4
Leopard	2		2			2
Lion	0	0	0			0
Oribi	3		3			3
Puku	10	-4	6			6
Reedbuck	5	-1	4			4
Roan Antelope	2	-1	1			1
Sable Antelope	2		2			2
Sitatunga	7	-3	4			4
Warthog	6	-3	3			3
Waterbuck D	3		3			3
Wildebeest Blue	3	-1	2			2
Zebra	2		2			2
						0
Totals	**98**	**-26**	**72**	**0**	**0**	**72**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Prohunt Zambia Ltd**
GMA: **Lunga Luswishi**
Hunting Block: **Kasempa**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	5		5	5		0
Buffalo	3	-2	1			1
Bushbuck	8		8	8		0
Bushpig	4		4	2		2
Civet	0	1	1	0		1
Crocodile	7		7	4		3
Duiker Blue	2		2			2
Duiker C	6		6	2		4
Duiker Yellow	1		1			1
Hartebeest	6		6	2		4
Hippopotamus	5		5	4	1	0
Hyaena	2		2	2		0
Impala	15		15	12		3
Jackal	2		2	2		0
Kudu	4		4	3		1
Leopard	2		2	1		1
Lion	1		1	0		1
Oribi	8		8	4		4
Puku	13		13	12	1	0
Reedbuck	7		7	3		4
Roan Antelope	2		2			2
Sable Antelope	4	4	8	7		1
Sitatunga	6		6	3		3
Warthog	12		12	12		0
Waterbuck D	7		7	5		2
Zebra	4	4	8	4		4
Totals	**136**	**7**	**143**	**97**	**2**	**44**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Kaindu Natural Resources Trust**
GMA: **Kaindu Natural Resources Trust**
Hunting Block: **Kaindu Natural Resources Trust**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	2	-1	1			1
Buffalo	4	2	6	5		1
Bushbuck	2		2	2		0
Bushpig	2		2	1		1
Civet	0	1	1			1
Crocodile	2		2			2
Duiker Blue	2	-1	1	1		0
Duiker C	2		2	1		1
Hartebeest	5		5	4		1
Hippopotamus	3		3	2		1
Hyaena	0	1	1	1		0
Impala	5		5	3		2
Jackal	1		1			1
Leopard	1		1	1		0
Oribi	3		3	2		1
Puku	4		4	4		0
Reedbuck	5		5	4		1
Roan Antelope	2		2	1		1
Sable	0	3	3	2		1
Sitatunga	1		1			1
Warthog	2		2	1		1
Waterbuck Defassa	2		2	1		1
Zebra	2		2	2		0
Totals	**52**	**5**	**57**	**38**	**0**	**19**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Ilinda Open Game Ranch**
GMA: **Ilinda Open Game Ranch**
Hunting Block: **Ilinda Open Game Ranch**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon Yellow	1		1			1
Buffalo	1	-1	0			0
Bushbuck	1		1			1
Bushpig	1		1	1		0
Crocodile	0	0	0			0
Duiker C	2		2	1		1
Grsybok	1		1			1
Hartebeest	2		2	1		1
Impala	2		2	1		1
Kudu	1		1			1
Leopard	0	1	1			1
Monkey V	1		1			1
Oribi	3		3	2		1
Reedbuck	2		2	1		1
Sable Antelope	2		2			2
Sitatunga	3		3	3		0
Warthog	2		2	1		1
						0
Totals	**25**	**0**	**25**	**11**	**0**	**14**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Nyamvu Game Ranch**
GMA: **Nyamvu Game Ranch**
Hunting Block: **Nyamvu Game Ranch**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	2		2	2		0
Buffalo	2	2	4	4		0
Bushbuck	4		4	4		0
Civet	0	1	1	1		0
Crocodile	4		4	4		0
Duiker C	1		1	1		0
Elephant	1		1	1		0
Grsybok	1		1	1		0
Hartebeest	0	1	1	1		0
Hippopotamus	4		4	3		1
Hyaena	2		2	1		1
Impala	6	4	10	10	1	1
Klipspringer	1		1			1
Kudu	3		3	2		1
Leopard	1	2	3	1		2
Lion Male	0	1	1	1		0
Puku	2	1	3	3		0
Roan Antelope	3		3	3		0
Sable Antelope	3		3	3		0
Warthog	3		3	3		0
Waterbuck C	2	1	3	3		0
Zebra	0	2	2	2		0
Totals	**45**	**15**	**60**	**54**	**1**	**7**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Ivory Safaris**
GMA: **Musalangu**
Hunting Block: **Chikwa**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	4		4			4
Buffalo	18	-1	17	13		4
Bushbuck	3	5	8	4		4
Bushpig	4	-2	2			2
Civet	0	1	1			1
Crocodile	10		10	6		4
Duiker C	2		2			2
Eland	2		2	2		0
Elephant Male	2		2	2		0
Grysbok	1	2	3			3
Hartebeest	3	1	4	1		3
Hippopotamus	8		8	6		2
Hyaena	2	4	6	3		3
Impala	12		12	10		2
Kudu	3	2	5	4		1
Leopard	4		4	3		1
Lion Male	1	1	2	2		0
Puku	8		8	7		1
Reedbuck	0	2	2			2
Roan	3	0	3	3		0
Warthog	8		8			8
Waterbuck C	1	4	5	3		2
Wildebeest C	12		12	8		4
Zebra	5		5	3	1	1
Totals	**116**	**19**	**135**	**80**	**1**	**54**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company:
GMA: **Musalangu**
Hunting Block: **Tembwe Kambombo**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	9		9			9
Buffalo	5		5			5
Bushbuck	10		10			10
Bushpig	4		4			4
Crocodile	6		6			6
Duiker C	3		3			3
Eland	1		1			1
Grsybok	3		3			3
Hippo	6		6			6
Impala	5		5			5
Kudu	4		4			4
Leopard	2		2			2
Puku	5		5			5
Reedbuck	1		1			1
Roan	1		1			1
Warthog	4		4			4
Waterbuck C	5		5			5
			0			0
Totals	**74**	**0**	**74**	**0**	**0**	**74**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company:
GMA: **Musalangu**
Hunting Block: **Lundu**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	4		4			4
Buffalo	8		8			8
Bushbuck	3		3			3
Bushpig	2		2			2
Crocodile	3		3			3
Duiker C	3		3			3
Eland	3		3			3
Grsybok	1		1			1
Hartebeest	5		5			5
Hippo	4		4			4
Hyaena	2		2			2
Impala	9		9			9
Klipspringer.	1		1			1
Kudu	4		4			4
Leopard	2		2			2
Reedbuck	1		1			1
Roan	3		3			3
Warthog	4		4			4
Waterbuck C	1		1			1
Zebra	5		5			5
Totals	**68**	**0**	**68**	**0**	**0**	**68**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Nkalamu Open Game Ranch**
GMA: **Nkalamu Open Game Ranch**
Hunting Block: **Nkalamu Open Game Ranch**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	1		1	1		0
Buffalo	1		1			1
Bushbuck	3		3	3		0
Civet	1		1			1
Crocodile	1	1	2	1		1
Duiker C	1		1			1
Hippo	1	1	2	2		0
Impala	6		6	5		1
Kudu	1	1	2	2		0
Leopard	1		1	1		0
Puku	2		2	2		0
Roan Antelope	1	1	2	2		0
Warthog	1	1	2	2		0
Waterbuck C	1	1	2			2
Totals	**22**	**6**	**28**	**21**	**0**	**7**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

Species	Approved Quota	Adjustments	Final Quota	Harvested 1st	Harvested 2nd	Balance
Elephant	0	1	1			1

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

Species	Approved Quota	Adjustments	Final Quota	Harvested 1st	Harvested 2nd	Balance
Elephant Male	0	2	2	1		1

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Nyampala Safaris**
GMA: **Rufunsa**
Hunting Block: **Rufunsa**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	5	-4	1			1
Buffalo	3	1	4			4
Bushbuck	1		1			1
Bushpig	1		1			1
Crocodile	5	-2	3			3
Duiker C	2	-1	1			1
Hippo	4	-1	3			3
Hyeana	0	1	1			1
Impala	5	-2	3			3
Leopard	2		2			2
Warthog	2	-1	1			1
Zebra	0	1	1			1
Totals	**30**	**-8**	**22**	**0**	**0**	**22**

Species	Approved Quota	Adjustments	Final Quota	Harvested 1st	Harvested 2nd	Balance
Elephant Male	2	1	3			3

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Westgate Investments**
GMA: **Lupande**
Hunting Block: **Upper Lupande**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	3		3	1		2
Buffalo	20	2	22	19	2	1
Bushbuck	5	3	8	8		0
Crocodile	5		5	4		1
Duiker C	1		1	1		0
Eland	1		1	1		0
Grysbok	1		1	1		0
Hartebeest	1		1			1
Hippopotamus	5	2	7	6		1
Hyeana	3		3	3		0
Impala	15		15	12		3
Kudu	2		2	2		0
Leopard	4		4	4		0
Lion	0	1	1	1		0
Monkey V	1		1			1
Puku	10		10	8		2
Roan Antelope	1		1	1		0
Warthog	4		4	4		0
Waterbuck C	2		2	2		0
Wildebeest C	5		5	2		3
Zebra	5		5	4	1	0
Elephant Male	0	1	1			1
Totals	**94**	**9**	**103**	**84**	**3**	**16**

Elephant	0	1	1	1		0

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Mpyamanzi Conservation**
GMA: **Mpyamanzi Conservation**
Hunting Block: **Mpyamanzi Conservation**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	2		2	2		0
Buffalo	2	1	3	3		0
Bushbuck	1	1	2	2		0
Bushpig	1	1	2	1		1
Crocodile	1	1	2	1		1
Civet		1	1			1
Duiker C	1	1	2	1		1
Eland		1	1			1
Grysbok		1	1			1
Hartebeest	1	1	2	2		0
Hippopotamus	1	1	2	1		1
Hyaena		1	1			1
Impala	2	1	3	3		0
Kudu	1		1			1
Leopard		1	1	1		0
Reedbuck	1	1	2	2		0
Oribi		1	1			1
Puku		1	1	1		0
Sable		1	1	1		0
Roan		1	1	1		0
Waterbuck D		1	1	1		0
Warthog		1	1	1		0
Zebra	1	1	2	2		0
			0			0
Totals	**15**	**21**	**36**	**26**	**0**	**10**

Elephant Male	0	1	1			1

Elephant Male	0	1	1			1

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Muchinga Adventures**
GMA: **Tondwa**
Hunting Block: **Tondwa**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	4		4	1		3
Bushpig	2	1	3	3		0
Duiker B	2	1	3	2		1
Duiker C	4	-1	3	1		2
Eland	2		2	1		1
Grysbok	1	-1	0			0
Hyaena	1	-1	0			0
Impala	5	-5	0			0
Jackal	0	1	1			1
Puku	6		6	5		1
Reedbuck	2	2	4	4		0
Roan	3	-1	2	2		0
Sable Antelope	2	1	3	3		0
Sitatunga	5	3	8	6		2
Warthog	6	-2	4	3		1
Totals	**45**	**-2**	**43**	**31**	**0**	**12**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

Elephant	0	2	2	1	

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Kazumba Open Game Ranch**
GMA: **Kazumba Open Game Ranch**
Hunting Block: **Kazumba Open Game Ranch**

					UTILIZATION		
	Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
	Baboon	3		3	3		0
	Buffalo	2		2	1		1
	Bushbuck	2		2	2		0
	Crocodile	2		2	1		1
	Duiker C	1		1	1		0
	Grysbok	1		1			1
	Hippopotamus	2		2	1		1
	Hyaena	1		1			1
	Impala	6		6	6		0
	Kudu	2		2	1		1
	Leopard	1		1	1		0
	Lion	0	1	1	1		0
	Puku	1		1	1		0
	Roan	1		1			1
	Warthog	1		1	1		0
	Waterbuck C	1		1			1
				0			0
	Totals	**27**	**1**	**28**	**20**	**0**	**8**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **DJR INVESTMENTS LIMITED**
GMA: **Chiawa**
Hunting Block: **Chiawa**

					UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	4		4			4
Buffalo	2	4	6	3		3
Bushbuck	3		3	1		2
Bushpig	1		1			1
Crocodile	5		5	1		4
Duiker C	2		2			2
Elephant Male	0	2	2	2		0
Hippopotamus	5		5	3	1	1
Hyaena	2		2			2
Impala	10		10	2	2	6
Klipspringer	1		1			1
Kudu	0	0	0			0
Warthog	4	0	4	1		3
Waterbuck C	3		3			3
Zebra	2		2			2
Leopard	0	1	1	0		1
Totals	**44**	**7**	**51**	**13**	**3**	**35**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **BUSANGA TRAILS**
GMA: **Mukungule**
Hunting Block: **Mukungule**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	2		2	1		1
Buffalo	4	3	7	6		1
Bushbuck	3		3	2		1
Bushpig	1		1			1
Duiker B	0	1	1			1
Duiker C	2		2	1		1
Eland	2		2	1		1
Grysbok	1		1	1		0
Hartebeest	1		1	1		0
Hippopotamus	4	-2	2			2
Hyaena	1		1	1		0
Impala	1		1	1		0
Klipspringer	1		1			1
Kudu	3	-1	2			2
Leopard	1	1	2	1		1
Puku	3		3	2		1
Reedbuck	0	3	3	2		1
Roan Antelope	1		1			1
Sable Antelope	1	1	2	1		1
Warthog	3		3	1		2
Waterbuck C	4	-1	3	1		2
Zebra	3		3	1		2
						0
Totals	**42**	**5**	**47**	**24**	**0**	**23**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Sable Transport Ltd**
GMA: **Sandwe**
Hunting Block: **Sandwe**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	3		3			3
Buffalo	4		4			4
Bushbuck	6		6			6
Bushpig	2		2			2
Crocodile	5		5			5
Duiker C	3		3			3
Grysbok	1		1			1
Hippopotamus	3		3			3
Hyaena	2		2			2
Impala	6		6			6
Klipspringer	1		1			1
Kudu	2		2			2
Puku	2		2			2
Roan	3		3			3
Warthog	3		3			3
Waterbuck C	1		1			1
Zebra	1		1			1
			0			0
Totals	**48**	**0**	**48**	**0**	**0**	**48**

THE DEPARTMENT OF NATIONAL PARKS AND WILDLIFE

2016 NON RESIDENT HUNTING QUOTA

Safari Company: **Nsonga Game Management & Lodges**
GMA: **Namwala**
Hunting Block: **Namwala**

				UTILIZATION		
Species	**Approved Quota**	**Adjustments**	**Final Quota**	**Harvested 1st**	**Harvested 2nd**	**Balance**
Baboon	3	1	4	1	0	3
Buffalo	4		4	3	1	0
Bushbuck	4		4	4		0
Bushpig	2	2	4	0		4
Crocodile	4		4	4		0
Duiker C	4		4	2		2
Grsybok	2		2	0		2
Hartebeest	3	1	4	2		2
Hippopotamus	3	1	4	3		1
Hyaena	1	1	2	1		1
Impala	10		10	5	3	2
Kudu	3	1	4	2		2
Leopard	3		3	0		3
Lion	1		1	0		1
Oribi	1		1	0		1
Puku	8		8	5		3
Reedbuck	3		3	2		1
Sable	3	1	4	4		0
Warthog	4		4	3		1
Waterbuck D	4		4	3		1
			0			
			0			
Totals	**70**	**8**	**78**	**44**	**4**	**30**

Elephant	0	1	1			1

QUESTIONS FROM USFWS ON ELEPHANT NDF

NO	QUESTION /INFORMATION NEEDED	DNPW's RESPONSE
	A. Conservation and Management of Elephants	
1	Please provide the results of 2015 and 2016 African elephant hunting season in Zambia. In particular, we would like to know how many elephants were taken and the location (which specific hunting block, concession or communal area), the sex (if known), and what kind/amount of revenue was generated from these hunts.	A total of 15 African elephants were harvested for the past two years. In 2015 only (3) were harvested from lower lupande (2) and 1 from Luwawata which generated $30,000 in revenue. In 2016 a total of 12 elephants were harvested from Chiawa (2), Luwawata (2) ,Chikwa (2) and 1 each from Chifunda, Nyaminga, Nyampala Hunting Blocks and 1 each from Nyakolwe and Nyamvu Game Ranches all together generating revenue amounting to $120,000. Only male elephants were harvested from these hunts.
2	Does the government of Zambia continue to use the Statutory Instrument Number 107 of 2010 of the Zambia Wildlife Act No.12 of 1998 to regulate sport- hunting of elephant?	The Zambia Wildlife (Elephant Sport Hunting) Regulations No. 107 of 2010 has not been repealed and is still a valid Statutory Instrument. The repeal of the Zambia Wildlife Act No. 12 of 1998 did not by implication mean that the Statutory Instruments passed pursuant to the repealed Act are also repealed. On the contrary the Statutory Instruments passed pursuant to the repealed Act can only be repealed expressly or by an enactment of a subsequent Statutory Instrument. Therefore SI No. 107 of 2010 is valid law and part of the new Zambia Wildlife Act No 14 of 2015. However Department of National Parks and Wildlife (DNPW) submitted a revised Statutory Instruments on Elephant Sport Hunting to the Ministry of Justice for finalization in view of the transformation. Once the draft Statutory Instrument is finalized the same will be made available to yourselves.
3	We understand that the Zambia Wildlife Authority (ZAWA) was disbanded in 2015 and reincorporated as government department, the Zambia Department of National Parks and Wildlife (DNPW). Can you provide us information on the regulatory framework that relating to management of elephant populations in Zambia?	Since the repeal of the Zambia Wildlife Act No.12 of 1998 did not repeal the Statutory Instruments enacted under that Act, the Zambia Wildlife (Elephant Sport Hunting) Regulations No. 107 and the Zambia Wildlife (International Trade in Endangered species of Wild Fauna and Flora) Regulations No 61 of 2007 (CITES) and the relevant provisions of the Zambia Wildlife Act No. 14 of 2015 are still the regulatory framework that relate to the management of Elephant in Zambia.
4	When we last made findings for the import of sport	Although the 2005 elephant management plan expired in 2012, Government

	– hunted elephant trophies from Zambia the Government of Zambia had established the National Strategy for Elephant Management in Zambia in 2005. Does the Government of Zambia still manage elephants according to this strategy? Has the strategy been updated since 2005? If so, we would appreciate receiving a copy of the updated strategy.	still implements most of the strategies identified. However, the plan is scheduled for review this year. A consultant has since been engaged with support from the World Wide Fund for Nature(WWF) and The Nature Conservancy (TNC) to facilitate this process.
5	Which actions within the current National Strategy for Elephant Management in Zambia has DNPW implemented? Additionally, what outcomes have been achieved through implementation?	Actions so far implemented from the Elephant Management Plan include but not limited to the following:- 1) A central strong room for ivory stockpiles was built. An Ivory management System has been put in place – which includes management of ivory stockpiles. The ivory data base and comprehensive auditing system have been established. The ivory movement system from source to headquarters has also been put in place. Accountable documents for ivory movement systems have been developed. The ivory stockpile includes identified ivory from the following sources: ▪ Natural mortality ▪ Problem animal control ▪ Law enforcement/ recovered from poachers ▪ Collected from wildlife estate and / or Natural breakage ▪ Unknown origin including ivory from other countries ▪ Coordinates of source where mortality/ or ivory was collected. 2). The DNPW does monitor collection, registration, weighing and storage of ivory accordance with the standards recommended by CITES Resolution 10.9 (CoP10, Harare). 3). Monitoring illegal killing of elephants (MIKE) is been implemented in addition the Spatial Monitoring & Reporting Tool (SMART) system is being rolled out across Protected Areas. 4). Coordination of elephant management in Transfrontier Areas-a corridor management strategy was been developed; 5). Implementation of CITES rules and regulation on elephant.

		6). Improvement of funding. Government now pays DNPW staff salaries while allowing it to retain all its revenue as per budget this improving resources available to anti-poaching.
6.	How were funds generated from the sport hunting of elephant in 2015 and 2016 used, directly or indirectly, to benefit the long term survival of elephants? Please provide specific examples of projects or activities that were supported with funds generated through the sport hunting of elephants in Zambia. How will funds generated from sport hunting of elephants in 2017 be used, directly or indirectly, to benefit the long –term survival of elephant?	Funds generated from hunting are distributed as follows:- Animal fees are shared: - 5% of the funds go to the Community Resource Board (CRB) patron (traditional leader or Chief); - 45% of the funds go to the CRB in the form of community funds; and - 50% of the funds go to DNPW in the form of conservation funds. Concession fees are shared: - 5% of the funds go to the CRB patron (traditional leader or Chief); - 15% of the funds go to the CRB in the form of community funds; and - 80% of the funds go to DNPW in the form of conservation funds. According to the "Guideline on the use of Community funds accrued from wildlife management" the communities are utilised as follows: - 45% of the funds go to wildlife management, including resource protection and escort services; - 35% of the funds go to community projects such as construction of clinics, roads, schools, and wells; and - 20% of the funds go to administration of the CRBs. Communities have used funds from hunting to pay for school fees for Orphans and vulnerable children, repair or build classrooms or health centers or even purchase vehicles used as ambulances to mitigate long distances to hospitals.
7	How much revenue was generated by government of Zambia through elephant sport hunting in 2015 and 2016 and what was the breakdown of revenue distributed between DNPW and local communities? What is the fee structure ('revenue from sport – hunting" versus "hunting concession fees") and what amount of this revenue does DNPW allocate for anti – poaching activities? Are sport – hunting fees and hunting concession fees both utilized for	A total of USD30, 000 and USD120,000 was raised from the sale of elephants in 2015 and 2016 respectively. The total revenue was shared on the community as in the ***Annex 1*** below. About K2.5 million (USD260,000) and K11.4 million (USD1.1 Million) was given to CRBs as their share of the total revenue generated from hunting. The animal fees of elephant is USD 10,000 for non-residents, K69,999 for Citizens and K99,999 for Established Residents. The minimum concession fees for hunting blocks is as follows:-

	elephant conservation and community development?	Prime Hunting Block=K600,000 (highest bid) Secondary Hunting blocks= k360,000 Each Outfitter pays the community a fee of K100, 000 (approx USD10,000) annually. The Government allocates about K40million to DNPW annually of which 75% is used for anti-poaching. Revenue from sport hunting is used for conservation of wildlife through payment of community scouts salaries, patrols and other anti-poaching activities. The CRBs are obliged by law to invest 45% of their earnings from hunting on wildlife management and are allowed to use upto 35% of the money on their development activities.
8	Was all of the revenue generated from sport – hunting in 2015 and 2016 retained by DNWP, or did some portion of it go into Zambia 's general treasury.	DNPW retains all revenues from animal including elephant sport hunting, concession and other fees as per approved annual budget.
9	What benefits have local communities realized through the revenue generated by sport hunting in 2015 and 2016. Have the attitudes of these communities changed towards maintaining wildlife populations on communal lands (i.e., are their clear incentives provided for conserving wildlife, elephant specifically)?	Revenues from elephant sport hunting is used it to pay salaries for their scouts, conducted patrols and embarked on community projects. Direct Benefits; rendering scholarships to students for instance Nabwalya CRB is currently sponsoring two students as well as soft cash loans to small scale farmers with an objective of enhancing household food security. Communities in wildlife areas are committed to conservation of wild life because they are able to earn income from it directly and indirectly. Current concession agreements require that at least 80% of the outfitter's employees are from the local community as one direct incentive for conservation. The community also receives 50% of the meat from elephant hunting while outfitters purchase agricultural produce from them as well.
10	Please provide any current information you have available on trends in terms of government efforts to curb poaching activities in Zambia.	The level of effort from government to curb poaching increased with the presidential order to all security wings to be involved in anti-poaching. This has contributed to the increased number of man-days spent on patrol and the

		number of arrests of offenders.
11	It has been reported that "in Luangwa and even Kafue, the existing elephant protection efforts seem to be successful in controlling poaching and stabilizing elephant's population" does the government of Zambia have plans to replicate the success seen in Luangwa and Kafue across all of Zambia 's national parks?	The Government is committed to combating poaching and to ensure that positive population growth is recorded in all wildlife protected areas. Government through DNPW is in the process of starting to revise its elephant conservation strategy with special focus on needy areas that recorded declines in elephant. The plan will also look at how to galvanize private sector and NGO participation in elephant protection especially in Lower Zambezi and Sioma-Ngwezi NPs.
	B. Elephant Population Distribution, Status and Trends in Zambia	
12	The results of Great Elephant Census show that overall, the elephant population in Zambia may be stable, but with large difference between parts of the Country, for example, the data suggests that although elephant numbers are stable (possibly increasing) in the two largest elephant landscapes, Luangwa and Kafue, the numbers in the lower Zambezi are declining catastrophically. Furthermore, Sioma Ngwezi had a carcass ratio of 85%, showing where the poaching problem is most dire. Is or assessment of the situation in these areas including actions and future plans Zambia has to address these declines and the ongoing poaching crisis especially in Sioma Ngwezi.	DNPW is working with partners that include the Security agencies and NGOs to improve anti-poaching effects in especially Lower Zambezi and Sioma-Ngwezi National Parks. For instance, with assistance from WWF and the Peace Parks Foundation, Government has built new housing for rangers and recruited additional 30 rangers in Sioma-Ngwezi NP. Further government has approved projects by WWF and PPF under the KAZA TFCA that will see increased funding to support law enforcement activities in Sioma-Ngwezi National Park.
13	After the release of the Great Elephant Census data, we understand that the Government of Zambia indicated that they would launch a working group to develop future strategies. Has this working group been formed? If so, who are the members of this working group? What are the plans/goals for this working group? Any information you can provide regarding this working group would be informative	Government did not plan for any working group as suggested by online media. However, Government was addressing issues of poaching through other mechanisms. A presidential order was given to all government security agencies to participate in combating wildlife crimes in Zambia. To this effect a taskforce was formed which include the Zambia Army, Air force, National Service, Police, Intelligence and the Department of National Parks and Wildlife. Furthermore, DNPW with technical assistance from WWF and TNC are revising the elephant conservation strategy in a participatory manner with input from stakeholders that include photographic operators, outfitters, conservation NGOs, AfrESG, experts, academia, community and other

		government departments . The elephant conservation strategy will have special focus on combating elephant poaching and illegal trade of ivory.
	C. Sustainability of off-take	
14	Zambia's annual elephant export quota reported on the CITES secretariat's webpages for 2016 was set at 160 tusks (80 animals). Will the annual elephant export quota for 2017 remain the same, and if not, what will the export quota be for the upcoming year? It was stated that the hunting quota for 2015 hunting season was set at 36 elephants. What was Zambia's total elephant hunting quota for 2017? Please describe where open hunting areas are located. What are the quotas (by year) for each of your hunting blocks, concession areas, and communal areas, and how are the quotas distributed among these areas? What was the total off-take from sport – hunting in 2015 on Zambia's elephant population, and is this same information also available for sport- hunting conducted in Zambia in 2016?	Zambia's CITES voluntary export quota will remain the same at 80 animals (160 tusks) and the 2017 sport hunting quota is at 30 animals; The open game ranches that participate in elephant sport hunting are located in the Luangwa valley east of West Petauke GMA. Only hunting blocks located in the Luangwa and Zambezi valley are allocated elephants to hunt. Each is allocated only one elephant per year but may be allowed to hunt a second one if another hunting block within the same ecosystem voluntarily forfeits it's elephant quota thus ensuring that the total quota is not exceeded. Hunting quota for 2015 was 12 but only 3 were harvested in two hunting blocks namely Munyamadzi (1) and Lower Lupande (2). Nothing was hunted in private Game ranches. The Hunting quota in 2016 was 30, of which only 12 were harvested from Mwanya (1), Nyaminga (1), Luawata (2), Nyamvu game ranch (1), Chikwa (2), Chifunda (1), Nyampala (1), Nyakolwe (1), Chiawa (2) and Chisomo (1).
15	Please provide an explanation of the scientific rationale for your quotas and /or a copy of your CITES non – detriment finding.	The government sets quota based on the population size, distribution, trophy quality, occurrence of HEC and demand from the community or outfitter. The quota does not exceed 1% of the total elephant population and is always far below the export limit of 80. Surveys conducted in 2008, 2013 and 2015 show a stable to growing population in primary surveys elephant range ecosystems. Trophy quality measurements used as part of the data set to determine quotas. This has been made strict by insisting that hunters only take out tusks weighing above 15kg. Hunters who harvest underweight ivory are penalized.
16	If available, provide the results of analyses of trophy quality of all sport- hunted elephants in Zambia in 2015 and 2016	The average trophy weight for 2015 – 2016 was 19. 2 Kg. There has not been much change from the past 10 years i.e 2005 to 2013 which had an average of 19.21kg.
17	Please provide information on the number of	A total of 10 and 16 elephants were killed through controls in 2015 and 2016

	elephant killed as a result of conflicts between humans and elephants in 2015 and 2016. Were these elephants included in your hunting quotas for booth years?	respectively. In 2016, elephants killed 4 people and injured 1. None of the problem elephants were included on the sport hunting quota because the occurrence of Human Elephants Conflicts (HEC) by and large did not coincide with hunting by potential clients.
18	Please provide update information on elephant poaching levels and trends in Zambia 2015 and 2016. Results of carcass surveys and observation of poaching activities during scout patrols or other filed reconnaissance activities (e.g., numbers of new carcasses discovered on recent scout patrols) would be informative.	168 elephants were reported to have been poached in 2015 and 155 in 2016. A total of 50 fresh and 22 recent carcasses were recorded in national parks and GMAs cross the country in recent patrols.
19	Where poaching occurred in Zambia in 2015 and 2016, please provide information on the location (s) of problem areas where poaching was the most prevalent.	Poaching of elephant was recorded in Lower Zambezi , Sioma, South Luangwa, Lukusuzi and Kafue National Parks and in Game Management areas such as Rufunsa, Chiawa, West Petauke and Mulobezi.

In Reply Refer To:
FWS/AIA/DMA

Memorandum

To: The File

From: Chief, Branch of Permits

Subject: Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zambia during the 2012 hunting season

The African Elephant (Loxodonta africana) is listed as threatened under the U.S. Endangered Species Act with a special rule [50 CFR 17.40(e)]. The special rule gives the requirements for the import of sport-hunted trophies, including marking requirements for ivory. Under paragraph 17.40(e)(3)(iii)(C), the U.S. Fish and Wildlife Service (Service) must make a finding that the sport hunting of elephants will enhance the survival of the species in the wild. Information received from the Zambia Wildlife Authority (ZAWA) confirmed that the sport hunting of elephants, banned in Zambia since 1982, was re-opened under the Zambia Wildlife Act (Act No. 12 of 1998/Statutory Instrument No. 40 of 2005), enacted May 13, 2005, authorizing the sport-hunting of elephants for non-commercial purposes. A National Policy and Action Plan on Elephant Management in Zambia from the Ministry of Tourism, Environment and Natural Resources, as well as documentation provided at the 15th Meeting of the Conference of the Parties (Doha 2010 – CoP15 Prop. 5), was also provided to the Service. This document outlined the Government's goal to conserve elephants at population levels that would promote conservation of biodiversity while providing for sustainable utilization. This information provided overall guidelines on the management of elephants to ensure long-term survival. While the Service continues to have some concerns about how the financial resources and infrastructure within ZAWA are being utilized to adequately manage and effectively protect elephants in national parks and game management areas during this period, we believe that Zambia and ZAWA continue to make significant improvements. Based on the available information and continuing assurances made by ZAWA on providing documentation on the use of moneys derived from elephant hunting programs, the Service is ***able to find*** that the importation of sport-hunted elephant trophies taken in Zambia in 2012 enhanced the survival of the species.

Basis for Finding:

Population and Trends -
The current elephant population in Zambia is estimated to be approximately 27,000 animals and increasing. The range for the elephant in Zambia can be considered in seven sub-regions as follows: Luangwa Valley system, Mid/Lower Zambezi system, Kafue system, Mosi oa Tunya, Sioma - upper Zambezi system, Bangweulu system, Nsumbu – Mweru wa Ntipa, Lusenga - Tanganyika system, and West Lunga system. Each of the sub regions is larger than 10,000km^2 and a total area exceeding 200,000km^2. These elephant sub regions cover a diverse landscape and land tenure systems encompassing National Parks, Game Management Areas and some open areas creating an almost contiguous landscape in which elephants can roam between habitats. Still others form a continuum with the neighboring countries linking into the southern African sub-region population.

The habitat in the major elephant areas are: the Luangwa valley system, dominated by mopane woodlands on the valley floor and miombo woodlands on the plateau; Mid/Lower Zambezi valley dominated by mopane woodlands, Acacia woodlands, and miombo woodlands; Kafue system, dominated mainly by miombo woodlands, and some Baikea plurijuga woodlands mainly in the south; Mosi-oa-Tunya, Sioma – upper Zambezi system, dominated by miombo woodlands, some mopane and Baikea plurijuga woodlands; Bangweulu system, dominated by miombo woodlands and expansive wetlands; Nsumbu, Mweru wa Ntipa, Lusenga – Tanganyika system dominated by miombo woodlands, and itigi thickets; West Lunga is mainly dominated by wet miombo woodlands.

Protected Areas alone cover over 200,000km^2 or 30% of Zambia's total land mass of 754,614 km^2 in the form of National Parks and Game Management Areas. With trans-frontier conservation initiatives in and around Zambia, the elephant habitats are growing larger.

The status of elephant populations in the major range has been determined by systematic aerial sample counts, a method approved by MIKE program. The aerial population survey conducted in 2008 covered approximately 166,712.51 km^2 of the major elephant range, representing about 80% of the total range and resulted in a population estimate of 26,382 elephants. Additionally, most of the sub-populations within Zambia are contiguous with populations in neighboring countries, hence the formation and implementation of the modern concept of Trans-frontier Conservation Areas (TFCAs) in southern Africa to promote the maintenance of movement corridors for elephants between countries in the region.

In 2008, Zambia conducted a countrywide aerial survey of the African elephant at a cost of $191,460 to update the numbers surveyed in the previous years. The results estimated an

elephant population of 26400± 4400 indicating a stable population in reference to previous estimates of 2002 and the 1990s when estimates were 25000±3000 and 22000±3000 elephants respectively. Although confidence intervals are overlapping there is notable evidence that populations are stable and in some areas growing. The 2008 aerial survey apparently showed low carcass ratios in Kafue (0.97%), Luangwa (1.57%) and Upper Zambezi (3.20%), with Lower Zambezi (>5%) as the only exception. The ratios indicate stable or expanding populations. It is possible that population fluctuations in Lower Zambezi could be explained by the movements of elephants between Zambia, Zimbabwe, and Mozambique.

Since the early 1980s, most of the elephants have been restricted to National Parks, Game Management Areas and adjacent lands. Areas known to have had viable populations of elephants in the past are the Luangwa Valley, the Lower Zambezi Valley, Sioma Ngwezi, the Nsumbu/Mweru Wa Ntipa, the Kafue National Park and adjacent areas, Sesheke/Senanga districts, Kasanka/Lavushi Manda areas and Chizera /West Lunga areas in North Western province. However, most of the current elephant populations are in National Parks and some Game Management Areas.

The majority of the animals are widely distributed. The primary risk to the long-term survival of the elephant in Zambia appears to be increasing conflicts with human interests such as agriculture and human-elephant conflicts. The Zambian government by law owes it to the rural communities to conserve and to benefit from wildlife resources in a serious partnership.

Threats-

The elephant population of Zambia appears to be currently secure and viable, as evident from: population increases, available range, combined population size, representation in major protected areas, and the community-based natural resource management policies. The major threat to the short and medium term survival in Zambia appears to be increasing human-elephant conflicts. Between 1996 and 2008, survey results indicate that the elephant population was on the increase. This may imply that the species will continue to reclaim its former range, but human settlements continue to expand in the GMAs and human-elephant conflicts will continue to be a management challenge. From 2002 to 2008, 9,969 reports of problem elephants were made to ZAWA. The human-elephant conflicts have increased in the past decade, and will become the most serious area of conflict in the future. It is believed, however, that this situation could be counteracted if elephants are perceived to have value to the people living with them.

Hunting Quota-

Zambia currently has an annual voluntary quota of 80 individuals per year for trophy hunting for noncommercial purposes (quota between 2005 and 2010 was 20 animals). The level of sport hunting appears to be based largely on the 0.5% of standing population guideline (Martin 1986 and 2005). This implies that the maximum adult male off-takes through sport hunting at present should not exceed approximately 135 per year at current population size. ZAWA considered an increase in the national annual harvest export quota to 120 trophy hunted elephants per year (240 tusks per year) in documents presented at CoP15, but only increased the number to 80 in 2011.

However, it is the Service's understanding that legislation still needs to be adopted to facilitate this increase.

Illegal trade-
ZAWA, in collaboration with other law enforcement agencies such as the Drug Enforcement Commission (DEC), Anti-Corruption Commission (ACC), and Zambia Police and Customs, have made a number of seizures over the years. All seizures were reported to Elephant Trade Information System (ETIS). There appears to be a stronger domestic network that the Management Authority has established with other law enforcement agencies to control illegal trade at the national level.

Regulations and Enforcement-
The responsibility for implementing wildlife conservation laws in Zambia dates back to the 1930s or 1940s, when the Department of Tsetse, Fisheries, and Wildlife was created. In the late 1950s, this agency became the Department of Game and Fisheries and operated under this designation until the mid-1970s, when it became the Department of National Parks Wildlife Service (DNPWS) with responsibility for the protected area network. In 1999, the Government of Zambia transformed this agency into ZAWA, creating a semi-autonomous agency responsible for the management and protection of this network, with statutory powers derived through an Act of Parliament, "The Zambia Wildlife Act No. 12 of 1998". However, this agency, as a semi-autonomous agency, has a low funding capability, relying primarily on revenue from tourism, including sport hunting. Between 1999 and 2005, ZAWA struggled with their law enforcement capabilities due to inadequate resources. The costs associated with this transformation process continued to effected the financial and staff allocations for law enforcement activities. Large sums of money that could have been utilized by law enforcement were apparently channeled into tasks involved in the transformation process. There was also a temporal suspension of safari hunting during this time, further curtailing law enforcement capabilities due to a decrease in hunting revenues being collected. The ban on safari hunting was lifted in 2002. However, the ban on elephant sport hunting remained in effect until 2005. With the lifting of the ban, it is not clear whether ZAWA's law enforcement capabilities improved with the increase in revenues generated when safari hunting resumed. However, it does appear that the Protected Area network has suffered because of loss of personnel through retrenchments and reduced financial support.

During the 1970s, Zambia experienced a severe decline in their elephant populations due, in part, to increased human population, conversion of land for agricultural activities, and excessive hunting for ivory. The increase in poaching brought about by international demands for ivory also contributed to this decline. In 1982, the Government of Zambia instituted a ban on elephant sport hunting. By 1989, it was estimated that Zambia's elephant population had fallen below 18,000 from an estimated 200,000 in the 1970s. In 2004, according to information provided by ZAWA[1], Zambia's elephant population ranged between of 22,000 to 25,000, indicating a stable

1 This estimate is higher than the IUCN estimates for the same time period (see IUCN SSC African Elephant Status Report 2007)

and/or increasing population. As a result, in 2005, elephant sport hunting, which had been banned since 1982 was re-opened. Under the Zambia Wildlife Act (Act No. 12 of 1998/Statutory Instrument No. 40 of 2005), the sport hunting of elephant was authorized for non-commercial purposes. Under this legislation, there were two areas in three GMAs designated for the sport hunting of elephants - the Chiawa and Rufunsa GMAs in the Lower Zambezi Ecosystem, and the Lupande GMA in the Luangwa Valley Ecosystem.

For much of the time since its inception in 1999, ZAWA did not appear to have had adequate resources to conduct fully their functions. From the information provided, between 2005 and 2008, there were shortages in work force and a need for proper staff training, as well as a lack of material resources to enable staff to carry out their duties. Although ZAWA continued to pay salaries for staff throughout the country, ZAWA appear to have had to rely, largely, on outside donor organizations to recover from the costs associated with its transformation from the DNPWS. There was a need for suitable vehicles, radios or other means of communication, field staff accommodations, uniforms, weapons and other patrol equipment. The financial resources were also inadequate in terms of providing funding for management operations and projects. One organization, NORAD, through the Emergency Support Programme (ESP), provided funding to cover both management and law enforcement operations, allowing ZAWA to procure uniforms, patrol equipment, boats, and vehicles for resource protection in the Western and Central regions, where a majority of the hunting areas are situated. Another organization, the United Nations Development Program (UNDP) supported the Nsumba – Mweru Wa Ntipa Ecosystem, providing vehicles to Law Enforcement, as well as funding for the preparation of general management plans for the three national parks located in this area.

The Government of Zambia's CITES proposal for the Fifteenth meeting of the Conference of the Parties (CoP 15 - Doha, Qatar, March 2010) to transfer its elephant population from Appendix I to Appendix II, contained a report on the illegal killing of elephants indicating that between 2002 and 2008, there were 327 elephants illegally killed. Although elephant poaching trends indicated an increase in poaching levels, the estimated illegal annual off-take was said to be less than 0.3% of the elephant population estimates. The increasing trend in elephant poaching was attributed to increased poaching levels in Lower Zambezi and areas of the Luangwa Valley system where resources for law enforcement were considered inadequate. The high level of human-elephant conflicts taking place in these areas also exacerbated elephant poaching. Over 67% of problem elephant reports involved crop and property damages, as well as human injuries and deaths. However, there was no information given on the number of animals taken during this same timeframe in relation to problem animal control measures undertaken by ZAWA, leading to a potential increase in the percentage of annual off-take from both illegal and problem animal control activities.

The lack of resources available to ZAWA since this transformation previously raised question about their ability to monitor the actual level of poaching, as well as their enforcement

capabilities in addressing the ongoing illegal ivory trade within their own borders.[2] This was part of the rationale for the Service not finding that elephant hunting and the subsequent importation of trophies in previous years provided the required level of enhancement. In 2011, however, it appears that the situation had improved. ZAWA had multiple years to improve its management efforts and to "settle in". Management of ZAWA appeared to have stabilized and funding improved. ZAWA appeared to have taken efforts to improve their overall management and control. There also appeared to be an increase in the cooperation between ZAWA and community groups for the betterment of elephant management. These improvements appear to have continued into 2012.

Sustainable Use-

Elephant sport hunting which had been banned in Zambia since 1982, was resumed in May of 2005. The hunting of elephants for sport does not include the hunting of elephants for controlling problem elephants. The season commences on May 1st and ends on December 31st each calendar year. Currently, elephant sport hunting is only authorized in two designated areas of three GMAs: Chiawa and Rufunsa GMAs in the Lower Zambezi Ecosystem, and Lupande GMA in the Luangwa Valley Ecosystem.

Prior to the 1980s, wildlife management in these game management areas was the responsibility of the Zambian Government, with little or no local community involvement or stake in the management of these wildlife resources. According to ZAWA, this approach led to an escalation in the illegal harvesting of these resources. In the early 1980s, this reportedly changed with the development of the Administrative Management Design (ADMADE) program, a government initiative to guide and encourage the participation of local communities in managing wildlife in GMAs. In return for their participation in this program, the Government, under the ADMADE program, provided communities financial incentives derived from wildlife utilization in their respective areas. The revenue generated from safari hunting activities was divided in half with 50 % going to the central treasury and 50% going towards wildlife management. The 50% allocated for wildlife management was further divided as follows: 35% to local communities, 40% to the DNPWS for management purposes, and 25% for its administrative expenses.

Under the Zambia Wildlife Act No. 12 of 1998, with the transformation of the DNPWS to ZAWA, the concept of community participation in wildlife management was further advanced by providing a framework for the formation of Community Resource Boards (CRBs) in GMAs and open areas. The CRBs are local institutional bodies composed of elected community representatives, as well as representatives of the Chief and the local authorities, providing a link between ZAWA and the local communities. In June of 2002, ZAWA and the local communities

2 Documents CoP14 Doc. 53.2 ("Monitoring of Illegal Trade in Ivory and Other Elephant specimens") and CoP15 Doc. 44.1 Annex ("The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory") appear to support the DMA's statement regarding ZAWA's inability to monitor and control poaching. While the number of seizures reported in ETIS were low between 2004 (CoP13) and 2009 (CoP15), the volume of the seizures were very high (e.g., few seizures of very high quantities). The ETIS documents indicate that such occurrences are indicative of highly organized criminal activity is a major feature of the illicit ivory trade out of Zambia.

agreed to share revenue generated from safari hunting as follows: 45% going to CRBs, 5% going to Chiefs (Patrons), 40% to ZAWA, and 10% going to the Central Treasury.

On or about July 28, 2008, DMA sent a letter to Dr. Lewis Saiwana, Director General, ZAWA, asking for a detailed accounting of the amount of funds generated in a given year associated with safari hunting, and details on how those funds were allocated and spent. The Service received a response to that request from Dr. Saiwana in September 2008, stating that each CRB operates a bank account where the 50 % allotment of funds accrued from wildlife hunting was deposited. The administration of these accounts was supervised by the Auditor General's Office. According to Mr. Saiwana, between 2005 and 2007, a total of 44 elephants were taken in the four hunting blocks through licensed safari outfitters. The total income generated from this activity was $594,000, with $297,000 being the community share. Of that total income, 5% was paid to the Chiefs as the patrons of the CRBs. The remaining $267,300 was paid to the CRBs, with revenue amounting to $120,285 spent on wildlife management within the GMAs, $93, 355 spent on community projects, and $53,460 spent on CRB administrative activities. A detailed breakdown on the amount each hunting block received (Rufunsa, Chiawa, Upper and Lower Lupande) and the community projects undertaken with this funding was provided. However, an accounting of the revenue ZAWA received during this same timeframe, and how it was utilized to further elephant conversation and management programs within Zambia, was not provided. This puts into question whether the revenue ZAWA collected from elephant sport hunting during this timeframe in any way furthered Zambia's efforts to establish a sustainable management program for elephants. Although Dr. Saiwana provided an accounting for how this money was utilized by the local communities in relation to wildlife management and local development, there was no information provided for how the money retained by ZAWA was being utilized. It is not clear what percentage of elephant hunting revenue retained by ZAWA went towards activities involving elephant management, protection, and conservation in the National Parks and GMAs, putting into question the degree with which this system of hunting concessions benefits the protected area system, and what portion of revenues generated by elephant safari hunting go back into the management and conservation of Zambia's natural resources.

According to the 2007 report from ZAWA, there was no stated policy on human-animal conflicts, particularly in relation to compensation. In many rural areas where elephants exist in Zambia, there has been a steady rise in human-elephant conflicts that in turn creates a negative attitude towards any conservation efforts for elephants. This is of great relevance in rural communities where livelihoods are most affected by the presence of elephants. These communities are largely unaware of any possible advantages of living in close proximity to elephants when their crops and property were being destroyed. There is apparently no compensation given by ZAWA for property damage caused by elephants, and increased poverty has contributed to an increase in illegal activity and negative attitude towards elephants. Between 2001 and 2005, there were reportedly 115 elephants killed in response to human-elephant conflicts, with no benefits accrued to the affected communities, except for the meat. Through ZAWA's community based approach to natural resource management, the creation of CRBs in designated GMAs gives local communities a direct say in how these areas are managed

and operated. According to ZAWA, it is their policy that these GMAs be managed with the guidance of Management Plans. However, due to financial limitations, only four of the 35 GMAs have such plans in place.

On September 19, 2006, the Service provided grant money to the Wildlife Conservation Society, through the AECA, in the amount of $5,038 to provide support to village scouts in the Rufunsa GMA in southern Zambia, one of three GMAs designated for elephant sport hunting, to help strengthen conservation efforts by providing basic equipment and supplies to the community game scouts. This grant helped provided basic field equipment and rations to fourteen village scouts to improve their ability to patrol their community area outside the Lower Zambezi National Park. On September 16, 2008, the Service provided grant money to the Frankfurt Zoological Society, through the AECA, in the amount of $74,646 to provide support for law enforcement and protection of elephants in North Luangwa National Park, to better equip security teams protecting wildlife in eastern Zambia. This project was designed to provide equipment for trained ZAWA patrols in the Park, including rations for 10-day field patrols, base radios and solar equipment, handheld radios and GPS equipment for patrol teams, and conducting regular maintenance and upkeep of equipment and vehicles.

Since the report of the CITES Panel of Experts of 2002, Zambia has made tremendous progress in addressing issues raised by the Panel that were not unique to Zambia alone. The report by the Panel was used as a checklist for various issues that are now part of the progress for backing up this proposal. ZAWA has been able to show a greater level of "responsibility" in regards to how revenue is generated and utilized by the department. The Service previously stated that it was comfortable with the accounting of funds provided to communities, but was concerned about internal utilization of hunting revenues by ZAWA. While this account was not provided at the time the 2011 decision was made, the rationale that ZAWA cannot account for money until it is received was reasonable. Based on conversations held with ZAWA officials, the Service was comfortable in authorizing the importation of some trophy specimens on the assurance that ZAWA will clearly and accurately report on the amount of revenues generated during the 2011 elephant hunting season and how those funds were utilized for elephant conservation. ZAWA was informed, however, that if accounting were not provided for the 2011 season, authorization of future imports would not occur.

A letter was provided to ZAWA in January 2012, at the Safari Club International annual convention, requesting information concerning the requested accounting information on the 2011 hunting revenues. It has taken ZAWA much of the year to provide this information, but in mid-October 2012, the requested information was provided to the Service via an e-mail message. The e-mail provide a good general overview of how ZAWA handles funds generated through elephant hunting, as well as other hunting opportunities. Ideally, the Service was looking for very specific reporting on how revenue generated through elephant hunting specifically addressed elephant conservation needs. However, ZAWA was unable to provide such information due to how all funds generated by ZAWA are managed. ZAWA, like many other wildlife agencies, does not "earmark" specific funds for specific activities. As such, all funds generated through

elephant hunting are deposited into ZAWA's general treasury funds and used to fund all ZAWA activities. ZAWA did provide, however, a good description of the types of activities they carrying out in the area of elephant conservation. The description did provide a good understanding of ZAWA's management objectives and utilization of funds. Based on this information, we feel comfortable to state that the restrictions placed on the 2011 enhancement determination could be limited, on a year-by-year basis, and allow for the issuance of permits for elephants taken in 2012.

Enhancement of rural livelihoods-

Zambia states that they subscribe strongly to the United Nation's Millennium Development Goals, especially regarding poverty alleviation and environment. Zambia has stated that sustainable trade in elephant specimens is essential as an economic incentive mechanism for the conservation of the elephants, its habitat, and a myriad of other species. However, it is also crucial for satisfying basic human needs in rural areas, especially those that are challenged by the co-existence of humans and elephants. However, these are the same areas where poverty and disease are a serious challenge to human development. In many rural areas where elephants exist in Zambia, human-elephant conflicts are increasing creating substantial negative attitudes to the conservation efforts of elephants. Eventually elephants are the victims of the protection of human life and property. As the elephant population increases, accompanied by the spread of its range into areas inhabited by humans, conflicts are a well-known consequence. Under such circumstances, negative attitudes towards the elephant have been demonstrated and the future of the species can only be guaranteed if there is goodwill and tolerance by the rural poor who share the rural frontier with the elephant. Tolerance is likely to increase if communities realize and appreciate economic returns earned from the sustainable use of elephant.

Like many other countries in southern Africa, Zambia is fortunate to have a well-developed Community Based Natural Resources Management Program that offers assistance for livelihoods in arid and semi-arid areas where agriculture and livestock keeping are largely subsistence and may not be sustainable.

Economic returns from the sale of hunting opportunities for African elephants, either in association with other trophy species or alone, will undoubtedly enhance the participation of local communities in elephant conservation in Zambia.

Summary:

Up until 2010, ZAWA had a limited capacity to manage and protect elephants due, in part, to the costs associated with its transformation from a full government agency to a semi-autonomous agency in 1999. However, there were clear indications in 2011 that they have improved and that this improvement continued into 2012. The previous ban on safari hunting in Zambia impacted ZAWA's ability to manage wildlife resources due to decreased revenue from hunting fees. In 2002, the ban on safari hunting was lifted and ZAWA began to implement a system of local

community participation in wildlife management through the formation of democratically elected community institutions called Community Resources Boards in GMAs, designed to protect wildlife resources and implement community projects. This system allowed for the sharing of hunting revenues between ZAWA and local communities within these GMAs, giving communities a vested interest in conserving and protecting their wildlife resources. While the General Director of ZAWA has provided information on the amount of revenue generated from elephant sport hunting and how this revenue was distributed between ZAWA and the CRBs, the Service has had little information on how his agency had utilized their share of this revenue in relation elephant management and conservation. Given the totality of the situation, the Service was willing to accept ZAWA's assurance that a full accounting of the utilization of 2011 funds would be provided at the end of the year. Although it took ZAWA well into 2012 to provide the requested information, we have received a reasonable accounting of the generated funds. As a result, along with assurances from ZAWA that they will continue to provide an accounting of funds generated in 2012, it is likely that a clear indication of the benefits derived from sport hunting in relation to Zambia's elephants can be determined. Based on these factors, DMA is **able to find** that the sport hunting of elephants in Zambia in 2012 and the subsequent importation of these 2012 personal trophies is likely to enhance the survival of the species.

AFRICAN CONSERVANCIES

ANTI-POACHING REPORT

2016

AFRICAN CONSERVANCIES

African Conservancies was established in 2014, and the first project was in Nyaminyami Rural District Council, the Omay Communal Land hunting area. AC comprises Carbon Green International, the relevant Rural District Council and the relevant community in which the conservation plan falls. A trust has been formed that will include these parties as beneficiaries.

The primary goal of AC was to locate a suitable area to form, build and manage a sustainable community conservation area. The Omay 1 hunting area between the Ume and Sengwa Rivers was selected as a perfect phase one. The criteria of selection include: being communal land hunting area, falling within the CGI REDD+ project area, and having a suitable residual resource and forest land to be able to resuscitate.

OBJECTIVES OF AFRICAN CONSERVANCIES

The primary objective of AC was to select an area within the REDD+ project, (stretching from Binga to Kanyemba in the communal areas) and partner the community and council. The belief in building sustainable conservation areas and in particular enabling communities to truly and directly benefit from this sustainable utilization is at the core of this project.

The immediate goals with the Ume River Community Conservation Area were to reduce hunting offtake and reduce poaching. The hunting offtake was reduced in 2014, 2015 and in 2016. For example, 2014 saw twelve buffalo being hunted from the quota of thirty five. In 2015 we had a buffalo offtake of ten from the possible thirty five. Having done our own numbers on the ground, our offtakes are very conservative and the population increase through relocation due to no hunting pressure is clearly visible, with far better trophy quality and substantial numbers increases across species.

Anti-poaching began in 2014, with six CGI game scouts based out of Manyuli camp close to the Gokwe boundary and six scouts based out the Ume hunting camp. We decided at the close of 2014 that the anti-poaching was not having enough effect on the structured elephant poaching, so in March 2015 Steve Wentzel and I decided that it needed direction and management. So beginning in March, I personally came into the Omay to oversee and manage the anti-poaching teams.

I immediately amalgamated the two teams and brought in Mr Charles Khumalo to head up this new team. Charles is ex-Zimbabwean National Army, a brave, dedicated leader, who has commanded not only the respect of this unit, but myself and the community at large.

We started in-house training incorporating firearms training, tactical house clearances, offensive tracking and in the process building a more intense unit that could cope with a far more aggressive outlook to the poaching problems. This immediately began to produce results.

This team has increased in size and area of operations; in 2015 additional capacity was attained to eighteen personnel and there are four fixed bases of operations.

Our focus has been on hardened, armed poachers with the theory that the fish, snare, and dog bushmeat poachers would be dealt with in the process of eliminating the more "serious" elements.

AREA OF OPERATIONS

Though we in theory are based in the Omay communal land, our operations stretch into Gokwe, around Chizarira and Charisa and Binga. Due to our operations being outside of the National Parks we predominantly operate with Zimbabwe Republic Police details and RDC game scouts. Our entire unit has now been accepted as Police reservists and we are awaiting our Police force numbers.

It has been agreed that our unit, having been accepted as reservists, will establish a dedicated reaction team within the police force that I shall train and manage. The first in-house courses in conjunction with Police and ourselves are set to begin early 2017. We hope to achieve better safety, operational cohesion and teamwork by implementing standardized Standard Operating Procedures and insight into our intelligence and operations work.

OPERATIONS

In August 2015 Charles Khumalo was tasked with resurrecting and bettering the information gathering networks, as reacting to shots fired is almost a pointless affair. The poaching teams shoot toward last light and fifteen minutes from shots fired the elephant's face is chopped off and the poachers are moving. There is no way to track them fast enough to catch them up at this stage. The needle-in-a-haystack affair is almost pointless for arresting poachers. There are over two million acres of bush to patrol and it would require an army to do this.

The informant/intelligence network has had significant effect; we had over one hundred and twenty people on our books at the beginning of 2015. We have over one hundred and eighty at this time. Over ninety five percent of our arrests have occurred and been made possible through the capturing or purchasing of intelligence that is then collated, vetted and prioritized.

Our full-time Intel man has proven time and time again that our focus on the "funnies" department produces results. By taking away the safe zones of the community that the poaching teams utilized in the past, they are now severely limited as to where and how to carry out illegal operations without being compromised. We incorporate many layers into this department.

EDUCATION

Educating people and school children to the value of their wildlife and ensuring the CAMPFIRE funds trickle down and are utilized correctly is essential. In doing this we ask communities to embrace the teams' desire to protect their valuable resources and to understand that without the participation of the community in our protection efforts there is very little hope for the future as the community only has their renewable resources to consistently rely on.

PAC

We make sure the community is protected from the wildlife and ensure that we promptly carry out PAC (Problem Animal Control) operations. We carry out PAC work in predominantly a non-

lethal method, fireworks, implementation of beehive projects on elephant entrance routes, reinforcing stock pens against lions, and teaching methods of pushing unwanted wildlife back into the conservation areas - and supporting communities to do this.

UNDERCOVER OPERATIONS

There are continual rolling undercover operations taking place. These again vary in style and target various criminal elements. The “sales” department, “purchase” department and “poaching” department. The covert teams pose as the above, leading to sting operations carried out in conjunction with the police. These teams actively work their way into the ivory trade in the area, building up intelligence and “networking” the illegals and setting up stings that protect the identities and integrity of undercover teams and Confidential Informants. These ops by nature are very testing and have a high danger component that takes a certain type of individual to carry out with a high degree of success.

ENTRIES AND EXITS

The poaching teams generally originate from south of Nyaminyami district, with a few (under 5%) from Zambia to the north. Over 85% of them have to enter and exit the areas and cover substantial distances generally on foot. A substantial amount of time is put into understanding these routes, mapping them, walking and timing them, watching them physically or with trail cameras or in establishing informants to monitor the routes. By doing so we have formed a very good idea of which team is on the way in or has come into the area and where to intercept them on the way out or set up sting ops to catch them on exit.

GENERAL PATROLS

General cross-graining for spoor is carried out between intel operations, with the entries and exits work helping to minimalize the amount of area that requires coverage. We will also utilize this quiet time to carry out work on lesser criminal activities like bushmeat and fish poaching.

SUCCESFUL OPERATIONS

25 January. Confidential Informant (CI) resulted in a night operation on a poacher’s home resulting in an arrest and recovery of an illegal firearm used for elephant poaching.

13 March. CI led to an ambush of an entrance route from Binga. The poaching team changed their route, resulting in an imperfect ambush. On contact, one was arrested and three escaped. Tracker team follow-up found the escapees fled to Zambia to avoid arrest.

21 March. A patrol found a fresh snare line. Tracker team followed up approximately 30 km to homesteads. Subsequent search and questioning led to the arrest of two and recovery of 25 snares and spears.

4 April. CI led to a night op on two locations. One with an illegal firearm and the second with the ammunition, both recovered. Warrants of arrest have been issued for the individuals involved.

13 July. Tracker team follow-up of suspicious spoor led to the arrest of an individual laying cable snares, 17 cable snares were recovered.

15 July. Observation team sighted a suspicious fire at night. OP guided tracker team in at first light. Were fired upon, poachers fled during exchange of fire.

15 October. Tracker team with information from CI followed spoor of elephant poaching team leading to Matusadona National Park. Contact and exchange of fire ensued, contact initiated prematurely due poaching teams imminent entry to the Park. Suspects fled into the Park unfortunately holding the firearm but dropping other equipment. Cross-boundary follow up delayed due the time of day.

3 November. Suspect photographed by trail cam exiting Park with Ivory. After positive ID, night op resulted in his arrest. Trial is ongoing, critical due to the first time photographic evidence of this nature will be utilized for state prosecution.

3 November. CI information led to the arrest of a poacher found in possession of poached buffalo meat and poaching equipment.

18 December. CI information led to arrest of an individual in possession of pangolin scales and skins, buffalo carcass and equipment.

26 December. CI information led to a night op and the arrest of a known meat poacher. Illegal bush meat, snares and equipment were recovered.

ARRESTS

ELEPHANT POACHING	**3**
MEAT POACHING	**12**
ILLEGAL FISHING	**30**
GOLD PANNING	**7**

	52
RECOVERIES	
WEAPONS	**2**
SNARES	**119**
ILLEGAL NETS	**+ 4000m**

GENERAL

2016 saw a massive reduction in poaching activities and the increase in game numbers is now quite visible. Over the last nineteen months only four elephant have been poached in the whole of Omay. We believe that these results have been achieved by the continuous efforts to reduce the operating space and safe zones for poaching teams and the significant reduction in firearms available to the teams from our 2015 recoveries of illegal weapons.

Poaching teams still enter Matusadona National Park via their southern boundary, and 2017 will see our teams operating to close these routes down and we expect significant action over the coming months.

2015 saw the unfortunate murder of one of our confidential informants. The person targeted was the head of our intel section. His brother, the CI was poisoned and died. The subsequent attempts to poison senior members of our team and myself just go to prove the impact that we have had on the illegal elephant poaching in the Omay and to the lengths these gangs will go.

We would not be able to operate without the significant financial assistance we receive from Carbon Green Africa and the Safari stakeholders in the Omay. Hunting and the sustainable utilization of forests plays a pivotal role in the subsistence of the communities that live in Omay. Our role in contributing to a sustainable livelihood from these renewable resources on behalf of the communities is imperative. Any assistance contributed toward this in any format always goes a long way.

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Range contraction enables harvesting to extinction

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Economic incentives to harvest a species usually diminish as its abundance declines, because harvest costs increase. This prevents harvesting to extinction. A known exception can occur if consumer demand causes a declining species' harvest price to rise faster than costs. This threat may affect rare and valuable species, such as large land mammals, sturgeons, and bluefin tunas. We analyze a similar but underappreciated threat, which arises when the geographic area (range) occupied by a species contracts as its abundance declines. Range contractions maintain the local densities of declining populations, which facilitates harvesting to extinction by preventing abundance declines from causing harvest costs to rise. Factors causing such range contractions include schooling, herding, or flocking behaviors—which, ironically, can be predator-avoidance adaptations; patchy environments; habitat loss; and climate change. We use a simple model to identify combinations of range contractions and price increases capable of causing extinction from profitable overharvesting, and we compare these to an empirical review. We find that some aquatic species that school or forage in patchy environments experience sufficiently severe range contractions as they decline to allow profitable harvesting to extinction even with little or no price increase; and some high-value declining aquatic species experience severe price increases. For terrestrial species, the data needed to evaluate our theory are scarce, but available evidence suggests that extinction-enabling range contractions may be common among declining mammals and birds. Thus, factors causing range contraction as abundance declines may pose unexpectedly large extinction risks to harvested species.

anthropogenic Allee effect | hyperstable | endangered species | poaching | biogeography

Harvesting has driven the population declines of thousands of species of animals and plants (1), but it is thought to rarely cause extinction because the increasing cost of harvesting a progressively rarer species would eventually exceed the value of the harvest, and harvesting would stop (2). However, for species harvested for high-value products, there is concern that their depletion could fuel price increases, via market demand, large enough to compensate for higher harvest costs and thereby maintain profit incentives to harvest all of the way to extinction, absent management intervention (3). Courchamp et al. (3) term this threat the "anthropogenic Allee effect."

Species thought to face this threat include those harvested, both legally and illegally, for trophies [e.g., large terrestrial mammals including rhinoceros, elephants, and large cats (4–8)], for collections [e.g., stag beetles (9)], for body parts regarded as having medicinal or aphrodisiac properties [e.g., many large mammals (4)], or for luxury foods [e.g., sturgeons, bluefin tunas, sea cucumbers (10–12)]. Many such species are considered threatened by the Red List of the International Union for Conservation of Nature (IUCN) (1) or the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (13). Expanding human populations, coupled with economic growth in developing countries with large luxury harvest markets, may increase pressures on these species in coming decades (12).

A similar threat of extinction from overharvesting would occur if a species' harvest costs failed to rise as its abundance declined, thus maintaining harvesting profitability. One way this can occur is if the geographic area (range) occupied by the species contracts as its abundance declines, thereby maintaining its local population density. This pattern has been noted in several fish and aquatic invertebrate populations (14, 15) and may have contributed to the famous 1990s collapse of northern cod (*Gadus morhua*) (16). In fish and invertebrates, range contraction is often observed in declining populations that exhibit schooling behavior (to maintain school sizes) and/or forage in patchy environments (because populations concentrate in the preferred habitats) (14, 15, 17). Habitat destruction and climate change can also cause range contraction and thus might similarly buffer harvest costs against population declines and create incentives for harvesting to extinction.

These overharvesting threats from range contraction and market demand likely interact (Fig. 1). For example, prices would not need to be very sensitive ("flexible") to abundance declines to allow profitable harvesting to extinction if costs were insensitive to abundance declines because of range contraction.

Here, we theoretically and empirically characterize this interaction. We use a simple model to illustrate conditions under which range contraction and price flexibility can in combination allow harvesting to extinction under open access. We then review available empirical evidence to shed light on where these biological and economic risk factors may be most acute. Whereas many harvests are now managed (18), it is nonetheless important to understand the threats posed by open-access incentives due to

Significance

Many threatened species including elephants, sturgeons, and bluefin tunas are harvested for high-value products. Species can be driven extinct if incentives to harvest do not diminish as populations decline; this occurs if harvest prices rise faster than costs with declining stock. Whereas recent conservation attention for these species has largely focused on market demand, we show—using a theoretical model and an empirical review—that contractions in species' geographic ranges, which stabilize costs and may be especially common among terrestrial species, might often play a larger role in maintaining harvest incentives. Forces impacting ranges—such as patchy and declining habitats, schooling/herding behavior, and climate change—therefore merit greater attention in assessing overharvesting threats.

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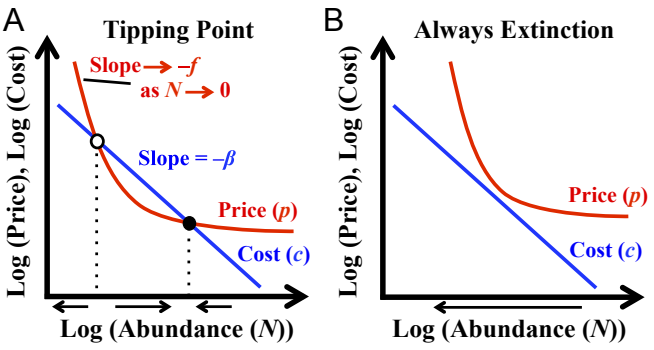

Fig. 1. Profitable harvesting to extinction [Courchamp et al.'s (3) anthropogenic Allee effect] under open access occurs when, at harvest levels at which abundance is not changing, harvest price (red, nonlinear due to density-dependent population growth) is greater than harvest cost (blue) as abundance approaches zero. Such conditions either can result in alternative stable states (***A***)—a tipping-point abundance (open circle) separates domains of attraction of a positive equilibrium abundance (solid circle) and extinction—or can cause profits to be positive at any abundance and make extinction the only possible outcome of open-access harvesting (***B***).

the pervasiveness of illegal and unreported harvesting of endangered species (4, 7, 8).

Theory

We consider the following model of open-access harvesting on a single population with abundance N. The population has a per-capita growth rate, denoted $g(N)$, which follows negative density dependence ($g'[N] < 0$) and has a maximum of r ($g[0] = r$). The population is harvested at rate Y, which is a function of the current harvest effort, E, and abundance (N); there is no harvest if either abundance or effort is zero:

$$Y = Y(N, E),\ Y(0, E) = Y(N, 0) = 0. \quad [1]$$

The population's rate of change, denoted $\dot{N} \equiv dN/dt$, is

$$\dot{N} = Ng(N) - Y. \quad [2]$$

Under open access, the rate of change in effort, $\dot{E} \equiv dE/dt$, has the same sign as harvest profits (2); i.e.,

$$\dot{E} > (<)\, 0 \text{ if } p > (<) c,\ \dot{E} = 0 \text{ if } p = c, \quad [3]$$

where p and c are, respectively, the price and average cost of a unit of harvest received/incurred by harvesters.

Extinction Condition. Harvesting to extinction can occur in this model if and only if, as abundance (N) approaches 0, there is still upward pressure on effort (i.e., $\dot{E} > 0$) when harvest rates (Y) exactly balance population growth ($Ng[N]$) (i.e., abundance is not changing, $\dot{N} = 0$) (illustrated in Fig. S1). Formally, this means that extinction can occur if and only if

$$\lim_{N \to 0} \left(\frac{p}{c}\right) |_{Y = Ng(N)} > 1. \quad [4]$$

Prices, Costs, and Abundance. We assume that the sensitivity of the price (p) to changes in abundance (N) is mediated by changes in the supply of harvest in the market—equal to the harvest rate, Y. The sensitivity of a harvest product's price to its supply is commonly measured by the "price flexibility of demand" (19, 20), denoted f, defined as

$$\frac{\partial p}{\partial Y}\left(\frac{Y}{p}\right) = -f; \quad [5]$$

i.e., price increases by f% when supply (Y) declines by 1%. Price flexibility is related to, but distinct from, the more widely known concept of demand elasticity; they are reciprocals in a market with only one good, but not otherwise (19). We use price flexibility, because it is considered a more appropriate empirical demand measure for harvests (e.g., ref. 20).

Assuming constant price flexibility (f), Eq. **5** implies that the price (p) is given by

$$p = \rho Y^{-f}, \quad [6]$$

where ρ is either a constant or a function of variables other than supply (Y). In the analysis that follows, we assume ρ is constant, but discuss alternate assumptions in *Theory*, *Other Considerations* and in *SI Materials and Methods*.

To model the relationship between average costs (c) and abundance (N), we assume the harvest rate (Y) at a given time is proportional to the harvesting effort (E) (i.e., constant returns to scale) multiplied by the population abundance (N) raised to a constant power, β (*sensu* refs. 21 and 22):

$$Y = qN^{\beta}E. \quad [7]$$

q is also a constant. β represents the percentage of change in catch-per-unit effort (CPUE $= Y/E$) resulting from a 1% change in abundance (N) and thus can be thought of as the "catch flexibility." If $\beta < 1$, then CPUE is "hyperstable" because it changes proportionally more slowly than abundance (21).

For simplicity we assume that effort has a constant cost and that the units of effort are such that they have unit costs (i.e., total cost $= E$). The average unit cost of harvest ($c = E/Y$) is then given by (from Eq. **7**)

$$c = q^{-1}N^{-\beta}. \quad [8]$$

We briefly discuss alternate assumptions in *Theory*, *Other Considerations* and in *SI Materials and Methods*.

Extinction Condition Revisited. With Eqs. **6** and **8** for p and c, extinction condition **4** becomes

$$\lim_{N \to 0} \left(\frac{p}{c}\right) |_{Y = Ng(N)} = \begin{Bmatrix} 0 & f < \beta \\ \rho q r^{-f} & f = \beta \\ \infty & f > \beta \end{Bmatrix} > 1, \quad [9]$$

implying (Fig. S1; intuition discussed below and illustrated in Fig. 1) that extinction can occur if and only if

$$f > \beta,\ or\ f = \beta\ and\ \rho q r^{-f} > 1. \quad [10]$$

If price flexibility exceeds catch flexibility ($f > \beta$), then two scenarios are possible (depending on parameter values) under open access: (*i*) Extinction is the only possible outcome (Fig. 1*B* and light-red E isocline in Fig. S1*D*) and (*ii*) there is an unstable equilibrium acting as a tipping point separating a basin of attraction of extinction and a basin of attraction of either a stable (positive) equilibrium or a limit cycle (Fig. 1*A* and dark-red E isocline in Fig. S1*D*). In contrast, if $f = \beta$ and $\rho q r^{-f} > 1$, only extinction is possible (light-red E isocline in Fig. S1*E*).

Range Contraction. Under random search, CPUE would be proportional to population density (abundance [N]/range area [A]), i.e., $Y \propto \left(\frac{N}{A}\right) E$, and catch flexibility (β) would then be determined solely by the relationship between abundance (N) and range area (A): $\beta = 1 - \frac{\partial A}{\partial N}\left(\frac{N}{A}\right)$. In practice, other factors (e.g., technology, harvester search skill) tend to further buffer CPUE as abundance declines (15, 23) (see Fig. 2 and Dataset S1 for many examples), meaning that

$$\beta \leq 1 - \frac{\partial A}{\partial N}\left(\frac{N}{A}\right). \quad [11]$$

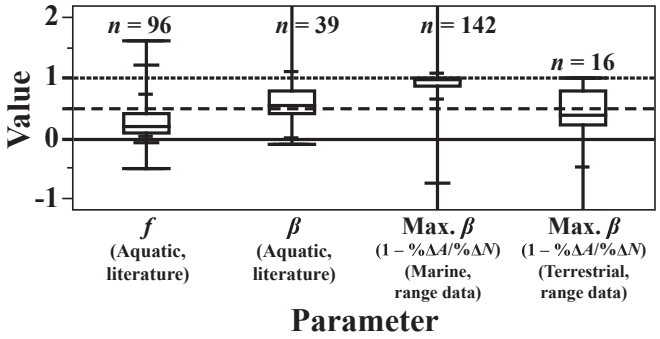

Fig. 2. Comparison of ranges of estimates of price flexibility (*f*: the percentage of increase in price, *p*, caused by a 1% decrease in harvest rate, *Y*) and catch flexibility (β: the percentage of decrease in CPUE caused by a 1% decrease in abundance, *N*) from the published literature for aquatic species and observed range-abundance relationships [which imply upper bounds on catch flexibility (Max. β) by inequality **11**] in marine fish and invertebrates, terrestrial mammals, and one terrestrial bird species (northern bobwhite). Boxes show 25th to 75th percentile range; minima, maxima, and 2.5th, 10th, 90th, and 97.5th percentiles are marked on the whiskers. See Dataset S1 for all values and references. Two terrestrial mammal populations having no observed abundance change are excluded.

Intuition. The intuition of our theory is as follows: A 1% decrease in abundance (N) of a rare species increases average costs by β% and increases price by approximately f%. If $f > \beta$, the incentive to keep harvesting only increases; if $f = \beta$, it fails to decrease (and it is positive if $\rho q r^{-f} > 1$). If range (A) contracts proportionally as fast as or faster than abundance declines [i.e., $\frac{\partial A}{\partial N}\left(\frac{N}{A}\right) \geq 1 \Rightarrow \beta \leq 0$], then incentives to harvest are maintained even with constant prices ($f = 0$), and range contraction therefore poses an extinction threat on its own (16, 23). Similarly, if prices rise proportionally as fast as or faster than supply falls (i.e., $f \geq 1$), then incentives to harvest are maintained even with no range contraction (i.e., $\beta = 1$), and price flexibility poses an extinction threat on its own. The most common case, as we will see below, is where $0 < \beta, f < 1$—one where price flexibility and range contraction (and/or other factors making costs insensitive to declines) can pose threats only in combination.

Other Considerations. Other factors beyond price and catch flexibilities can impact the changes in costs or prices coincident with changes in abundance. These include economies of scale [meaning $\frac{\partial Y}{\partial E}\left(\frac{E}{Y}\right) > 1$] (e.g., ref. 24), technology and technological change (meaning $dq/dt > 0$) (25), supply-independent increasing trends in price (e.g., caused by income growth) (meaning $\partial\rho/\partial t > 0$), and supply-independent effects of abundance on prices caused by "rarity value" (3, 26) ($\partial\rho/\partial N < 0$).

These other effects are not the focus of the present study, but we show in *SI Materials and Methods* the direction in which each of these effects is likely to impact extinction threats: Technological change, positive supply-independent price trends, and rarity value each exacerbate the threats [although supply-independent rarity effects on prices may be negligibly small in comparison with supply effects (measured by f) for species already rare enough for their harvest products to confer status; e.g., Fig. S2]. Economies of scale have a neutral effect when $f \approx 1$ or $\beta \approx 1$ but can have a mild mitigating effect when f and β are both small (Fig. S3). We briefly discuss this effect in context with observed economies of scale in fisheries (Table S1). We also show how the existence of perfect substitutes (i.e., goods that are indistinguishable from the focal species' harvest product to consumers) will tend to prevent profit-driven extinction altogether. Finally, we discuss the implications of nonconstant f and β—in short, extinction still requires $f \geq \beta$ [assuming constant ρ and q and $\frac{\partial Y}{\partial E}\left(\frac{E}{Y}\right) = 1$], at the limits of f and β as abundance (N) approaches zero.

Other factors—such as intertemporal discounting (27, 28) and opportunistic or multispecies harvesting (29, 30)—can influence a species' risk of extinction by overharvesting via different mechanisms, but these are also not the focus of this study.

Review of Empirical Evidence

Our theory suggests that profitable harvesting to extinction requires highly flexible prices, highly inflexible catch rates (implying inflexible costs), or a combination ($f \geq \beta$, which may be a conservative criterion, given the exacerbating factors not included in our model). We assume that price flexibility does not directly influence—nor is it influenced by—either catch flexibility or the range–abundance relationship, and thus we review empirical estimates of these three factors separately (Fig. 2), rather than restricting our analysis to species having estimates of each (there are very few such species).

Price Flexibility. To our knowledge, price flexibility (f) estimates for wild terrestrial harvests are rare, perhaps because few terrestrial harvests of wild animal species are legal and commercial in data-rich countries. One modeling study (31), however, assumed $f = 0.1$ for poached elephants. A second study (32) estimated demand elasticity for Serengeti bushmeat to be >1, which is consistent with $f < 1$ with few substitutes.

In contrast, we found 96 published price-flexibility estimates for aquatic harvest products (Fig. 2 and Dataset S1)—varying widely in focal species, commodity type, position in the supply chain [ex-vessel (the price paid to harvesters), wholesale, and retail], and estimation method, including some from high-value species. Most estimated price flexibilities were low (median $f = 0.22$; $f < 0.5$ in 81% of estimates). Estimates of ex-vessel price flexibilities—of primary relevance to our theory—were especially small ($n = 46$, median = 0.12, $f < 0.5$ in 96% of estimates) (Dataset S1). Ex-vessel prices tend to be less flexible than prices farther along the supply chain (33), perhaps because of market power among some wholesale buyers and processors or because storage and preservation can buffer retail supplies against changes in harvest rates.

Some high-value aquatic species lack formal price flexibility estimates from in-depth demand analyses, but their price trends are nonetheless mostly consistent with inflexible prices ($f << 1$). To illustrate this point, Fig. 3 shows aggregate price–supply relationships for several populations thought to be facing (or to recently have faced) demand-related extinction threats. Bluefin tunas [Atlantic (ABF) (*Thunnus thynnus*), Pacific (PBF) (*Thunnus orientalis*), and Southern (SBT) (*Thunnus maccoyii*)] have had relatively stable prices despite abundance declines (Fig. 3 *A* and *B*; data from refs. 34 and 35). Indeed, Chiang et al. (36) estimated $f = 0.19$ for wholesale fresh bluefin tuna (lumped ABF, PBF, and SBT) in Japan. Historical caviar [made from sturgeon (Acipenseriformes) roe] prices (1976–2010; Fig. 3*C*; data from ref. 37) have risen 0.3% on average for every 1% decline in catch. Before the International Whaling Commission's moratorium on whaling in the late 1980s, Northeast Atlantic minke whale (*Balaenoptera acutorostrata*, a relatively data-rich whale example; data from ref. 38) prices increased by 0.65% on average for every 1% decline in catch (Fig. 3*D*). California abalone (*Haliotis* sp.) prices seem to have been more flexible, increasing by roughly 1% (0.98%) for every 1% decline in catch over the period 1950–1993, before the 1997 ban on fishing (Fig. 3*E*) (data from refs. 3 and 39). These historical trends do not necessarily reflect the magnitudes of underlying market-level price flexibilities, but they are mostly consistent with the pattern of low price flexibility ($f < 1$) seen in other aquatic harvest products (Fig. 3*F*). Controlling for catch, none of these species have residual prices significantly correlated with abundance (Fig. S2),

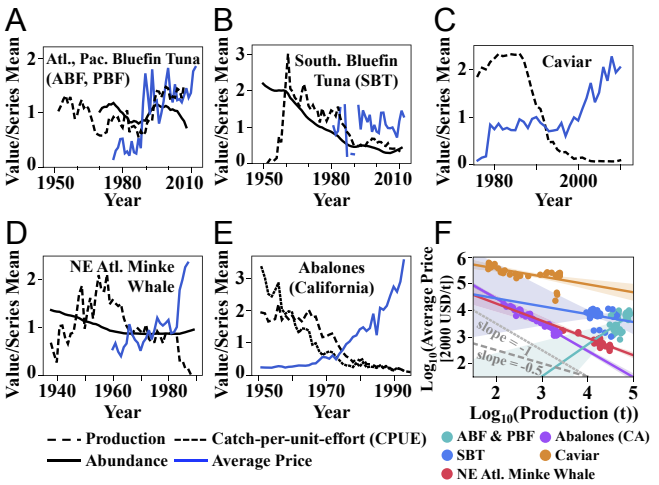

Fig. 3. Price trends in highly valued marine species: (*A*) ABF and PBF [production (total catch) and abundance from ref. 35; ex-vessel prices from ref. 34], (*B*) SBT [production (total catch) and abundance from ref. 35; ex-vessel prices from ref. 34], (*C*) caviar (global production, average export prices from ref. 37), (*D*) the Northeast Atlantic minke whale (production, abundance, prices from ref. 38), and (*E*) California abalones (CPUE and prices from refs. 3 and 39). All prices were converted to real USD value using the World Bank's (40) published currency exchange and inflation rates. (*F*) Prices of each of these harvests have historically risen as fast as catch has declined (California abalone) or slower (others). For ABF and PBF, catch and prices rose together pre-1990, creating a positive correlation, likely due to the expansion of sashimi markets. Solid lines show linear fits of log-transformed price and production (supply) data, with 95% confidence intervals shaded. Dotted and dashed gray lines, respectively, illustrate slopes of −1 (implying 1% increase in price for 1% decrease in production) and −0.5, for reference.

suggesting that supply-independent rarity effects may indeed be negligible.

Range Contraction and Catch Flexibility. Several studies have directly estimated catch flexibility (β; usually incorporating effects of both range and other factors) in aquatic populations (see ref. 15 for review), but to our knowledge no such literature yet exists for terrestrial populations. We found published estimates of catch flexibility from 39 aquatic populations (median $\beta = 0.56$) (Fig. 2; see Dataset S1 for values and references). Of these, 32 (82%) exhibited hyperstability ($\beta < 1$), and 14 (36%) exhibited severe hyperstability ($\beta < 0.5$), including 5 of 6 small pelagic finfish populations—which tend to both exhibit schooling behavior and forage in patchy environments.

For comparison, we compiled estimates of coincident changes in range area and abundance in 142 harvested marine fish and invertebrate populations (Fig. 4*A*; see legend for references; full data available in Dataset S1). We use the ratio of coincident observed percentage of changes in range and abundance, denoted $\%\Delta A/\%\Delta N$, as a measure of average $\frac{\partial A}{\partial N}\left(\frac{N}{A}\right)$, which would bound catch flexibility (β) by inequality **11**.

Most of these populations had very abundance-insensitive ranges (median $\%\Delta A/\%\Delta N = 0.03$) (Figs. 2 and 4*A*): For 87 (61%) of them, the range changed by less than 1/10th of the percentage by which abundance changed ($|\%\Delta A/\%\Delta N| < 0.1$) (17). We found $\%\Delta A/\%\Delta N > 0.5$ (implying $\beta < 0.5$) in only 8 (6%) of the populations, half of which were tunas or billfish (Dataset S1), and we found some evidence suggesting that abundance-sensitive range may be associated with schooling behavior among tunas (Fig. 4*B*). Notably, we found hyperaggregation ($\%\Delta A/\%\Delta N > 1$, implying $\beta < 0$) in both ABF and PBF (Fig. 4*B*), suggesting that these populations would not necessarily need any price flexibility to be profitably harvested to extinction.

In *SI Materials and Methods*, we compare the range–abundance relationships from these 142 harvested marine populations to a taxonomically similar sample from 247 nonharvested marine populations. In the combined sample, we find taxonomy, but not harvesting, to be a significant determinant of the range–abundance relationship (*SI Materials and Methods*, Tables S2 and S3, and Figs. S4 and S5), suggesting that ecology may be a more important driver. We most commonly find highly abundance-sensitive ranges ($\%\Delta A/\%\Delta N > 0.5$) among small invertebrates (molluscs, shrimps) and pelagic finfish in the combined sample (Table S3).

Our reviews of catch flexibility estimates and range–abundance relationships (Dataset S1) support the hypothesis that aggregation and patchy habitats lead to hyperstable catches in aquatic species, in part because of range contraction (14, 15). However, we find catch flexibility (β) estimates to be smaller on average than values implied by range–abundance relationships alone (Fig. 2), which suggests that other drivers besides range contraction also contribute to hyperstable catch rates. Indeed, a few studies have directly demonstrated this [e.g., refs. 16 and 41 found $\frac{\partial \mathrm{CPUE}}{\partial D}\left(\frac{D}{\mathrm{CPUE}}\right) \approx 0.5$, where $D = N/A$, in Atlantic cod and California kelp bass (*Paralabrax clathratus*), respectively; see refs. 15 and 23 for review].

We found estimates of coincident range and abundance trends for 17 harvested terrestrial mammals and one North American

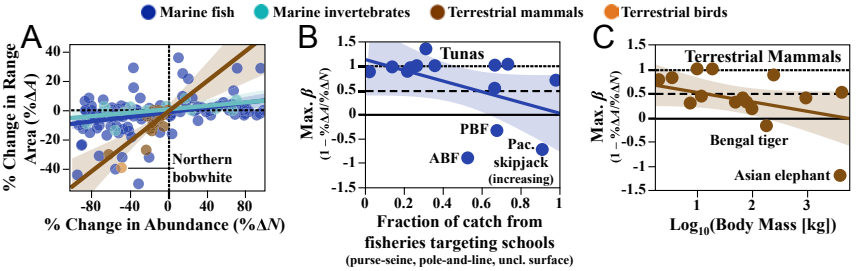

Fig. 4. Range–abundance relationships for populations of harvested US marine fish and invertebrates (1970s–2000s; from ref. 42); tuna and billfish (1960–1999; from refs. 35 and 43); harvested terrestrial mammals, mostly from the Western Ghats of India [1978/79–2008/09; from ref. 44; also the African forest elephant (*Loxodonta cyclotis*) from 2002–2011, ref. 45]; and northern bobwhite (*Colinus virginianus*), a North American game bird (1966–1993; from ref. 46). *A* shows all populations. *B* and *C* show relationships between the maximum catch flexibility (Max. β) and (*B*) a proxy for schooling behavior in tunas and (*C*) adult body mass in terrestrial mammals (Dataset S1). Harvested populations exhibiting hyperaggregation (Max. $\beta < 0$) are labeled; all are declining in abundance and range over the time periods in question, except for Pacific skipjack tuna (*Katsuwonus pelamis*), which is increasing. Colored lines in all panels represent linear ordinary least-squares (OLS) fits (within large taxonomic groups in *A*), with 95% confidence intervals shaded. Negative slopes in *B* and *C* are nearly significant ($P < 0.1$).

game bird population [northern bobwhite (*Colinus virginianus*)] (Fig. 4*A*; see legend for description of sources; full data are available in Dataset S1). In most (10) of these populations, range contracted at more than half the rate that abundance declined ($\%\Delta A/\%\Delta N > 0.5$, implying $\beta < 0.5$) (Fig. 4 *A* and *C*). Abundance-sensitive range was most common among large-bodied mammals; we found hyperaggregation in the Bengal tiger (*Panthera tigris*) and the Asian elephant (*Elephas maximus*)—both species threatened by poaching and habitat destruction (1, 44) (Fig. 4*C*).

Although this terrestrial sample is quite small, it suggests that terrestrial species might more commonly experience range contraction as they decline than marine species—a pattern that we also find in a sample of 28 nonharvested bird and mammal populations (Fig. S5, *SI Materials and Methods*, and Dataset S1). If, like for aquatic species, other factors besides range contraction further decrease catch flexibility (β) (Fig. 2), many terrestrial species—especially large-bodied mammals, perhaps—could be susceptible to profitable harvesting to extinction under open access.

Discussion

We find that escalating prices, stable harvest costs, or combinations of these two factors can, in theory, allow a species to be profitably harvested to extinction, absent effective protection. Our empirical review suggests that stable harvesting costs might be a surprisingly common cause of such extinction risks, but this full range of possibilities merits much further attention. Our review suggests that (*i*) range contraction in declining species may be common and often severe enough to allow extinction with little or no price flexibility among terrestrial species and among aquatic species that school or forage in patchy habitats, (*ii*) high price flexibility also occurs among some highly valued aquatic species, and (*iii*) other factors besides range contraction also buffer harvest costs against abundance declines. These results suggest that risk factors for abundance-insensitive costs merit greater attention in harvested species conservation.

Low price flexibility may be common because most harvested commodities have partial substitutes in the market. For example, studies have found moderate-to-high market substitutability between species within broad classes of fish products (see ref. 33 for review), including between most tuna species (36, 47). Species whose harvests have perfect substitutes are unlikely to be profitably harvested to extinction (26), because perfect substitutes cause the abundance sensitivity of a species' price to diminish as it approaches extinction (*SI Materials and Methods*). However, our price analyses were restricted to commercially harvested aquatic species, so the pattern of inflexibility we observed may not necessarily extend to other types of markets (e.g., black markets).

Our review suggested that range changes may be more correlated with abundance changes among terrestrial species compared with marine species (Fig. 4*A* and Figs. S4 and S5). This difference may be related to greater habitat destruction and space limitation on land. Space limitation positively correlates with body size in terrestrial mammals (48, 49), which may explain the especially strong relationships between range and abundance changes we found in large-bodied mammals. Thus, habitat destruction is likely a key driver of abundance-insensitive costs on land; and it also may directly and independently add to the extinction risk faced by terrestrial species. However, given our relatively small and unrepresentative terrestrial samples, these hypotheses merit further scrutiny.

Aggregating in patchy habitats is common among schooling fish, many small aquatic invertebrates, and other taxa found to have low catch flexibility, as well as some birds. Aggregation and habitat patchiness are likely key drivers of these species' susceptibility both to range contraction as they decline [due to concentration in preferred habitats and/or need to maintain school size (14, 15)] and to some other socioeconomic factors making costs even less sensitive to abundance [e.g., aggregation predictability (15, 23), harvester coordination (e.g., ref. 50), and use of fish aggregating devices (FADs) (51)]. It is ironic that herding and schooling behaviors, which are considered adaptations for predator avoidance (52), may make such species particularly prone to extinction from human harvesting.

Together, these results suggest that the harvested species most susceptible to profitable harvesting to extinction may be those with aggregation behavior, patchy or declining habitats, large home ranges (on land), and few market substitutes (26). Moreover, our results suggest that—absent management—many high-value harvested species could potentially be threatened by these risk factors. These include Atlantic and Pacific bluefin tuna [for which we find evidence of hyperaggregation (i.e., $\beta < 0$)] and many large poached land mammals (which likely have low catch flexibility) and may include sturgeons (which face habitat destruction, e.g., ref. 53) and high-value marine invertebrates [e.g., abalones, for which we found evidence suggestive of high price flexibility (Fig. 3 *E* and *F*)]. The extinct passenger pigeon (*Ectopistes migratorius*), which aggregated in large flocks and suffered both habitat destruction and overharvesting (e.g., ref. 54), possibly provides a historical case study of the interaction of these risk factors in extinction. The susceptibility of some plants [e.g., orchids in southeast Asia (55)] to overharvesting threats also merits further study. Because price and catch flexibilities (f, β) can change, a species currently having $f > \beta$ does not necessarily face extinction, absent management, but likely does face economic conditions promoting further depletion that could be severe.

Our analyses assume that species are harvested in an open-access system. Thus, a species we identify as susceptible to extinction from overharvesting would not necessarily be driven extinct if effective management or property rights that promote stewardship were implemented. Indeed, there are property rights in many harvests, including some poaching (18) and many fisheries (56). Harvests of whales (29), California abalones (39), and bluefin tunas are currently managed; and Atlantic bluefin tuna seems to be recovering (57). Trade in sturgeons and many mammals is regulated under CITES (13). It is nonetheless important to understand how open-access harvesting incentives could lead to extinction, as access restrictions are rarely perfectly enforced; high-value species are especially vulnerable to illegal harvesting (4).

Materials and Methods

SI Materials and Methods contains (*i*) a glossary of terms, in light of the broad range of topics discussed; (*ii*) brief discussions of the effects of economies of scale, technological change, rarity effects, supply-independent price trends, perfect substitutes, and nonconstant price flexibility (f) and catch flexibility (β) on overharvesting threats (Figs. S2 and S3); (*iii*) descriptions of the range and abundance data shown in Fig. 4; (*iv*) discussions of observed range–abundance relationships, in relation to taxonomy and harvesting (Tables S2 and S3 and Figs. S4 and S5); and (*v*) a review of returns to scale estimates in fisheries (Table S1). Dataset S1 contains all data shown in Figs. 2 and 4 and Figs. S4 and S5 and their sources.

ACKNOWLEDGMENTS. We thank P. Abrams, C. Lehman, P. Venturelli, D. Williams, and two reviewers for helpful comments and F. Courchamp, M. Pons, R. Hilborn, T. Branch, A. Scheld, and C. Anderson for assistance with price data. We acknowledge funding from a University of Minnesota Doctoral Dissertation Fellowship and a Natural Sciences and Engineering Research Council of Canada Postgraduate Scholarship-Doctoral (to M.G.B.), the Waitt Foundation, the Ocean Conservancy, and a Department of Defense National Defense Science & Engineering Graduate Fellowship (to A.F.-H.).

1. International Union for Conservation of Nature (IUCN) (2015) *IUCN Red List of Threatened Species*. Version 2016.3. Available at www.iucnredlist.org. Accessed January 14, 2017.
2. Clark CW (1976) *Mathematical Bioeconomics: The Optimal Management Resources* (Wiley, New York).
3. Courchamp F, et al. (2006) Rarity value and species extinction: The anthropogenic Allee effect. *PLoS Biol* 4(12):e415.
4. Graham-Rowe D (2011) Biodiversity: Endangered and in demand. *Nature* 480(7378):S101–S103.
5. Palazy L, Bonenfant C, Gaillard JM, Courchamp F (2011) Cat dilemma: Too protected to escape trophy hunting? *PLoS One* 6(7):e22424.
6. Palazy L, Bonenfant C, Gaillard J, Courchamp F (2012) Rarity, trophy hunting and ungulates. *Anim Conservat* 15(1):4–11.
7. Biggs D, Courchamp F, Martin R, Possingham HP (2013) Legal trade of Africa's rhino horns. *Science* 339(6123):1038–1039.
8. Wittemyer G, et al. (2014) Illegal killing for ivory drives global decline in African elephants. *Proc Natl Acad Sci USA* 111(36):13117–13121.
9. Tournant P, Joseph L, Goka K, Courchamp F (2012) The rarity and overexploitation paradox: Stag beetle collections in Japan. *Biodiversity Conserv* 21(6):1425–1440.
10. Gault A, Meinard Y, Courchamp F (2008) Consumers' taste for rarity drives sturgeons to extinction. *Cons Lett* 1(5):199–207.
11. Collette B, et al. (2011) High value and long life-double jeopardy for tunas and billfishes. *Science* 333(6040):291–292.
12. Purcell SW, Polidoro BA, Hamel JF, Gamboa RU, Mercier A (2014) The cost of being valuable: Predictors of extinction risk in marine invertebrates exploited as luxury seafood. *Proc R Soc B* 281(1781):20133296.
13. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (2017) *The CITES Species*. Available at www.cites.org. Accessed January 14, 2017.
14. Prince JD, Loneragan NR, Okey TA (2008) Contraction of the banana prawn (Penaeus merguiensis) fishery of Albatross Bay in the Gulf of Carpentaria, Australia. *Mar Freshwat Res* 59(5):383–390.
15. Wilberg MJ, Thorson JT, Linton BC, Berkson J (2009) Incorporating time-varying catchability into population dynamic stock assessment models. *Rev Fish Sci* 18(1):7–24.
16. Rose G, Kulka D (1999) Hyperaggregation of fish and fisheries: How catch-per-unit-effort increased as the northern cod (Gadus morhua) declined. *Can J Fish Aquat Sci* 56(S1):118–127.
17. Thorson JT, Rindorf A, Gao J, Hanselman DH, Winker H (2016) Density-dependent changes in effective area occupied for sea-bottom-associated marine fishes. *Proc R Soc B* 283:20161853.
18. Harris RB, Cooney R, Leader-Williams N (2013) Application of the anthropogenic Allee effect model to trophy hunting as a conservation tool. *Conserv Biol* 27(5):945–951.
19. Houck JP (1965) The relationship of direct price flexibilities to direct price elasticities. *J Farm Econ* 47(3):789–792.
20. Eales J, Durham C, Wessells CR (1997) Generalized models of Japanese demand for fish. *Am J Ag Econ* 79(4):1153–1163.
21. Harley SJ, Myers RA, Dunn A (2001) Is catch-per-unit-effort proportional to abundance? *Can J Fish Aquat Sci* 58(9):1760–1772.
22. Clark CW, Munro GR (1975) The economics of fishing and modern capital theory: A simplified approach. *J Environ Econ Manage* 2(2):92–106.
23. Pitcher T (1995) The impact of pelagic fish behaviour on fisheries. *Sci Mar* 59(3):295–306.
24. Torres MdO, Felthoven RG (2014) Productivity growth and product choice in catch share fisheries: The case of Alaska pollock. *Mar Pol* 50:280–289.
25. Squires D, Vestergaard N (2013) Technical change and the commons. *Rev Econ Stat* 95(1):1769–1787.
26. Hall RJ, Milner-Gulland E, Courchamp F (2008) Endangering the endangered: The effects of perceived rarity on species exploitation. *Conserv Lett* 1(2):75–81.
27. Clark CW (1973) Profit maximization and the extinction of animal species. *J Poli Econ* 81: 950–961.
28. Swanson TM (1994) The economics of extinction revisited and revised: A generalised framework for the analysis of the problems of endangered species and biodiversity losses. *Oxf Econ Pap* 46:800–821.
29. Branch TA, Lobo AS, Purcell SW (2013) Opportunistic exploitation: An overlooked pathway to extinction. *Trends Ecol Evol* 28(7):409–413.
30. Burgess MG, Polasky S, Tilman D (2013) Predicting overfishing and extinction threats in multispecies fisheries. *Proc Natl Acad Sci USA* 110(40):15943–15948.
31. Hertzler G, Gomera M (2004) *Are African Elephants an Endangered Species?* (International Union for Conservation of Nature, ROSA, Harare, Zimbabwe).
32. Rentsch D, Damon A (2013) Prices, poaching, and protein alternatives: An analysis of bushmeat consumption around Serengeti National Park, Tanzania. *Ecol Econ* 91: 1–9.
33. Asche F, Bjørndal T, Gordon DV (2007) Studies in the demand structure for fish and seafood products. *Handbook of Operations Research in Natural Resources*, eds Weintraub A, Romero C, Bjørndal T, Epstein R (Springer, New York), pp 295–314.
34. Melnychuk MC, Clavelle T, Owashi B, Strauss K (2017) Reconstruction of global ex-vessel prices of fished species. *ICES J Mar Sci* 74(1):121–133.
35. Ricard D, Minto C, Jensen OP, Baum JK (2012) Examining the knowledge base and status of commercially exploited marine species with the ram legacy stock assessment database. *Fish Fish* 13(4):380–398.
36. Chiang FS, Lee JY, Brown MG, et al. (2001) The impact of inventory on tuna price: An application of scaling in the Rotterdam inverse demand system. *J Ag Appl Econ* 33(3):403–412.
37. Food and Agriculture Association of the United Nations (2016) *Fishery and Aquaculture Statistics*. Available at www.fao.org/fishery/statistics/en. Accessed April 23, 2016.
38. Amundsen ES, Bjørndal T, Conrad JM (1995) Open access harvesting of the Northeast Atlantic minke whale. *Environ Resour Econ* 6(2):167–185.
39. Hobday AJ, Tegner MJ (2000) *Status Review of White Abalone (Haliotis sorenseni) Throughout Its Range in California and Mexico* (US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Region Office, La Jolla, CA).
40. World Bank (2016) *World Development Indicators*. Available at data.worldbank.org/data-catalog/world-development-indicators. Accessed April 23, 2016.
41. Erisman BE, et al. (2011) The illusion of plenty: Hyperstability masks collapses in two recreational fisheries that target fish spawning aggregations. *Can J Fish Aquat Sci* 68(10):1705–1716.
42. Pinsky ML, Worm B, Fogarty MJ, Sarmiento JL, Levin SA (2013) Marine taxa track local climate velocities. *Science* 341(6151):1239–1242.
43. Worm B, Tittensor DP (2011) Range contraction in large pelagic predators. *Proc Natl Acad Sci USA* 108(29):11942–11947.
44. Pillay R, Johnsingh A, Raghunath R, Madhusudan M (2011) Patterns of spatiotemporal change in large mammal distribution and abundance in the southern Western Ghats, India. *Biol Conserv* 144(5):1567–1576.
45. Maisels F, et al. (2013) Devastating decline of forest elephants in central Africa. *PLoS One* 8(3):e59469.
46. Rodríguez JP (2002) Range contraction in declining North American bird populations. *Ecol Appl* 12(1):238–248.
47. Sakai Y, Yagi N, Ariji M, Takahara A, Kurokura H (2009) Substitute and complement relations among various fish species in the Japanese market: Implications for fishery resource management. *Fish Sci* 75(5):1079–1087.
48. McNab BK (1963) Bioenergetics and the determination of home range size. *Am Nat* 97:133–140.
49. Ripple WJ, et al. (2014) Status and ecological effects of the world's largest carnivores. *Science* 343(6167):1241484.
50. Gaertner D, Dreyfus-Leon M (2004) Analysis of non-linear relationships between catch per unit effort and abundance in a tuna purse-seine fishery simulated with artificial neural networks. *ICES J Mar Sci* 61(5):812–820.
51. Torres-Irineo E, Gaertner D, Chassot E, Dreyfus-León M (2014) Changes in fishing power and fishing strategies driven by new technologies: The case of tropical tuna purse seiners in the eastern Atlantic Ocean. *Fish Res* 155:10–19.
52. Hamilton WD (1971) Geometry for the selfish herd. *J Theor Biol* 31(2):295–311.
53. Lenhardt M, Jaric I, Kalauzi A, Cvijanovic G (2006) Assessment of extinction risk and reasons for decline in sturgeon. *Biodiversity Conserv* 15(6):1967–1976.
54. Hung CM, et al. (2014) Drastic population fluctuations explain the rapid extinction of the passenger pigeon. *Proc Natl Acad Sci USA* 111(29):10636–10641.
55. Phelps J, Webb EL (2015) "Invisible" wildlife trades: Southeast Asia's undocumented illegal trade in wild ornamental plants. *Biodiversity Conserv* 186:296–305.
56. Worm B, et al. (2009) Rebuilding global fisheries. *Science* 325(5940):578–585.
57. Pons M, et al. (2016) Effects of biological, economic and management factors on tuna and billfish stock status. *Fish Fish* 18(1):1–21.
58. Asche F, Bremnes H, Wessells CR (1999) Product aggregation, market integration, and relationships between prices: An application to world salmon markets. *Am J Agr Econ* 81(3):568–581.
59. Natale F, Hofherr J, Fiore G, Virtanen J (2013) Interactions between aquaculture and fisheries. *Mar Pol* 38:205–213.
60. Greenville J, Hartmann J, Macauley TG (2006) Technical efficiency in input-controlled fisheries: The NSW ocean prawn trawl fishery. *Mar Resour Econ* 21:159–179.
61. Hannesson R (1983) Bioeconomic production function in fisheries: Theoretical and empirical analysis. *Can J Fish Aquat Sci* 40:968–982.
62. Sharma KR, Leung P (1999) Technical efficiency of the longline fishery in Hawaii: An application of a stochastic production frontier. *Mar Resour Econ* 13:259–274.
63. Kirkley JE, Squires D, Strand IE (1995) Assessing technical efficiency in commercial fisheries: The mid-Atlantic sea scallop fishery. *Am J Ag Econ* 77:686–697.
64. Weninger Q (1998) Assessing efficiency gains from individual transferable quotas: An application to the mid-Atlantic surf clam and ocean quahog fishery. *Am J Ag Econ* 80:750–764.
65. Esmaeili A (2006) Technical efficiency analysis for the Iranian fishery in the Persian Gulf. *ICES J Mar Sci* 63:1759–1764.
66. Bjørndal T, Conrad JM (1987) The dynamics of an open access fishery. *Can J Econ* 20:74–85.
67. Bjorndal T (1989) Production in a schooling fishery: The case of the North Sea herring fishery. *Land Econ* 65:49–56.
68. Comitini S, Huang DS (1967) A study of production and factor shares in the halibut fishing industry. *J Poli Econ* 75:366–372.
69. Kompas T, Che TN (2005) Efficiency gains and cost reductions from individual transferable quotas: A stochastic cost frontier for the Australian south east fishery. *J Prod Anal* 23:285–307.
70. Campbell HF, Hand AJ (1998) Joint ventures and technology transfer: The Solomon Islands pole-and-line fishery. *J Devel Econ* 57:421–442.
71. Eggert H (2000) Technical efficiency in the Swedish trawl fishery for Norway lobster. *IIFET 2000 Proceedings*. Available at oregonstate.edu/dept/IIFET/2000/papers/eggert.pdf 448. Accessed April 25, 2016.

Chronology of Zimbabwe's current management plan

December 1, 2014 – Conservation Force (CF) email with agenda for Elephant Conservation Policy and Management Plan workshop (December 2-4, 2014)

May 4, 2015 – Conservation Force (CF) email on preparatory documents for Sebungwe workshop

May 5, 2015 – CF email on Mana Pools Workshop Proceedings (held March 30 April 2, 2015)

May 8, 2015 – CF email on Sebungwe workshop agenda (held May 19-22, 2015)

May 14, 2015 – CF email on Sebungwe workshop factsheet

August 3, 2015 – Email from Zimbabwe government with a copy of the "Draft – July 2015 Action Plan for Elephant Conservation and Management in Zimbabwe (2015 – 2019)"

September 30, 2015 – CF email on South East Lowveld Workshop Proceedings (held August 7-11, 2015)

February 15, 2016 – Email from Zimbabwe Government with copies of the four subregional action plans

February 29, 2016 – CF email final print of management plan (Service received a hard copy of the signed management plan around that time period as well)

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY

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Ref: USFWS/B/3/1

25 January 2017

The United States Fish and Wildlife Service (USFWS)
U.S. Department of the Interior
1849 C Street, NW
Washington, DC 20240
United States of America

Attention: *Endangered species department*

Dear Sir/Madam

Ref: The Role of Trophy Hunting of the African Elephant (*Loxodonta africana*) in supporting Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)

Zimbabwe Parks and Wildlife Management Authority (ZimParks) hereby submits a document detailing how the trophy hunting of the African elephant (*Loxodonta africana*) is benefitting local communities through the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE).

We hope the United States Fish and Wildlife Service (USFWS) will utilize this information to justifiably re-consider the decision to suspend the importation of elephant trophies taken in Zimbabwe. Following USFWS's extension of the suspension in 2015 to include future hunting seasons, ZimParks is concerned that will have undesirable impact on our elephant conservation efforts currently benefitting local communities and implementation of our National Elephant Management Plan.

As an elephant range state, Zimbabwe remains committed to sustainable conservation practices that enhance the protection of elephants and their habitat.

Thank you for giving us the opportunity to fill any existing information gaps which facilitates sound decision making processes in the interest of species survival in the wild.

Sincerely,

pp

Geoffreys Matipano
ACTING DIRECTOR GENERAL

Board of Directors: Mr.T.E.Mundangepfupfu (Chairman), Mrs.I.E.Mupamhanga (Vice chairperson), Mr.W.Mutinhima, Mr.C.Mudenda, Mr.N.Mutsvangwa, Mr.I.D.Kunene, Dr.H.Rukato, Mrs.D.Mabika, Mr.E.Chidziya(Ex Officio)

INTERNATIONAL

Facing Drought, Zimbabwe Says It Is Selling Off Wild Animals

May 4, 2016 · 1:19 PM ET

MERRIT KENNEDY

African bush elephants on Fothergill Island, Zimbabwe.

DEA/G. Sioen/De Agostini/Getty Images

Zimbabwe says it is putting some of the wild animals in its reserves up for sale because of the severe drought that has hit the country.

That's according to a statement from the Zimbabwe Parks and Wildlife Management Authority (known as ZimParks) that was carried by Reuters and CNN.

It says the country intends to "destock its parks estates" by selling animals to "private wildlife reserves" but offers few additional details, CNN reports.

The network says that according to the statement, interested parties should:

> "... provide the following information about the habitat [in] which they intend to put the acquired animals: name and address of property, size of property, ownership of the property, description of current land use, intended use for the acquired animals and existing infrastructure e.g. fences, water availability, roads, fireguards, protection/law enforcement capacity and management."

CNN adds that "conservation groups will be watching closely to see if any animals appear destined for hunting concessions."

It's unclear whether foreign buyers can apply, Reuters reports. ZimParks spokeswoman Caroline Washaya-Moyo would not comment on the number of animals for sale or whether they could be transported outside Zimbabwe.

"We do not have a target. The number of animals depends on the bids we receive," she said, according to Reuters.

The government intends to use the money raised "to buy food and secure water facilities for distressed animals," Environment, Water and Climate Minster Oppah Muchinguri-Kashiri says, CNN reports.

Zimbabwe's famous national parks, which are teeming with animals such as lions, elephants, cheetahs and monkeys, take up about 13 percent of the country's land area.

The region is facing a severe drought that has taken a toll on food harvests. According to UNICEF, 37 percent of households in Zimbabwe are hungry. The dry conditions have "decimated" livestock. In February, the situation prompted

Zimbabwean President Robert Mugabe to declare a state of disaster.

According to Reuters, "about 54,000 of Zimbabwe's 80,000 elephants live in the western Hwange National Park, more than four times the number it is supposed to hold." The wire service adds that drought conditions at Hwange are already "critical" and "expected to worsen."

Last year, Zimbabwe sold dozens of elephants to China in a bid to raise money for conservation efforts, according to *The Guardian*. The sale was sharply criticized by wildlife protection groups.

wild animals | water | zimbabwe

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Briefing Paper for Departmental Clearance of Federal Register Documents

I. Title of document: Issuance of Import Permits for Zimbabwe Elephant Trophies Taken On or After January 21, 2016, and On or Before December 31, 2018

II. Popular short name, if applicable: Zimbabwe Elephant Imports

III. DCN: FR00003065

IV. RIN (for rules) or notice tracking number (for notices): [FWS–HQ–IA–2017–N116]

V. Summary: The U.S. Fish and Wildlife Service's (Service's) Division of Management Authority (DMA)/International Affairs program has found that the killing of African elephant trophy animals in Zimbabwe on or after January 21, 2016, and on or before December 31, 2018, will enhance the survival of the African elephant. The Service is required to publish notice of this finding, due to language in a 1997 proposed rule noting that the Service would published a notice of any changes in our finding in the *Federal Register*. In 2014 and 2015, the Service announced that they were unable to find that the killing of African elephant trophy animals in Zimbabwe would enhance the survival of the African elephant. After evaluating the available information, the Service has made a new determination that would affect elephants taken in 2016 and 2017.

VI. Is timing critical? ☒ Yes ☐ No

a. What is the target date, and (if applicable) "no later than" (NLT) date, for the FR document to clear DOI? Target date 10/6/17

b. What's driving the timing? The Service is unable to finalize any pending application requesting the importation of elephant trophies taken in 2016, 2017, and 2018 until this *Federal Register* notice is published. The Service currently has 31 applications pending. In addition, as soon as the *Federal Register* notice is published, the Service will send a letter to the Zimbabwe Government informing them of the positive decision and request additional information to facilitate the completion of the Service's 2019 finding.

c. What happens if the deadline is missed? The Service is unable to finalize any review or issuance of the 31 pending applications until the *Federal Register* notice is published. In addition, the Service cannot send a letter to Zimbabwe requesting additional information for the completion of the 2019 finding.

VII. Background: The African elephant (*Loxodonta africana*) is listed as threatened under the ESA, on the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal Regulations (50 CFR 17.11(h)). It is also regulated under the provisions of section 4(d) of the ESA (known as a "section 4(d) rule"), with a rule found at 50 CFR 17.40(e). The section 4(d) rule includes specific requirements for the import of sport-hunted trophies. Under § 17.40(e)(6)(i)(B), in order for the Service to authorize the import of a sport-hunted elephant trophy, the Service must find that the killing of the trophy animal will enhance the survival of the species in the wild (known as an "enhancement finding").

On April 4, 2014 (and revised on April 17, 2014), the Service announced an interim suspension of imports of sport-hunted elephant trophies taken in Zimbabwe during the 2014 season. Our decision to establish an interim suspension of imports of elephant trophies from Zimbabwe was due to our having insufficient information on the status of elephants in Zimbabwe and on Zimbabwe's current elephant management program to make an enhancement finding. On July 17, 2014 (and revised on July 22, 2014), the Service found that the import of elephant trophies taken in Zimbabwe in 2014 on or after April 4, 2014, would be suspended. The July

17, 2014, decision to uphold the April 4, 2014, suspension was due to the Service's being unable to make an enhancement finding even after receiving additional materials from the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) and others. On March 26, 2015, the Service made another determination to continue the suspension. This decision was due to the Service being unable to make an enhancement finding even after receiving additional materials from ZPWMA and others.

Following the Service's March 26, 2015, finding, the Service sent a letter on May 1, 2015, to the Zimbabwe's Minister of Environment, Water and Climate, outlining the concerns the Service still had regarding elephant trophy imports from Zimbabwe. On July 20, 2015, ZPWMA responded to the Service's questions and included a draft version of the Action Plan for Elephant Conservation and Management in Zimbabwe (2015–2020). In January 2016, the Service received the final version of the action plan, the Zimbabwe National Elephant Management Plan (2015–2020), which had been approved by ZPWMA and the Minister of Environment, Water and Climate. In September 2016, during the 17th Meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Service met with representatives from Zimbabwe to further discuss the current status of the Service's evaluation of the importation of elephant trophies. As a result of those conversations, the Service received a letter dated November 8, 2016, with supplemental information regarding Zimbabwe's elephant management plan priorities. The Service also received additional information after the November 8, 2016, letter that supported a finding that the killing of African elephant trophy animals in Zimbabwe, on or after January 21, 2016, and on or before December 31, 2018, will enhance the survival of the African elephant.

VIII. Is this a **high-profile** or **controversial** action? ☒ Yes ☐ No

a. What are the **significant issues**? The Service is currently under litigation for the 2014 and 2015 decision to deny the import of elephant trophies from Zimbabwe. This decision would only affect the importation of trophies taken in 2016, 2017, and 2018, but will not alter the Service's previous decision on trophies taken in 2014 and 2015.

b. **Who will care**, and **how strongly** will they care? Both the hunting community, such as Safari Club International and National Rifle Association, would strongly support this decision to authorize the import of trophies from Zimbabwe. At the same time, a number of other organizations, such as PETA and HSUS, would likely oppose the decision.

IX. Communications: The decision to authorize the import of elephant trophies that were taken in 2016, 2017, and 2018 will be announced to the public via this Federal Register notice. The Service will not announce the receipt of applications to import trophies or the issuance of any permits to the public through a Federal Register notice.

X. Is there an information collection associated with this document? ☐ Yes ☒ No

a. Does the document have any approved OMB control number? ☐ Yes ☐ No
   If yes, the OMB control number is:

b. Does the document require ☐ a new OMB control number or ☐ renewal of an existing approval?
   If a new number or renewal is required, what is the current status?

XI. For rulemaking actions only: Has this action, in its current stage, been on a 90-day List? ☐ Yes ☐ No
   If yes, on which 90-day List did it first appear in its current stage?
   Did OIRA provide comments or change the significance? ☐ Yes ☐ No
   If yes, summarize comments and resolution:

XII. Approval is requested to send the document to:

☒ The Office of the Federal Register for publication, or
☐ OIRA for review.

XIII. Primary contact:

Name: Tim Van Norman, Chief, Branch of Permits, Division of Management Authority
Phone: 703-358-2350
Email: tim_vannorman@fws.gov

Briefing Paper for Departmental Clearance of Federal Register Documents

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III. DCN: FR00003065

IV. RIN (for rules) or notice tracking number (for notices): [FWS–HQ–IA–2017–N116]

V. Summary: The U.S. Fish and Wildlife Service's (Service's) Division of Management Authority (DMA)/International Affairs program has found that the killing of African elephant trophy animals in Zimbabwe on or after January 21, 2016, and on or before December 31, 2017, will enhance the survival of the African elephant. The Service is required to publish notice of this finding, due to language in a 1997 proposed rule noting that the Service would published a notice of any changes in our finding in the *Federal Register*. In 2014 and 2015, the Service announced that they were unable to find that the killing of African elephant trophy animals in Zimbabwe would enhance the survival of the African elephant. After evaluating the available information, the Service has made a new determination that would affect elephants taken in 2016 and 2017.

VI. Is timing critical? ☒ Yes ☐ No

a. What is the target date, and (if applicable) "no later than" (NLT) date, for the FR document to clear DOI? Target date 8/20/17

b. What's driving the timing? The Service is unable to finalize any pending application requesting the importation of elephant trophies taken in 2016 and 2017 until this *Federal Register* notice is published. The Service currently has 31 applications pending. In addition, as soon as the *Federal Register* notice is published, the Service will send a letter to the Zimbabwe Government informing them of the positive decision and request additional information to facilitate the completion of the Service's 2018 finding.

c. What happens if the deadline is missed? The Service is unable to finalize any review or issuance of the 31 pending applications until the *Federal Register* notice is published. In addition, the Service cannot send a letter to Zimbabwe requesting additional information for the completion of the 2018 finding.

VII. Background: The African elephant (*Loxodonta africana*) is listed as threatened under the ESA, on the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal Regulations (50 CFR 17.11(h)). It is also regulated under the provisions of section 4(d) of the ESA (known as a "section 4(d) rule"), with a rule found at 50 CFR 17.40(e). The section 4(d) rule includes specific requirements for the import of sport-hunted trophies. Under § 17.40(e)(6)(i)(B), in order for the Service to authorize the import of a sport-hunted elephant trophy, the Service must find that the killing of the trophy animal will enhance the survival of the species in the wild (known as an "enhancement finding").

On April 4, 2014 (and revised on April 17, 2014), the Service announced an interim suspension of imports of sport-hunted elephant trophies taken in Zimbabwe during the 2014 season. Our decision to establish an interim suspension of imports of elephant trophies from Zimbabwe was due to our having insufficient information on the status of elephants in Zimbabwe and on Zimbabwe's current elephant management program to make an enhancement finding. On July 17, 2014 (and revised on July 22, 2014), the Service found that the import of elephant trophies taken in Zimbabwe in 2014 on or after April 4, 2014, would be suspended. The July

17, 2014, decision to uphold the April 4, 2014, suspension was due to the Service's being unable to make an enhancement finding even after receiving additional materials from the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) and others. On March 26, 2015, the Service made another determination to continue the suspension. This decision was due to the Service being unable to make an enhancement finding even after receiving additional materials from ZPWMA and others.

Following the Service's March 26, 2015, finding, the Service sent a letter on May 1, 2015, to the Zimbabwe's Minister of Environment, Water and Climate, outlining the concerns the Service still had regarding elephant trophy imports from Zimbabwe. On July 20, 2015, ZPWMA responded to the Service's questions and included a draft version of the Action Plan for Elephant Conservation and Management in Zimbabwe (2015–2020). In January 2016, the Service received the final version of the action plan, the Zimbabwe National Elephant Management Plan (2015–2020), which had been approved by ZPWMA and the Minister of Environment, Water and Climate. In September 2016, during the 17th Meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Service met with representatives from Zimbabwe to further discuss the current status of the Service's evaluation of the importation of elephant trophies. As a result of those conversations, the Service received a letter dated November 8, 2016, with supplemental information regarding Zimbabwe's elephant management plan priorities. The Service also received additional information after the November 8, 2016, letter that supported a finding that the killing of African elephant trophy animals in Zimbabwe, on or after January 21, 2016, and on or before December 31, 2017, will enhance the survival of the African elephant.

VIII. Is this a **high-profile** or **controversial** action? ☒ Yes ☐ No

a. What are the **significant issues**? The Service is currently under litigation for the 2014 and 2015 decision to deny the import of elephant trophies from Zimbabwe. This decision would only affect the importation of trophies taken in 2016 and 2017, but will not alter the Service's previous decision on trophies taken in 2014 and 2015.

b. **Who will care**, and **how strongly** will they care? Both the hunting community, such as Safari Club International and National Rifle Association, would strongly support this decision to authorize the import of trophies from Zimbabwe. At the same time, a number of other organizations, such as PETA and HSUS, would likely oppose the decision.

IX. Communications: The decision to authorize the import of elephant trophies that were taken in 2016 and 2017 will be announced to the public via this Federal Register notice. The Service will not announce the receipt of applications to import trophies or the issuance of any permits to the public through a Federal Register notice.

X. Is there an information collection associated with this document? ☐ Yes ☒ No

a. Does the document have any approved OMB control number? ☐ Yes ☐ No
If yes, the OMB control number is:

b. Does the document require ☐ a new OMB control number or ☐ renewal of an existing approval?
If a new number or renewal is required, what is the current status?

XI. For rulemaking actions only: Has this action, in its current stage, been on a 90-day List? ☐ Yes ☐ No
If yes, on which 90-day List did it first appear in its current stage?
Did OIRA provide comments or change the significance? ☐ Yes ☐ No
If yes, summarize comments and resolution:

XII. Approval is requested to send the document to:
☒ The Office of the Federal Register for publication, or

☐ OIRA for review.

XIII. Primary contact:

Name: Tim Van Norman, Chief, Branch of Permits, Division of Management Authority
Phone: 703-358-2350
Email: tim_vannorman@fws.gov

Briefing Paper for Departmental Clearance of Federal Register Documents

I. Title of document: Issuance of Import Permits for Zimbabwe Elephant Trophies Taken On or After January 21, 2016, and Pn or Before December 31, 2017

II. Popular short name, if applicable: Zimbabwe Elephant Imports

III. DCN: FR00003065

IV. RIN (for rules) or notice tracking number (for notices): FWS–HQ–IA–2017–N116

V. Summary: This notice is to announce that the U.S. Fish and Wildlife Service's Division of Management Authority (DMA)/International Affairs program has found that the killing of African elephant trophy animals in Zimbabwe, on or after January 21, 2016, and on or before December 31, 2017, will enhance the survival of the African elephant. This notification is required due to language in a 1997 proposed rule noting that the Service would published a notice of any changes in our finding in the *Federal Register*. In 2014 and 2015, the Service announced that they were unable to find that the killing of African elephant trophy animals in Zimbabwe would enhance the survival of the African elephant. After evaluating the available information, the Service has made a new determination that would affect elephants taken in 2016 and 2017.

VI. Is timing critical? ☒ Yes ☐ No

a. What is the target date, and (if applicable) "no later than" (NLT) date, for the FR document to clear DOI? Target date 8/20/17

b. What's driving the timing? The Service is unable to finalize any pending application requesting the importation of elephant trophies taken in 2016 and 2017 until this Federal Register notice is published. The Service currently has 31 applications pending at this time. In addition, as soon as the Federal Register notice is published, the Service will send a letter to the Zimbabwe Government informing them of the positive decision and request additional information to facility the completion of the Service's 2018 finding.

c. What happens if the deadline is missed? The Service is unable to finalize any review or issuance of the 31 pending applications until the Federal Register notice is published. In addition, the Service cannot send a letter to Zimbabwe requesting additional information for the completion of the 2018 finding.

VII. Background: The African elephant (*Loxodonta africana*) is listed as threatened under the Endangered Species Act of 1973, as amended (ESA or Act; 16 U.S.C. 1531 *et seq.)*, on the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal Regulations (50 CFR 17.11(h)). It is also regulated under the provisions of section 4(d) of the Act (known as a "section 4(d) rule") with a rule found at 50 CFR 17.40(e). The section 4(d) rule includes specific requirements for the import of sport-hunted trophies. Under § 17.40(e)(6)(i)(B), in order for the Service to authorize the import of a sport-hunted elephant trophy, the Service must find that the killing of the trophy animal will enhance the survival of the species in the wild (known as an "enhancement finding").

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import of elephant trophies taken in Zimbabwe in 2014 on or after April 4, 2014, would be suspended. The July 17, 2014, decision to uphold the April 4, 2014, suspension was due to the Service being unable to make an enhancement finding even after receiving additional materials from the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) and others. On March 26, 2015, the Service made another determination to continue the suspension. This decision was again due to the Service being unable to make an enhancement finding even after receiving additional materials from ZPWMA and others.

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XI. For rulemaking actions only: Has this action, in its current stage, been on a 90-day List? ☐ Yes ☐ No
If yes, on which 90-day List did it first appear in its current stage?
Did OIRA provide comments or change the significance? ☐ Yes ☐ No
If yes, summarize comments and resolution:

XII. Approval is requested to send the document to:
☒ The Office of the Federal Register for publication, or

☐ OIRA for review.

XIII. Primary contact:

Name: Tim Van Norman, Chief, Branch of Permits, Division of Management Authority
Phone: 703-358-2350
Email: Tim_VanNorman@fws.gov

ZIMBABWE

All correspondence should be addressed
To "THE SECRETARY"
Telephone : Tel: +263 4 700596 - 8
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MINISTRY OF ENVIRONMENT, WATER AND CLIMATE
Private Bag 7753
Causeway
HARARE

Ref: G/21

08 November 2016

Chief Branch of Permits
U.S. Fish and Wildlife Service
Division of Management Authority
Washington D.C 20240
USA
Attention: *Mr Timothy J. Van Norman*

ZIMBABWE'S ELEPHANT MANAGEMENT PLAN PRIORITIES (2015 - 2020)

We would like to thank you for granting us an opportunity to meet at the recent CITES CoP17 and we hope that you travelled safely to your home country.

Further to previous correspondence regarding prioritising implementation of our Elephant Management Plan and to our discussion during CITES COP 17, which meeting also included Hon Minister and Mr B Arroyo and Mr D Arshe, we hereby wish to submit our supplementary Elephant Management Plan.

This plan prioritises activities identified in the National Elephant Management Plan to fully utilise the budget allocated to elephant management in Zimbabwe. These priorities listed herewith constitute those activities and actions that we believe, given the limited budgets, we are able to curtail poaching and illegal trade of elephants and ivory.

We hope that the information provided will suffice in responding to your enquiry. We welcome your commitment to lift the suspension on imports of hunted trophies of elephants from Zimbabwe. For any further clarifications do not hesitate to contact the undersigned.

MIN. OF ENVIRONMENT, WATER & CLIMATE
0 8 NOV 2016
11th Floor, Kaguvi Bld, Harare
Tel: 04 701681-2 / 701691 - 3
PERM. SECRETARY

P. Mupazviriho
SECRETARY FOR ENVIRONMENT, WATER AND CLIMATE

September 26, 2017

Memorandum

From: Tim Van Norman, Chief, Branch of Permits, DMA

To: Aurelia Skipwith, Deputy Assistant Secretary, FWP

Re: Comments on the Federal Register notice announcing issuance of Zimbabwe elephant permits

On September 19, 2017, you returned the Federal Register notice announcing the issuance of import permits for Zimbabwe elephant trophies to the Service with comments on several pages. Below is a response to each of the comments.

Page 1: "Why not 'on or after January 21, 2016?'"

Response: It is our understanding that you were questioning why the finding was time-limited rather than open-ended and only covered imports between January 21, 2016 and December 31, 2017. Initially, the Service intended to announce the decision to authorize imports earlier in the calendar year, thus allowing us time to have further communications with the Zimbabwe government to clarify several issues that might impact future determinations on imports of elephant trophies. Because we are moving from a negative finding to a positive finding, we intend to continue to monitor Zimbabwe's progress closely. However, given that the finding will not be announced until October 2017, and based on all of the information currently available to us regarding Zimbabwe's efforts, we believe it is appropriate to extend the enhancement finding to cover imports until December 31, 2018, and have revised the notice accordingly.

Page 5: "Wouldn't publication of the change in enhancement finding bring transparency to the process?"

Response: We do not believe it is necessary to use the Federal Register to convey changes in our findings and, with the exception of the African elephant, we do not typically do so. With the revision of the African elephant 4(d) rule in 2016, the Service codified the requirement for the issuance of an import permit for any import of a sport-hunted elephant trophy. With a permitting process in place, the Service again had the ability to communicate directly with potential importers on any enhancement determination, eliminating the need to make a general announcement to the public via a Federal Register notice. In addition, the Service now has other mechanisms, such as our webpage and email lists, which were not available in 1997 and 2001 when we indicated that we would publish such changes for the African elephant finding. The Service is in close communication with several hunter advocacy groups that are quick to announce to their members any changes the Service makes on enhancement findings. Therefore, there is no longer a need for the Service to go through the process of publishing a Federal Register notice to announce any changes.

Due to recent litigation involving Zimbabwe elephant trophy imports, the Service has determined that we would need to publish this final Federal Register notice to inform the public of the change in our enhancement determination for Zimbabwe elephants, but also to inform them that we no longer publish Federal Register notices in the future. Instead, the Service will rely on our website, direct outreach efforts, and the permitting process to convey any changes in our findings, as is currently the case for other species.

Page 9: "Carcass ratios?"

Response: It is our understanding that your comment was asking why we included the carcass ratio identified by the Great Elephant Census (GEC) in relation to their population estimates, but did not report the carcass ratio in association the IUCN population estimates. The IUCN African Elephant Status Report – 2016 only provides a population estimate, and does not identify a carcass ratio. While the GEC population data were the most comprehensive population estimate for Zimbabwe in the 10 years prior to 2014, we included the 2016 IUCN population data because it included several surveys that were conducted after the 2014 GEC and therefore provided a most current population estimate.

Page 14: No signature

Since we anticipated some revisions being made to this notice before it cleared by the Department, we did not include a signed version. ~~We do not typically sign the notice until we have clearance and a final version.~~ We will sign the final version and send hard copies to the Federal Register or have someone sign and send electronically through one of our employees who holds an account with the Federal Register.

September 29, 2017

Memorandum

From: Principal Deputy Director, U.S. Fish and Wildlife Service

To: Deputy Assistant Secretary, Fish and Wildlife and Parks

Re: Comments on the Federal Register notice announcing issuance of Zimbabwe elephant permits

On September 19, 2017, you returned the Federal Register notice announcing the issuance of import permits for Zimbabwe elephant trophies to the Service with comments on several pages. Below is a response to each of the comments.

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Due to recent litigation involving Zimbabwe elephant trophy imports, the Service has determined that we would need to publish this final Federal Register notice to inform the public of the change in our enhancement determination for Zimbabwe elephants, but also to inform them that we no longer will publish Federal Register notices in the future. Instead, the Service will rely on our website, direct outreach efforts, and the permitting process to convey any changes in our findings, as is currently the case for other species, such as lions or leopards.

Page 9: "Carcass ratios?"

Response: It is our understanding that your comment was asking why we included the carcass ratio identified by the Great Elephant Census (GEC) in relation to their population estimates, but did not report the carcass ratio in association the IUCN population estimates. The carcass ratio is comparison of the number of fresh and old carcasses observed during the survey compared to the total (live) population observed. Such a ratio provides some insight into the level of natural and unnatural (e.g., poaching) that is occurring in the survey area. Identifying the carcass ratio was a key component of the GEC surveys and was intentionally reported. The IUCN African Elephant Status Report – 2016 combines a number of individual surveys conducted over a given period of time, some of which may not have identified a carcass ratio. As such, the IUCN report only provides a population estimate, and does not identify an incomplete or biased carcass ratio. While the GEC population data were the most comprehensive population estimate for Zimbabwe in the 10 years prior to 2014, we included the 2016 IUCN population data because it included several surveys that were conducted after the 2014 GEC and therefore provided a most current population estimate. We recognize, however, that including information about the carcass ratio in the Federal Register notice may be confusing for the public since there is no discussion in the notice on how to interpret this data. Our primary goal in this section was to acknowledge the population numbers identified in the various surveys, not to focus on carcass ration. Therefore, we have removed the reference to carcass ratio.

Page 14: No signature

While there may be a need to resign the Federal Register notice in the future if any subsequent changes or revisions are made during the surname process, we have signed the notice that has been returned with this package. If necessary, we will re-sign the final version before sending hard copies to the Federal Register or have someone sign and send electronically through one of our employees who holds an account with the Federal Register.

September 26, 2017

Memorandum

From: T. Van Norman, Chief, Branch of Permits

To: Deputy Assistant Secretary, FWP

Re: Comments on the Federal Register notice announcing issuance of Zimbabwe elephant permits

On September 19, 2017, you returned the Federal Register notice announcing the issuance of import permits for Zimbabwe elephant trophies to the Service with comments on several pages. Below is a response to each of the comments.

Page 1: Your comment - "Why not 'on or after January 21, 2016".

Response: It is our understanding that you were questioning why the finding only covered imports between January 21, 2016 and December 31, 2017. Initially, the Service intended to announce the decision to authorize imports earlier in the calendar year, thus allowing us time to have further communications with the Zimbabwe government to clarify several issues that might impact future determinations on imports of elephant trophies. However, given that the finding will not be announced until October 2017, we have revised the FR notice and the enhancement finding to cover imports until December 31, 2018. This will allow more time for the Zimbabwe government to respond to our additional questions and the Service to evaluate the response before the 2019 hunting season begins. Revisions to the text were made on page 1 and 13 to reflect this revision.

Page 5: Your comment - "Wouldn't publication of the change in enhancement finding bring transparency to the process?"

Response: It is our understanding that you were questioning why we state on page 5 of the FR notice that we will, in the future, no longer publish a Federal Register notice announcing changes to our enhancement findings for the import of trophies from Zimbabwe. In 1997 and again in 2001, the Service published Federal Register notices announcing the downlisting of African elephant in Zimbabwe, Botswana, Namibia, and South Africa from Appendix I to Appendix II of CITES. The Endangered Species Act includes a provision (Section 9(c)(2)) that states that the noncommercial import of ESA threatened species that are also included in Appendix II of CITES could occur without the issuance of a U.S. import permit, provided that the specimen is accompanied by a valid CITES permit from the exporting country. The African elephant is listed as threatened under the Endangered Species Act, with a 4(d) rule that requires the Service to make a determination that the import would enhance the survival of the species. The subsequent

downlisting of the elephant to Appendix II meant that the Service, after making the required enhancement finding, no longer had the permitting mechanism that was available when the elephant was listed in Appendix I of CITES to notify the public about decision on whether imports would be allowed. It was determined at that time, therefore, that the Service would publish a Federal Register notice announcing any changes to our enhancement determinations for African elephants from these 4 countries.

With the revision of the 4(d) rule in 2016, the Service codified the requirement for the issuance of an import permit for any import of a sport-hunted elephant trophy. With a permitting process in place, the Service again had the ability to communicate directly with potential importers on any enhancement determination, eliminating the need to make a general announcement to the public via a Federal Register notice. In addition, the Service now has other mechanisms, such as our webpage, which were not available in 1997 and 2001 to alert the public on changes in our determinations. Finally, the Service is in close communication with a number of hunter advocacy groups that are quick to announce to their members any changes the Service makes on enhancement findings. Therefore, there is no longer a need for the Service to go through the process of publishing a Federal Register notice to announce any changes.

Due to recent litigation involving Zimbabwe elephant trophy imports, the Service has determined that we would need to publish this final Federal Register notice to inform the public of the change in our enhancement determination for Zimbabwe elephants, but also to inform them that we no longer publish Federal Register notices in the future. Instead, the Service will rely on outreach efforts and the permitting process directly with the applicants.

Page 9: Your comment - “Carcass ratios?”

Response: It is our understanding that your comment was asking why we included the carcass ratio identified by the Great Elephant Census (GEC) in relation to their population estimates, but did not report the carcass ratio in association the IUCN population estimates. The IUCN African Elephant Status Report – 2016 only provides a population estimate, but does not identify a carcass ratio. While the GEC population data was the most comprehensive population estimate for Zimbabwe in the 10 years prior to 2014, we included the 2016 IUCN population data since it included several surveys that were conducted after the 2014 GEC and therefore provided a most current population estimate.

We are available to discuss the Federal Register notice further if you still have questions or if our understanding of your comments was incorrect.

Minimising the Illegal Killing of Elephants and other Endangered Species (MIKES)

MIKES Sub-Project Document:

Strengthening Law Enforcement in Mana Pools National Park and Chewore and Sapi Safari Areas, Zimbabwe

Cooperating Management Agency:
Zimbabwe Parks & Wildlife Management Authority (ZPWMA)

Implementing Partner:
The Tashinga Initiative Trust (TTI)

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2.2 Development of protected area law enforcement, management and monitoring systems, protocols and capacity of selected sites (Result 2) 4

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3.1 Introduction 5

3.2 Sub-Project results & activities 5

Result 1: Wildlife law enforcement patrol staff capacity and performance improved. 5

Result 2: Organisation and effectiveness of law enforcement operations management strengthened. 6

Result 3: Contribution of ranger-based monitoring information to area management and the MIKE Programme enhanced. 6

Result 4: Collaboration with local communities in information sharing to improve wildlife law enforcement strengthened. 7

1. Introduction

1. This sub-project document has been developed as part of the Minimising the Illegal Killing of Elephants and other Endangered Species (MIKES) Project, which will be implemented by the CITES Secretariat in collaboration with elephant range States and other partners over a four-year period commencing January 2015, with financing provided by the European Union and under the overall leadership of the MIKE Programme Central Coordination Unit (CCU) based at UNEP Headquarters in Nairobi. The sub-project document details the support for strengthening wildlife law enforcement in the Mana Pools National Park and Chewore and Sapi Safari Areas that will be provided under Result 2 of the project, in cooperation with the Zimbabwe Parks and Wildlife Management Authority (ZPWMA – the Cooperating Management Agency) and with the implementation support of the Tashinga Initiative (TTI – the Implementing Partner).

2. Section 2 of this sub-project document provides general information on this MIKES sub-project, including background information on the overall MIKES project objectives and activities, in particular Result 2 on support for the MIKES focal sites. Section 3 provides detailed information concerning the sub-project itself, including the specific results and activities to be delivered by the sub-project, the contributions these results and activities are expected to make to the overall MIKES Project.

2. MIKES Project background information

3. The Minimising the Illegal Killing of Elephants and other Endangered Species (MIKES) Project builds on and supports the highly successful Monitoring the Illegal Killing of Elephants (MIKE) Programme, which has been implemented together with African Elephant range States by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) with the support of the European Commission from 2001 until the present day, and which was designed to generate reliable and impartial data on the status and trends in African elephant popu-

lations, illegal killing and illegal trade in ivory, as a basis for international and range State decision making and action concerning elephant conservation.

4. The MIKE Programme has documented alarming increases in levels of elephant poaching and highlighted the urgent need for action to reduce the increasing threat to elephant populations across Africa as a result of the escalating international illegal trade in their ivory, as well as similar threats that are being faced by other CITES-listed flagship species. The MIKES Project will respond to this need by leveraging the strong foundation established and successes that have been achieved by MIKE over the past decade, but with an expanded focus to include: a) initiatives aimed at minimising the impact of poaching and the illegal trade on the target species, in particular through efforts to strengthen the capacity and capabilities of law enforcement agencies to combat poaching at both site and national levels; b) other flagship CITES-listed flagship species threatened by international trade; c) piloting of the MIKE Programme's successful adaptive management and monitoring approaches in selected sites in the Caribbean and Pacific regions.

5. This sub-project document primarily addresses point a) above relating to the support for initiatives aimed at minimising the impact of poaching and the illegal trade on the target species, specifically with regard to African elephants, being delivered at the MIKES Result 2 law enforcement focal sites.

2.1 MIKES Project objectives

6. The **overall goal** of the MIKES project is:

   Illegal killing of elephants and other CITES-listed flagship species and the illegal trade in their products are reduced

7. The overall goal shows that while an important focus of MIKES will continue to be to the protection and sustainable management of Africa's elephant populations, the scope of the project will broaden to **also address the illegal killing and trade in other CITES-listed flagship species**, such as rhinos and great apes in Africa, and marine turtles in the Caribbean and Pacific regions. This reflects the fact that these species are also threatened by escalating illegal harvesting and trade, and that many of the challenges to be addressed and activities to be implemented under the MIKES project are also applicable to the protection of these species.

8. The MIKES **project purpose,** which aims to contribute towards the delivery of the overall objective, is:

   Management systems, capacity, information and decision-making processes supporting the protection of elephants and other CITES-listed flagship species and combatting the illegal trade in their products are strengthened at site, national, subregional and international levels

9. This project purpose underscores the MIKES project's emphasis on the four key strategies to be implemented through the project – concerning the strengthening of management systems, capacity, information availability and decision-making processes – which are central to the achievement of the project's overall objective. The project purpose also emphasises the four key stakeholder levels that the project will be active: site, national, subregional and international.

10. The five project results designed to achieve the project purpose, and that respond to the lessons learnt from previous phases of the MIKE Programme, are as follows:

    - Result 1: Information on status and threats to elephants and other flagship species and benchmarks on law enforcement and management effort

- Result 2: Development of protected area law enforcement, management and monitoring systems, protocols and capacity of selected sites
- Result 3: National and subregional information, decision making and intelligence systems
- Result 4: International awareness, cooperation, and action in the conservation and protection of elephants and other flagship species
- Result 5: Piloting of law enforcement, management and monitoring systems, protocols and capacity building approaches in Caribbean and Pacific protected area sites

This sub-project specifically relates to Result 2, which is described in the following section.

2.2 Development of protected area law enforcement, management and monitoring systems, protocols and capacity of selected sites (Result 2)

11. This sub-project will contribute to MIKES Result 2, which will allow the MIKES Project to respond to major current and emerging hotspots for illegal killing of elephants and other target species. In selected priority sites (called the MIKES focal sites), MIKES will provide technical and operational support for the strengthening of law enforcement capacity and systems of the concerned protected area agencies, through the provision of law enforcement-oriented training, technical support for the design of appropriate law enforcement patrol systems, and key operational support where required. The Result will also support efforts to strengthen the involvement of local communities in the law enforcement effort, alongside other local law enforcement agencies and the judiciary. The MIKES focal sites have been selected in accordance with their importance for the protection of key populations of elephants and/or other CITES-listed flagship species, the scale and nature of the threats to these species, and the likelihood of mitigating these threats through targeted support for the protected area's law enforcement and management systems.

12. The key activities identified to deliver this result are as follows:

- Activity 2.1 Develop and support the establishment of systems for improving the relevance of RBM to adaptive protected area management, including planning RBM operations and responding to information generated
- Activity 2.2 Develop or revise protected area management plans for selected target sites as a basis for planning and implementing effective law enforcement and adaptive management systems and improving accountability
- Activity 2.3 Provide technical, operational and material support for the strengthening of existing law enforcement and adaptive management systems and capacity at target sites, incorporating lessons learnt and best practice solutions
- Activity 2.4 Develop protected area law enforcement capacity to respond to major current and emerging target species poaching crises at hotspots for illegal killing within priority protected areas
- Activity 2.5 Develop and support initiatives designed to strengthen collaboration between neighbouring local communities, local authorities and protected area management in law enforcement initiatives in target protected areas
- Activity 2.6 Develop mechanisms for sharing of intelligence information between target sites concerning illegal killing of elephants and other flagship species

13. The specific sub-project results and activities are described below, and summarised in the activity plan in section 4.7.

3. Sub-Project Detail

3.1 Introduction

14. This sub-project relates to the provision of support for strengthening wildlife law enforcement at the Mana Pools National Park and Chewore and Sapi Safari Areas MIKES focal site, in cooperation with the Zimbabwe Parks and Wildlife Management Authority (ZPWMA – the Cooperating Management Agency) and with the implementation support of the Tashinga Initiative (TTI – the Implementing Partner).

15. This section provides details of the objectives, results and activities of the sub-project and the specific contributions towards the overall MIKES Project, the deliverables to be produced, and the implementation arrangements, including reporting, monitoring and evaluation of the sub-project.

16. The overall objective of for Mana Pools National Park, Sapi and Chewore Safari Areas sub-project mirrors the project purpose of the overall MIKES project, as follows:

    Management systems, capacity, information and decision-making processes supporting the protection of elephants and other CITES-listed flagship species and combatting the illegal trade in their products are strengthened at site, national, subregional and international levels

17. In addition, the specific objective of the Mana Pools National Park and Chewore and Sapi Safari Areas sub-project is as follows:

    Law enforcement capacity and systems aimed at reducing the illegal killing of elephants and other wildlife species in Mana Pools National Park and Chewore and Sapi Safari Areas are strengthened.

3.2 Sub-Project results & activities

18. This section describes the results to be delivered by the sub-project and the activities to be undertaken under each result. The sub-project has four main expected results:

    - Result 1: Wildlife law enforcement patrol staff capacity and performance improved
    - Result 2: Organisation and effectiveness of law enforcement operations management strengthened
    - Result 3: Contribution of ranger-based monitoring information to area management and the MIKE Programme enhanced
    - Result 4: Collaboration with local communities in information sharing to improve wildlife law enforcement strengthened

    The activities to be implemented under each result are detailed in the following sections:

Result 1: Wildlife law enforcement patrol staff capacity and performance improved.

19. Field-based patrol staff are the foundation of effective wildlife law enforcement efforts at Mana Pools, Sapi and Chewore. Although below the optimal requirement for the site, there are currently patrol staff based in Mana Pools, Chewore, and that are regularly deployed to parts of Sapi. However, these staff currently face a number of challenges that are impacting their performance and ability to prevent wildlife crimes. These include: a lack of basic field equipment and

rations to support effective patrols, and, particularly in some of the more recent recruits, a lack of key field skills (e.g. tracking). This result aims to begin addressing these challenges with the aim of improving patrol staff capacity, performance and motivation across the site. The main activities to be implemented under Result 1 are as follows:

- Activity 1.1: Identify and prioritise basic ranger field equipment needs in collaboration with site-based patrol staff, and provide equipment to 80 rangers based across Mana Pools, Sapi and Chewore
- Activity 1.2: Define key patrol staff training needs in collaboration with Mana Pools and Sapi/Chewore Area Managers, and carry out four training courses for selected patrol staff
- Activity 1.3: Develop new vegetable garden at Kapirinengu to provide fresh produce to supplement patrol rations, and identify key maintenance and management issues with Mana Pools vegetable garden and rehabilitate once addressed
- Activity 1.4: Review communication equipment needs with Area Managers, and purchase and provide VHF radio handsets and spare batteries in line with requirements

Result 2: Organisation and effectiveness of law enforcement operations management strengthened.

20. In order to make best use of the patrol staff available and respond to wildlife crime incidents, law enforcement managers need to be able to efficiently organise operations and deploy law enforcement staff throughout the site. Unfortunately, large parts of Mana Pools, and particularly Sapi and Chewore Safari Areas, are remote and difficult to access, especially during the wet season. This can make deploying patrol staff, and resupplying operational bases difficult, expensive and time-consuming. To help address these issues, this result will focus on activities designed to improve the mobility and coverage of law enforcement operations, and to improve the management facilities and skills that operations managers can call upon to facilities this. The main activities to be implemented under Result 2 are as follows:

- Activity 2.1: Purchase one Pelikan boat and deploy to Chewore North (Kapirinengu), and organise training for two coxswains in boat operation and maintenance
- Activity 2.2: Provide support for Lower Zambezi law enforcement coordination and rapid response operational base planning and architectural design, and periodic coordination meetings
- Activity 2.3: Carry out assessment of existing operational control rooms at Mana Pools and Chewore Headquarters, and rehabilitate facilities in line with findings
- Activity 2.4: Review optimal outpost construction type, facilities and location with area managers, and construct outposts in accordance with agreed plans
- Activity 2.5: Review capacity needs of senior law enforcement staff based at Mana Pools and Chewore, and support training opportunities to meet defined needs

Result 3: Contribution of ranger-based monitoring information to area management and the MIKE Programme enhanced.

21. Information collected by rangers on patrol is not only essential for the MIKE Programme, but can also play a critical role in informing area management of adaptations needed to improve the effectiveness of law enforcement operations. However, of the three areas in the site, at present only Chewore Safari Area has been collecting ranger-based monitoring information as part of the MIKE Programme for a number of years. The expansion of the collection of this information to Mana Pools and Sapi, has the potential to enhance both the effectiveness of law enforcement operations and increase the site's contribution to the MIKE Programme. As such, this result focuses on building on the significant progress in ranger-based monitoring made in Chewore, and

leveraging this progress to support its rollout in the Mana Pools and Sapi areas. The main activities to be implemented under Result 3 are as follows:

- Activity 3.1: Provide laptop computers and basic SMART training (led by Chewore administrator) on data management to selected staff at Mana Pools and Chewore North Offices
- Activity 3.2: Carry out basic training of wildlife law enforcement patrol staff based at Mana Pools National Park in ranger-based monitoring principles and practices
- Activity 3.3: Identify key staff in Mana Pools and Chewore operational bases for further training in SMART data management and reporting, with a particular focus on generating management orientated reports and MIKE data
- Activity 3.4: Review GPS needs, identify optimal GPS model and supplier, and provide units to patrol staff involved in ranger-based monitoring data collection in Mana Pools, Sapi and Chewore

Result 4: Collaboration with local communities in information sharing to improve wildlife law enforcement strengthened.

22. Accurate and timely intelligence on wildlife crime activities can play a critical role in optimising the effectiveness of wildlife law enforcement. At present the greatest poaching threats in the site are in the south and east of the site, which are mainly accessed through communal areas. As such, community members have the potential to play a critical role in supporting area management to both prevent wildlife crime and apprehend potential criminals. However, at present intelligence gathering activities are based a significant distance away from the site, and neither the institutional structures or the incentives necessary to enable and encourage park-community engagement are in place locally. This result aims to address these shortfalls and increase the opportunities and incentives for site-community collaboration. The main activities to be implemented under Result 4 are as follows:

- Activity 4.1: Support the establishment of community conservation neighbourhood watch committees in areas adjacent to Chewore North involving the traditional leadership, linked to the establishment of new ranger outposts (Activity 2.5)
- Activity 4.2: Provide transport and fuel to selected staff to support the establishment of an informer network, in collaboration with ZPWMA Investigations Office
- Activity 4.3: Establish an auditable fund and payment schedule for rewards made for information on wildlife crime that leads to encounters, arrests or prosecutions, in collaboration with ZPWMA Investigations Office

NOTE TO REVIEWERS

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- The U.S. Fish and Wildlife Service (Service) has found that the killing of African elephant trophy animals in Zimbabwe, on or after January 21, 2016, and on or before December 31, 2017, will enhance the survival of the African elephant. This determination does not affect previous determinations by the Service regarding trophy animals taken before January 21, 2016.

- On April 4, 2014 (and amended on April 17, 2014), the Service announced an interim suspension of imports of sport-hunted elephant trophies taken in Zimbabwe during the 2014 season. On July 17, 2014 (and revised on July 22, 2014), the Service found that the import of elephant trophies taken in Zimbabwe in 2014 on or after April 4, 2014, would be suspended. Our decision to establish an interim suspension of imports of elephant trophies from Zimbabwe was due to having insufficient information on the status of elephants in Zimbabwe and on Zimbabwe's current elephant management program to make an enhancement finding.

- On March 26, 2015, the Service made another determination to continue the suspension through 2015. This decision was again due to the Service being unable to make an enhancement finding even after receiving additional materials from the Government of Zimbabwe and others.

- Subsequent to these findings, the Service has received additional information that clearly identifies that ZPWMA has significantly addressed concerns raised by the Service in regards to their elephant management and how U.S. hunters are supporting conservation efforts through the hunting program. Included in this new information, was the final elephant management plan adopted by the Government of Zimbabwe on January 21, 2016. Therefore, the Service has determined that trophies hunted on or after January 23, 2016 would meet the issuance requirements under the ESA.

- After the original 2014 announcement, the Safari Club International and the National Rifle Association filed a temporary injunction asking the Court to lift the suspension based on their assertion that the suspension violated the ESA and the Administrative Procedure Act by failing to consider all relevant factors related to these decisions; complying with APA notice and comment requirements; and providing sufficient explanation of the need for enhancement findings. This litigation is still ongoing. This determination does not affect previous determinations by the Service regarding trophy animals taken before January 21, 2016.

For further information, please contact Timothy J. Van Norman, Chief, Branch of Permits, Division of Management Authority, 703-358-2350

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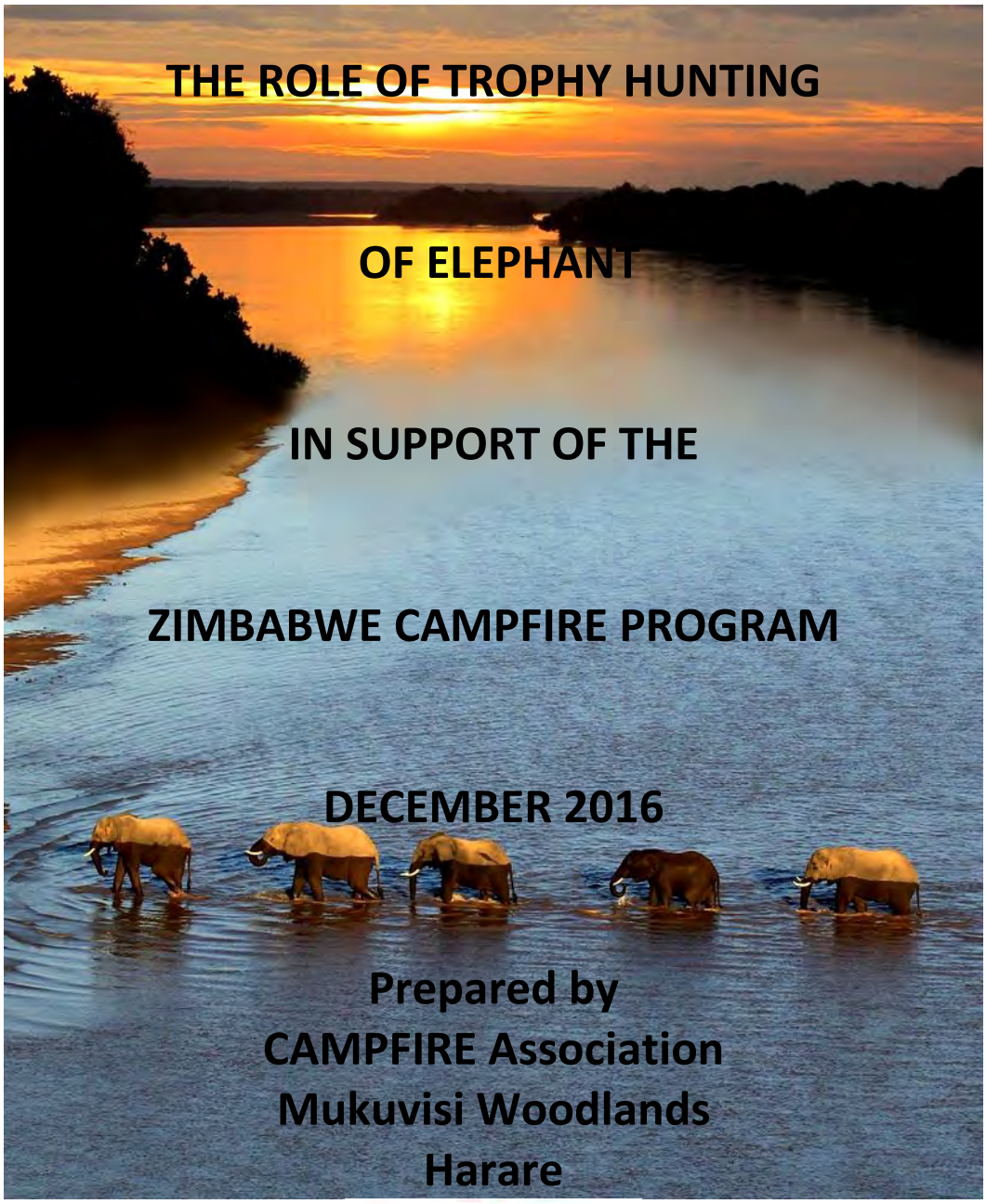
THE ROLE OF TROPHY HUNTING

OF ELEPHANT

IN SUPPORT OF THE

ZIMBABWE CAMPFIRE PROGRAM



DECEMBER 2016

Prepared by
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ACRONYMS AND ABBREVIATIONS

AA	Appropriate Authority
CA	CAMPFIRE Association
CAMPFIRE	Community Areas Management Program for Indigenous Resources
CCG	CAMPFIRE Collaborative Group
DNPWLM	Department of National Parks and Wildlife Management
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
RDCs	Rural District Councils
SOAZ	Safari Operators Association of Zimbabwe
USAID	United States Agency for International Development
ZPHGA	Zimbabwe Professional Hunters and Guides Association
ZPWMA	Zimbabwe Parks and Wildlife Management Authority

Acknowledgements

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Cover photo: Lin Berrie, Chilo Lodge, Mahenya CAMPFIRE Area

EXECUTIVE SUMMARY

In April 2014, the United States Fish and Wildlife Service (FWS) suspended the import of elephant trophies taken in Zimbabwe. In March 2015, the suspension was extended to include future hunting seasons. For it to reverse this decision, the FWS must make a finding that the killing of the animal whose trophy is intended for import would enhance the survival of the species in the wild. The Zimbabwe Parks and Wildlife Management Authority (ZPWMA) defended its position and provided the FWS with significant amounts of information and data related to elephant management. While this is acknowledged, the FWS was still of the opinion that its concerns had not been addressed, and identified six areas where additional information was required.

The CAMPFIRE Association has taken these into consideration, especially the issues regarding "excessive retention of generated funds by Rural District Councils", and how much revenue elephant sport-hunting provides and how much of that comes from U.S. hunters. This document addresses part of the information requested by the FWS under "Revenue Utilization" to demonstrate that by allowing the importation of trophies taken by U.S. hunters, the survival of elephants in Zimbabwe would be enhanced. To support this position, the CAMPFIRE Association outlines the evolution of the CAMPFIRE Program, describing the extent of its coverage and the impact that it has had on wildlife conservation in Communal Areas of Zimbabwe.

Evidence from the 2014 national elephant survey is provided to show that Zimbabwe has a substantial elephant population that is managed sustainably through an adaptive quota setting mechanism. Data from 9 CAMPFIRE Districts that participated in this audit of CAMPFIRE revenue shows that approximately 60% of the allocated elephant quota is utilized and that the majority of hunters (53%) originate from America. These hunters have contributed US$9 million towards the CAMPFIRE Program during the period 2010-2015 compared to US$8 million by the 40 other nations.

The income generated from trophy fees in the last 6 years (2010 – 2015) is approximately US$11.4 million of which elephant trophy fees contributed 65%, while a further US$4 million has come from the sale of hides, concession fees and other sundry income. These funds have been distributed to CAMPFIRE communities in various Wards who received approximately 57% (range 39% - 77%) of the Trophy Fees.

A standardized tool designed to gather baseline data has provided information on the physical and human parameters of the 9 participating Districts including how and on what the revenues from hunting have been utilized. At the District level, approximately 80% of the funds are used to support the administration and management of the CAMPFIRE program, including investment on law enforcement. In contrast, 55% of revenues provided to the producer Wards are channeled towards supporting social services such schools, clinics and other programs that benefit the community.

The cost of living with wildlife, and particularly elephants, is shown through providing data on the scale of crop damage (7,000ha over 6 years) that has a significant impact in terms of its monetary value on rural communities who face food insecurity and deep poverty (average income US$1 a day). 96 human lives were lost to wildlife attacks, with elephant accounting for more than half of those deaths. Yet despite these challenges, communities still retain a high level of tolerance for elephants, but this support is rapidly dissipating as a result of the loss of income from trophy hunting. This places almost two million hectares of wild land at risk, including the risk of increasing retaliatory killing through poisoning and illegal wildlife crime.

A way forward is discussed outlining how the resumption of trophy imports can offset the challenges facing the CAMPFIRE program and through this, enhance the conservation of elephant outside of the protected areas.

1 INTRODUCTION

In April 2014, the United States Fish and Wildlife Service (FWS) suspended the import of elephant trophies taken in Zimbabwe. The suspension was extended to include future hunting seasons on March 26, 2015. In May 2015, the Assistant Director (International Affairs) from the United States Fish and Wildlife Service (FWS), Mr. Byron Arroyo, wrote to the (then) Minister of Environment, Water and Climate outlining the reasons why the Service made a determination on 26th March 2015 that it was unable to authorize the import of elephant trophies taken in Zimbabwe in future. This is further explained in detail in the "Enhancement Findings for African Elephant Taken as Sport-hunted Trophies in Zimbabwe during 2014" published on the 7/22/14 (see reference FWS/AIA/DMA).

The FWS make the point that for it to authorize imports of sport-hunted African elephant trophies into the USA, the Service must be able to determine that the requirements of the special rule for the African elephant under the U.S. Endangered Species Act (ESA) have been met (see 50 CFR 17.40(e)(3)(iii)C). Specifically, the FWS must make a finding that the killing of the animal whose trophy is intended for import would enhance the survival of the species in the wild.

In defense of this, the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) provided the FWS with significant amounts of information and data related to elephant management. The FWS also communicated with various stakeholders including the Safari Operators Association of Zimbabwe (SOAZ), Zimbabwe Professional Hunters and Guides Association (ZPHGA), the CAMPFIRE Association, as well as individual professional hunters and outfitters, and independent scientific researchers.

The FWS acknowledged this input but still believed the data received did not fully address the questions regarding how elephants are managed in Zimbabwe, and how, by allowing the importation of trophies taken by U.S. hunters, that the survival of elephants in Zimbabwe would be enhanced. Six areas were identified where additional information was required. These are:

1: Updated Elephant Management Plan with formalized targets or indicators

2: Current elephant population data and the impact of hunting on the elephant population

3: Levels of poaching and prevention, including MIKE and PIKE data

4: Regulation and enforcement, particularly regarding the use of funds generated by U.S. hunters to support law enforcement and management

5: Sustainable use of elephant, specifically information of the levels of legal and illegal offtake

6: Revenue utilization from the hunting of elephant on Communal Lands, Safari Areas, Forestry and Private Conservancies.

The CAMPFIRE Association is not able to address these issues since these are the prerogative of the ZPWMA who is responsible for the conservation and management of elephant at the national level. Nonetheless, the CAMPFIRE Association is in a position to address part of the information requested under "Revenue Utilization", and contribute indirectly to the other five issues raised by the FWS.

2 Overview of Community Based Natural Resources Management in Zimbabwe

There are numerous reports and references in the literature that analyze the community based natural resources management program (CBNRM) in Zimbabwe. A more recent assessment can be found in the document prepared for USAID Zimbabwe by Mazambani and Dembetembe (2010).

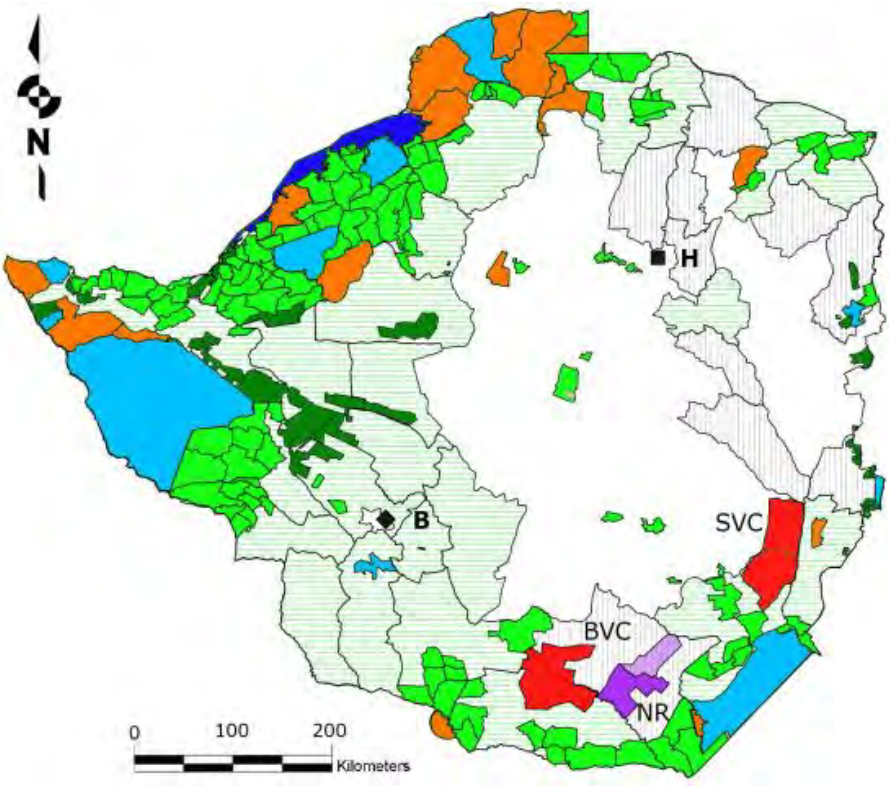

Figure 1: The location of CAMPFIRE areas (in light green) relative to National Parks (blue), Safari Areas (orange), Forest Areas (dark green) and Conservancies (red).

In 1982, the government amended the 1975 Parks and Wildlife Act to enable Rural District Councils (RDCs) to obtain 'appropriate authority' (AA) to utilize wildlife for commercial gain. The proposed changes were aimed at finding alternative forms of land use to subsistence agriculture on marginal lands. At that time, there was no particular model as to how this could happen without threatening the resource base. The (then) Department of National Parks and Wildlife Management (DNPWLM) began to explore options within the framework of an integrated landuse plan for the communal lands bordering National Parks and Safari Areas. This Act provided an opportunity to extend to communities in the Communal Lands the benefits that the private landowners enjoyed as a result of the 1975 Parks and Wild Life Act. This eventually led to the birth of Zimbabwe's Community Areas Management Program for Indigenous Resources (CAMPFIRE), which had far reaching impacts on wildlife productivity as well as the socio-economic wellbeing of CAMPFIRE communities.

2.1 The CAMPFIRE Program

The CAMPFIRE program was conceptually designed to focus on wildlife, woodlands, water, grazing resources, and grasslands. In practice, it focused on managing wildlife because of the direct monetary benefits which this resource offered to producer communities. The CAMPFIRE concept (see Murphree, 1993; Jones and Murphree, 2001) was developed in response to the realization that unless communities living adjacent to National Parks can obtain direct value from wildlife, they will not protect the wildlife. These communities would also need to have a much greater say in how those benefits would be derived and utilized.

While the 1982 amendment of the 1975 Parks and Wildlife Act permitted devolution of authority over wildlife to Rural District Councils (RDCs), the DNPWLM had meager resources to render the program operational (Jones and Murphree, 2001). The DNPWLM therefore turned to such institutions as the Center for Applied Social Sciences (CASS) at the University of Zimbabwe, which was assigned a socio-economic research and evaluation role; the WWF Multispecies Animal Production System Project in Zimbabwe; and the Zimbabwe Trust—an NGO focusing on rural development. These agencies had different but complementary objectives and together with the DNPWLM they formed the original CAMPFIRE Collaborative Group (CCG).

From 1986 to 1988, DNPWLM and its CCG partners engaged in discussions with selected communities and RDCs to identify locations for the inception of the program. The discussions focused on two main criteria, namely:

(a) voluntary interest in participation by communities and District Councils, and

(b) the presence of wildlife populations capable of producing sustainable and economically significant revenues.

The CCG work during this period also involved securing political support for the program, and attending to the demands of institutional and administrative detail associated with the conferment of Appropriate Authority (AA) by DNPWLM to RDCs, including the guidelines for awarding revenues and other benefits to communities from the the number of animals harvested within a local community's area each hunting season.

The agreed but non-binding guidelines stated that not less than 50% of the revenues was to be paid to the communities (as wards), not more than 35% was to be allocated to wildlife management (habitat management, fire control, monitoring, hiring of game scouts, etc.), and that 15% could be retained by the District Councils as an administrative levy.

Under the CCG, the CAMPFIRE Program attracted donor support and evolved through a number of phases.

- **Phase I** 1989-1994: (US$10m grant support – USAID and various partners). The period saw the initiation of CAMPFIRE and donor support was channelled towards the improvement of safari hunting in major districts that had been granted AA by 1995. This is also the period in which CAMPFIRE Association was established to coordinate the program.
- **Phase II** 1994-2003: (US$30m - USAID). This support focused on the capture of other natural resources (e.g. timber, sand, fishing, etc.). High-end non-consumptive tourism facilities were developed in Nyaminyami and Chipinge districts in the early 1990s, and 12 'joint venture' eco-tourism lodges were in operation in communal areas by 1999. Small grants were also provided to support the development of eco-tourism, crafts, and other community based natural resources management projects. Investments were also made in the production of natural resource products (e.g. fish in Beitbridge, Mwenezi; mopane worms in Bulilima Mangwe and Gwanda; honey in Binga, Kusile, Mutoko, and Nyanga districts) and many other products.
- **Phase III** 2003-2007: (US$165,000 – Ford Foundation). This period saw the cessation of major donor funding to CAMPFIRE, and it also coincided with larger macro level policy changes in

Zimbabwe after 2000, and the subsequent adverse socio-economic conditions. This led to the collapse of financial and technical support previously provided by the CCG.

- **Phase IV** 2007-present: (US$350,000 WK Kellogg Foundation). During this period, there was hyper-inflation, which led to the loss of income from hunting in real terms. This situation stabilised in 2009, when multiple foreign currencies were introduced. The CAMPFIRE Association maintained operations through a 4% levy paid by major hunting districts amounting to less than US$100,000 annually.

Following are key achievements in the development of CAMPFIRE (see Mazambani and Dembetembe, 2010):

I. Guruve and Nyaminyami, the first RDCs to be granted AA status, received their first hunting revenues in 1988. This had a dramatic effect in that many districts that are rich in wildlife applied for AA status and by the end of 1991 eleven additional districts had been granted AA status.
II. By the end of 1991, the 13 districts participating in the program collectively grossed US$1.1 million in revenue for that year.
III. By 1995 there were 23 districts participating in the program.
IV. The CAMPFIRE Association (CA), the secretariat for all districts with CAMPFIRE activities, was formed in 1992. Its primary objectives were to promote the wildlife interests of RDCs and to serve as an association of producer communities. The association played an important role in securing full government support for wildlife management in communal lands so that CAMPFIRE became a recognized conservation program.
V. Between 1995 and 2000 CAMPFIRE not only witnessed growth in terms of attracting more districts, but also in building the capacity of the RDCs, and in diversifying their activities to include other natural resources. The number of RDCs that were awarded AA status to manage wildlife increased from 2 in 1988 to 27 in 1996. Institutional capacity building grants via United States Agency for International Development (USAID) funding were secured for 24 districts from 1996 to 1999.
VI. Between 1989 and 2001, CAMPFIRE revenues amounted to almost USD $ 20.3 million, 97% of which originated in the original 13 districts. Of this, 49% was disbursed to communities (118 wards with over 121,500 households), 20% used for wildlife management, just over 12% retained by the District Councils as a levy, 3% used for other expenses (including the then 1.5% levy to the CAMPFIRE Association), and about 15% was retained by the RDCs pending allocation (Khumalo, 2003). Almost 90% of this income came from safari trophy hunting.
VII. The period from 2001 to 2003 witnessed two significant developments in CAMPFIRE:
    a. formation and registration of community trusts as a strategy for devolving decision making and control over resources from the RDCs to community groups, and
    b. a concerted drive to diversify CAMPFIRE. Twenty-eight non-wildlife-based community projects received financial support through CAMPFIRE compared to only five wildlife-based community projects.
VIII. At its peak in 2002, CAMPFIRE encompassed 53 districts with AA, though only 23 of these really functioned as intended, while only 12 received regular income from wildlife.
IX. The Association has spearheaded the revision of CAMPFIRE revenue sharing guidelines to improve the community's share of income from 50% to 55% of hunting income. A Direct Payment System was developed in 2006 to ensure that communities receive their income on

time. A standard hunting contract has been developed to improve hunting administration by RDCs.

In summary, CAMPFIRE protects about 50,000 km^2 (12.7%) of land in Zimbabwe (Figure 1). Benefits from wildlife and other incomes encompass:

- Approximately 777,000 households (25%) in Zimbabwe benefited from CAMPFIRE directly or indirectly;
- Approximately 25% of Zimbabwe's people are receiving incentives to conserve wildlife and prevent anti-poaching through CAMPFIRE;
- Between 1994 and 2012, CAMPFIRE generated US$39 million of which US$21.5 million was allocated to communities and used for resource management (22%), household benefits (26%), and community projects (52%).
- About 90% of CAMPFIRE revenue comes from hunting with elephant hunting contributing up to 70% of annual revenue.
- Based on Constitution of the CAMPFIRE Association as amended in 2007, all major RDCs use CAMPFIRE revenue sharing guidelines, and in these districts revenue is paid directly into community controlled bank accounts by safari operators using the following guideline:
  - RDC fees (41%), CAMPFIRE Association Levy (4%), and CAMPFIRE community (55%).

In the following sections, we describe how the income from the hunting of elephant is generated and utilized using data from 9 Districts (Beitbridge, Binga, Bulilima, Chipinge, Chiredzi, Hwange, Mbire, Nyaminyami, and Tsholotsho) for the period 2010 and 2015[1]. For each of these areas we provided:

- Total number of elephant hunted
- Total revenue earned from elephant (and other trophy species)
- How the revenue is spent on various management and social services

We also provide examples of community project support and the impact of human-wildlife conflict over this period.

3 Sustainable Use and Utilization of CAMPFIRE Resources and Revenues

The CAMPFIRE program relies almost exclusively on income from hunting. Since 2009, the number of RDCs where hunting is practiced has decreased, mostly because of the prevailing socio-economic conditions that have resulted in high levels of poverty. This is seen as the key driver of the escalating levels of illegal wildlife crime, and poaching of elephant in particular. Maintaining elephant numbers outside of the protected areas is important to their overall conservation, and the reason why Zimbabwe regards the sustainable utilization of all wildlife as critical to its national conservation strategy. The hunting of elephant in CAMPFIRE areas thus plays an important role and is the major source of income to communities in these areas.

[1] Hurungwe provided partial information, as explained in relevant parts of the report

3.1 NUMBERS, DISTRIBUTION AND REGIONAL TRENDS OF ELEPHANT IN ZIMBABWE

Elephants are distributed in four main regional populations in Zimbabwe, namely, Northwest Matabeleland, the Sebungwe, the mid-Zambezi Valley, and the South-East Lowveld**.** Crude ecological densities vary between 2.16 elephant/km^2 in Northwest Matabeleland and 0.46 elephant/km^2 in the Sebungwe region**.**

Elephant densities in the Communal Areas varies from 1.50 elephant/km^2 in the south-east Lowveld to 0.06 elephant/km^2 in the Sebungwe region. Overall it is estimated that 5,000 elephants reside in Communal Areas and occupy approximately 16,000km^2 (Table 1, Zimbabwe Elephant Management Plan: 2015-2020).

Table 1. Numbers and densities of elephants in the four regions of elephant range within Zimbabwe. (Source: Zimbabwe National Elephant Management Plan 2015 - 2020, see Dunham *et. al.* 2015a, b, c and d).

Name of Region & Area	Area (km2)	Estimated Number of Elephants	Density of Elephants/km^2
NW Matabeleland	**24,989**	**53,991**	**2.16**
Hwange National Park	15,180	45,846	3.02
Matetsi Complex	4,402	4,843	1.10
Forest Areas	2,332	1, 101	0.47
Communal Lands	**3,075**	**2,201**	**0.72**
Sebungwe	**15,529**	**3,407**	**0.22**
Parks & Wildlife Estate	6,234	2,894	0.46
Forest Areas	261	16	0.06
Communal Lands	**9,034**	**497**	**0.06**
Mid-Zambezi Valley	**16,014**	**11,656**	**0.73**
Parks & Wildlife Estate	12,257	9,752	0.80
Communal Lands	**3,757**	**1,904**	**0.51**
South East Lowveld	**8,835**	**13,037**	**1.48**
Gonarezhou NP & Malapati SA	5,118	11,120	2.17
Save Conservancy	3,496	1,585	0.45
Communal Lands	**221**	**332**	**1.50**
Mozambique Border	*1,574*	*0*	*0*
National Total*	**65,367**	**82,091**	**1.23**
Parks & Wildlife Estate	43,191	74,455	1.75
Forest Areas	2,593	1,117	0.43
Save Conservancy	3,496	1,585	0.45
Communal Lands	**16,087**	**4,934**	**0.18**

* The survey did not include Bubye Valley Conservancy or the Tuli Safari Area and some other small populations that likely add another 1,000 elephants to the estimated total for the country. The area surveyed in Mozambique is not included in the national total or in the South-East Lowveld total area.

3.2 ELEPHANT QUOTA ALLOCATION AND UTILISATION

Zimbabwe is allocated an export quota of 500 elephants (1,000 tusks) in terms of the CITES regulations (see https://cites.org/eng/res/10/E-Res-10-10R16.pdf). In practice, Zimbabwe adopts an adaptive management strategy that sets the overall elephant quota at up to 0.75% of the overall population. This implies that the maximum national quota should not exceed 600 animals at the current population estimate of 80,000 elephants. However, to maintain trophy quality at approximately 35kg (77lbs), the national quota is set at 0.3 – 0.5% of the overall population i.e. 240 – 400 elephants, assuming an average offtake of 60% (R.B. Martin, pers. comm.).

The approach applied to the CAMPFIRE areas is to set quotas that use parameters that are higher than these national guidelines. This strategy is adopted to provide incentives to local communities that reside in areas where high levels of human-elephant conflict is recorded, and to facilitate benefits to local communities through sport hunting.

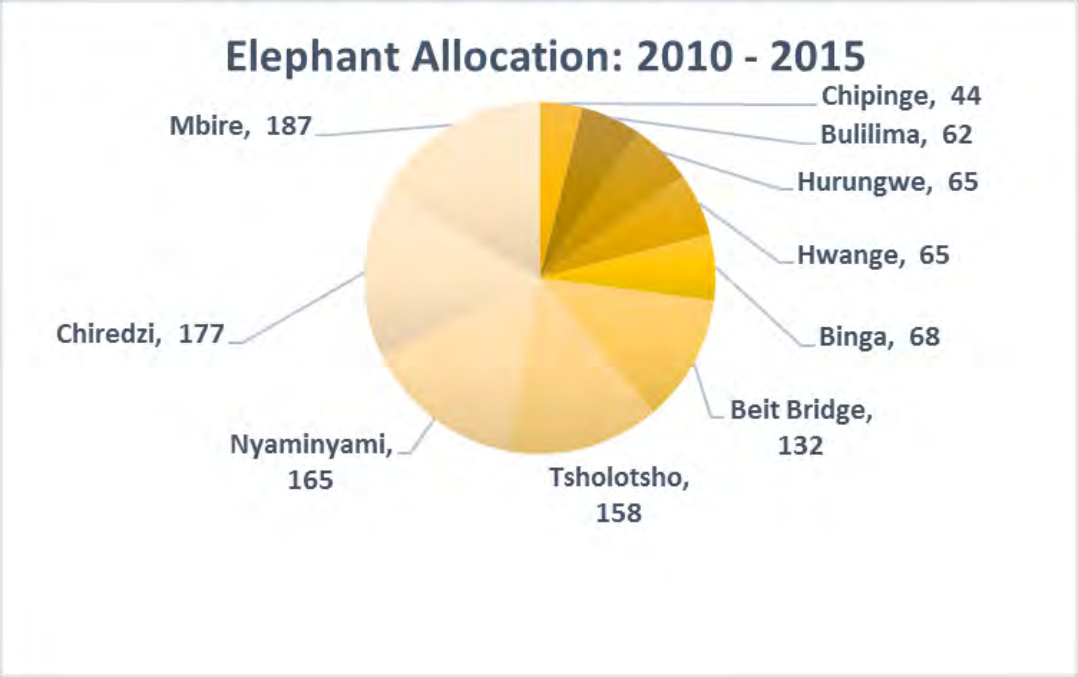

Figure 2: Total allocation of trophy elephant (N=1087) to nine major CAMPFIRE areas over a 6-year period

A total of 1,087 elephants have been allocated on quota to nine major CAMPFIRE areas since 2010 (Figure 2). This equates to 180 elephants per year. The distribution of this quota among the nine CAMPFIRE areas is dictated by the relative density of elephants in the neighboring protected areas and those residing in the CAMPFIRE areas. Tsholotsho, for example, that borders the southern boundary of Hwange National Park, was allocated 158 elephants (or 26/year) while Hwange, Binga and Hurungwe CAMPFIRE Areas that do not border onto areas of high elephant densities receive approximately 10 elephants/year.

The historical trend of utilization of the elephant quota (667 elephant or 61% of the quota allocation) is provided in Figure 3.

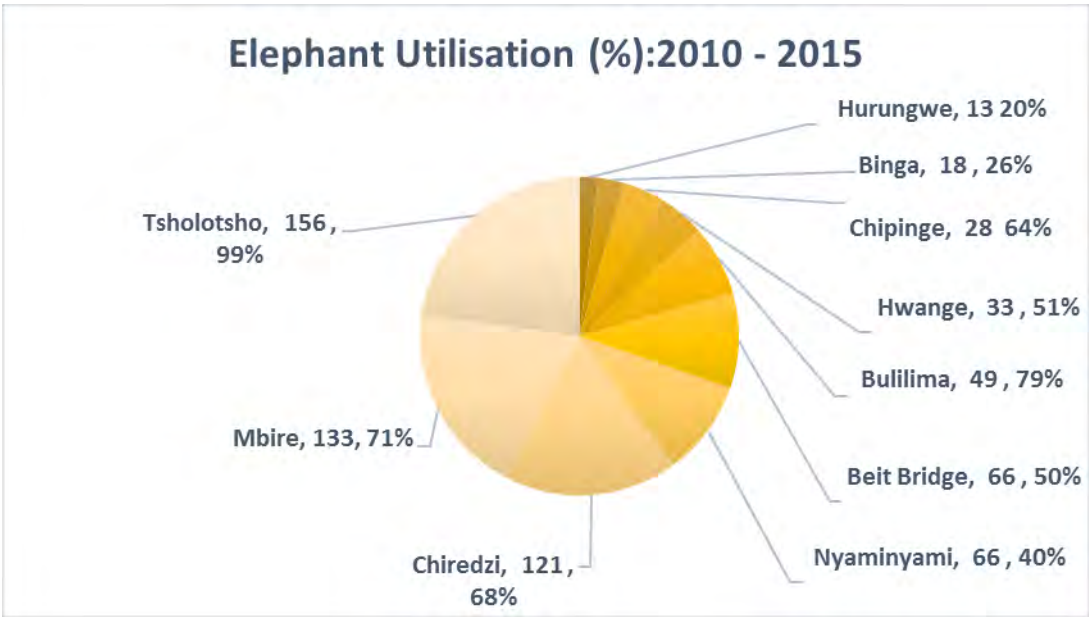

Figure 3: Overall utilization (%) of elephant quotas in nine major CAMPFIRE Areas over a 6-year period

Over the six years, Tsholotsho (99%), Mbire (71%) and Chiredzi (68%) have successfully utilized their allocated quotas while areas such as Hurungwe (20%) and Binga (26%) have not performed as well. The origin of clients hunting in these areas is summarized in Table 2. Over the 6-year period 1702 clients (average 284/year) have hunted in the seven CAMPFIRE Areas (excluding Binga and Hurungwe for which no data are available). Of these 897 clients (c.150/year or 53%) originated from the USA and 461 (c.77 or 27%) from Europe.

Table 2: Origin of hunting clients visiting the major CAMPFIRE Areas :2010 – 2015. Note. No data are available for Binga and Hurungwe

Origin of Clients	USA	Europe	Africa	Asia	South America	Oceania	Canada	Middle East	Total	Average
Beit Bridge	172	36	10	3	14	9	3	0	247	41
Bulilima	17	9	0	0	7	0	0	4	37	6
Chipinge	17	5	0	0	1	0	0	0	23	4
Chiredzi	151	52	57	69	0	0	0	0	329	55
Hwange	20	14	1	5	4	4	1	1	50	8
Mbire	213	90	36	0	10	16	3	0	368	61
Nyaminyami	273	218	24	1	18	21	8	0	563	94
Tsholotsho	34	37	3	4	1	1	1	4	85	14
Total	**897**	**461**	**131**	**82**	**55**	**51**	**16**	**9**	**1702**	**284**
Percentage	**53%**	**27%**	**8%**	**5%**	**3%**	**3%**	**0.9%**	**0.5%**		
Average/year	150	77	22	14	9	9	3	2		

3.3 Income Generation from Sport Hunting of elephants and other Key Species

3.3.1 Income received by Outfitters

To fully account for earnings in the hunting sector, the Reserve Bank of Zimbabwe, in collaboration with all the relevant stakeholders, introduced the Tourism Receipts Accounting System (TRAS) that required all outfitters to submit returns listing the revenue generated for hunting activities. This system has been in place for several years but required manual analysis of the data to extract the information. In January 2015, a web-based system (TRAS2) was introduced which links Safari Operators, Zimbabwe Parks and Wildlife Management Authority, Taxidermists, Shipping Agents, International Marketing Agents and Reserve Bank. Under this system all authorized hunts are registered allowing for the capture of hunting data (origin of clients, value of trophies and hunts, area hunted etc.), monitoring hunting quota utilization and tracking hunted trophies (Chitauro, 2016). The Exchange Control Division of the Reserve Bank of Zimbabwe and the ZPWMA are now able to:

1. Assess regional price differentials of similar hunts and the reasons thereof;
2. Present TRAS2 systems updates and reports to the users including international marketing agents;
3. Engage with international marketing agents of sport-hunting;
4. Obtain relevant insights on governing of the hunting sector; and
5. Come up with an effective mechanism to fully account for export proceeds from the hunting sector.

Outfitters that operate hunting concessions in CAMPFIRE Areas are required to deposit copies of the TRAS2 form with the CAMPFIRE Office in their respective RDCs/Wards. Each Office is therefore able to extract data on daily rates, trophy fees and other incidental revenues. Figure 4 provides a summary of the income by country of origin. This data confirms the major role of American hunters to the CAMPFIRE program who contribute 52% of the overall income.

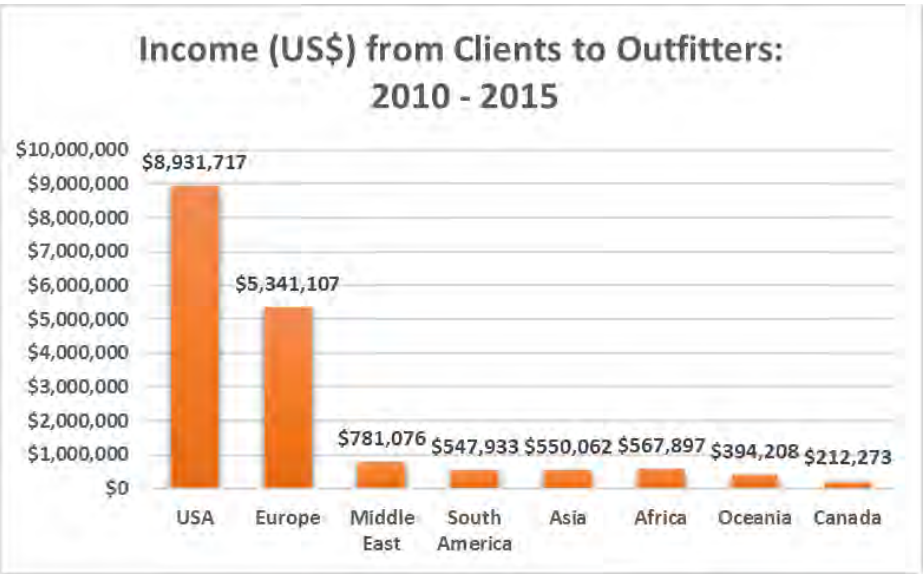

Figure 4: Contribution of hunting clients to the CAMPFIRE Program

3.3.2 Income from Trophy Fees

The data for the total amount of revenue generated for elephant, buffalo, leopard, hippo, crocodile and lion between 2010 – 2015 (approximately US$11 million) is shown in Figure 5.

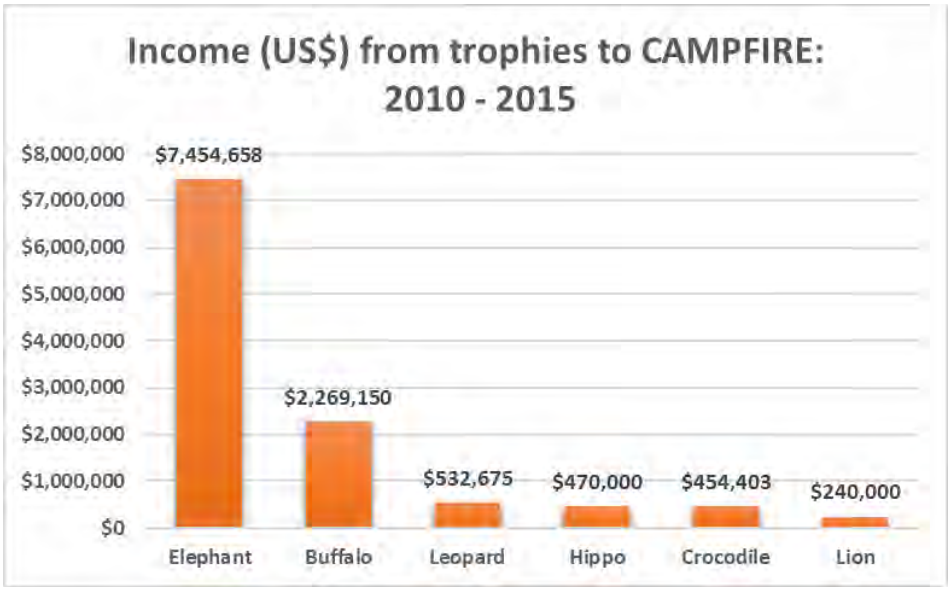

Figure 5: Income (US$) generated from the sale of key trophies

The importance of the income from elephant is clear from these data. Trophy fees from elephant account for 64% of all fees generated from the key species (approximately US$1.2 million/year). Buffalo (20%) are ranked second while leopard, hippo and crocodile contribute approximately 5% each. Noteworthy here is the low contribution of lion (approximately 2%). This low level of income generation is partly a result of the impact of the lion import suspension into the USA and Europe, decreasing quota allocations and decreasing offtake levels brought about by the recently imposed lion age hunting regulations. By comparison, the 897 American clients who hunted in CAMPFIRE Areas in the six-year period paid US$9 million in trophy fees and daily rates. Other nationalities, contributed US$8 million.

3.3.3 Other Income to RDCs

RDCs can generate income for other revenue streams, notably receiving a percentage of the daily rate, concession fees, bed night levies from photographic camps and from the lease/rent of equipment (Figure 6). The eight RDCs for which data are available generated approximately US$4 million from these revenue streams. Excluded here are revenues that could have been earned from the sale of ivory recovered from problem animal control (PAC) and natural deaths, and from the distribution of meat estimated at 550,000kg over the 6-year period.

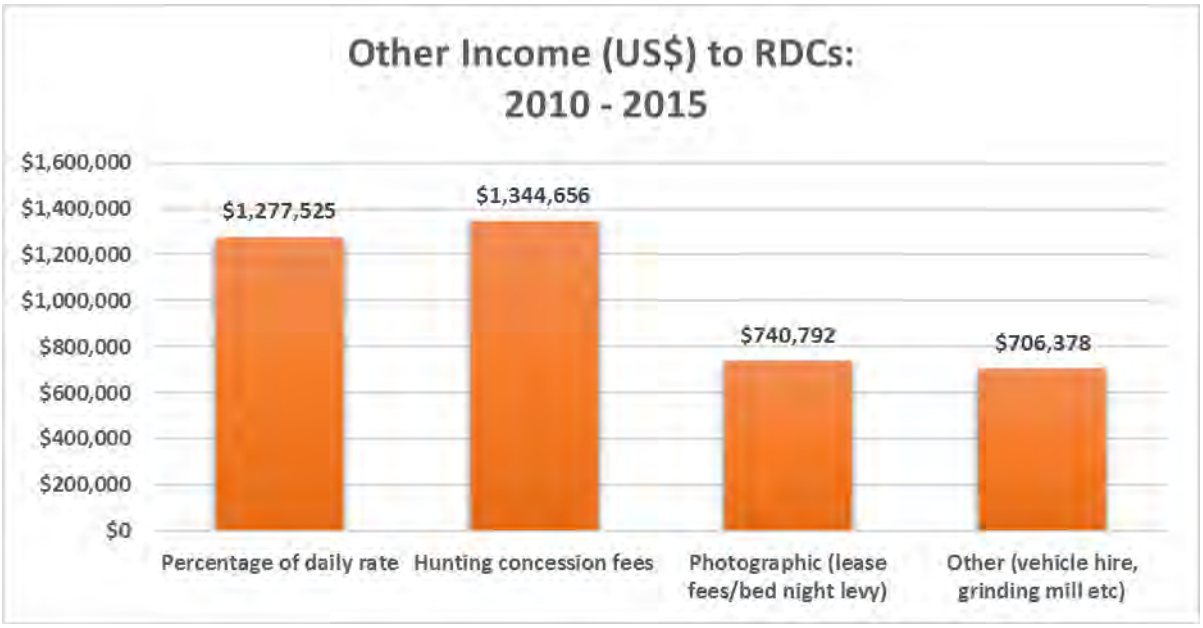

Figure 6: Income (US$) accruing to the RDCs from related income revenue streams

3.3.4 Benefit sharing: RDC vs Wards

Communities at the Ward level receive funds directly from the outfitter utilizing their area, except for those in Beitbridge and Hwange who are paid from dedicated CAMPFIRE accounts with the respective RDC. These funds are generated through trophy fees and income from the sale of hides, concession fees etc. (Table 3).

Over the last 6 years, the income generated from trophy fees is approximately US$11 million while a further US$4 million has come from the sale of hides, concession fees and other sundry income. The agreed split of these funds is that not less than 55% of the revenues is paid as Ward dividends, not more than 35% is allocated to the RDC for wildlife management (habitat management, fire control, monitoring, hiring of game scouts, etc.), and 15% is retained by the RDC as an administrative levy. Some RDCs do not consider all these revenues as "CAMPFIRE Funds" and segregate trophy fees from the other revenues. On average, the CAMPFIRE District Wards received 42% (range 23% - 66%) of the ***combined Concession and Trophy Fees***, but the Wards received approximately 58% (range 26% - 77%) of the ***Trophy Fees*** (Table 3).

Table 3: Summary of the benefit sharing (US$) of hunting related income between RDCs and Wards: 2010 - 2015

Districts	Income to RDC from trophy fees	Income to RDC from Hides, Concession fees etc.	Income to Wards	% All Revenue share: RDC vs Wards	% Trophy Fee Revenue share: RDC vs Wards
Beit Bridge	$657,458	$12,298	$370,228	55%	56%
Binga	$299,800	$364,224	$162,062	24%	54%
Bulilima	$521,700	$46,337	$403,685	71%	77%
Chipinge	$349,500	$139,259	$135,572	28%	39%
Chiredzi	$1,848,600	$181,420	$1,339,678	66%	72%
Hwange	$394,000	$105,131	$237,245	48%	60%
Mbire	$3,022,250	$54,420	$1,740,714	57%	58%
Nyaminyami	$1,883,853	$1,319,772	$1,132,204	35%	60%
Tsholotsho	$2,136,000	$1,990,200	$1,109,956	27%	52%
Total	**$11,420,886**	**$4,213,061**	**$6,631,342**	**42%**	**58%**

4 USE OF FUNDS BY RDCS AND WARDS

The CAMPFIRE Association prepared two templates in conjunction with district based CAMPFIRE Managers that were used as tools to audit the flow of income from safari hunting for the period 2010-2015, and how these funds are used to benefit CAMPFIRE communities. The tools gathered information on the following:

Tool 1: Data related to Rural District Councils

1. Area of district (either sq. km / ha) and total number of wards
2. The income generated by elephant, lion, leopard, hippo and crocodile i.e. Allocated quota (Number), Trophy fee, number hunted (offtake), percentage quota utilization.
3. The origin of the hunters (i.e. USA, Germany etc.) and the value of the safaris extracted from the TRAS2 forms where available. This data provided an indication of the income generation by outfitters.
4. The gross income that CAMPFIRE Districts received from the hunting and photographic activities (i.e. trophy fees, daily rates, concession fees, photographic fees, meat and any other sundry income).
5. Human resources employed at the District level (i.e. number of Wildlife Managers, number of Game Scouts, equipment (e.g., vehicles, patrol equipment etc.), patrol days per year.
6. The use of the funds to support:
    a. Meetings and Administration (i.e. the “15%” of funds)

   b. Law enforcement (RDC Game scouts, equipment, operational costs etc.)
   c. Compensation schemes (burial expenses, education, payment for hospital expenses etc.)
7. Management activities (fire guards, rehabilitation of water supplies, anti-poaching, problem animal control etc.)
8. Social services i.e. support to clinics, schools etc.
9. Other expenses not related to the above.

Tool 2: Data related to Wards

The following data was summarized for each ward in the District. The data collected at the Ward level was supported with evidence of income and expenditure e.g. copy of accounts, photographs of infrastructure etc.

1. Name of ward and ward number
2. Name and size of hunting area(s)
3. Name and number of village(s) and number of household beneficiaries
4. Income received at Ward level from hunting income, income generating projects from wildlife and other income (grinding mills etc.)
5. Allocation and use of income at Ward level for
   a. Meetings and Administration
   b. Wages/salaries
   c. Compensation schemes (e.g., burial expenses, education)
   d. Management activities (e.g., fire guards, rehabilitation of water supplies, anti-poaching, problem animal control.)
   e. Project running costs
   f. Social services (e.g. clinics, schools, grinding mills, roads, fencing, equipment, boreholes/pumps)
   g. Food security
   h. Direct cash benefits (i.e. to individuals, households, if applicable)
   i. Other
6. Human resources employed at the Ward level (i.e. number of Wildlife Managers, number of Game Scouts, equipment (e.g., vehicles, patrol equipment etc.), patrol days per year.
7. Number of Human and Wildlife Conflict cases by year and type (human death, injury, livestock, infrastructure)
8. Population estimates of major species (where available)

4.1 Profile of Rural District Councils

The data presented here has been extracted from Tool 1. For ease of understanding, these are presented below as follows:

- Characteristics of CAMPFIRE Districts
- Human resources and patrol effort
- Investment in equipment
- Expenditure

4.1.1 Characteristics of the CAMPFIRE Districts

The main parameters of the 10 RDCs (including Hurungwe) that provided data for this analysis are provided in Table 4. These RDCs represent approximately 9 million hectares of which 3.7 million hectares fall under the CAMPFIRE program. These RDCs have entered into agreements with both hunting and photographic outfitters who have invested in 26 hunting camps and 8 photographic camps respectively.

Altogether there are 224 Wards represented in these areas of which 104 are under the CAMPFIRE program. Excluding Hurungwe, there are 737 villages with a minimum of 85,847 households. This represents a community of approximately 600,000 people assuming that the average household is represented by 7 family members.

Table 4: Baseline features of the nine CAMPFIRE Districts

District	Total Area (Ha)	CAMPFIRE Area (Ha)	Hunting camps	Photo camps	Number of Wards	Number of Campfire Wards	Number of Villages	Number of Households
Beit Bridge	1,269,700	310,300	4	1	15	8	15	5,070
Binga	1,230,800	364,000	1	0	25	21	51	19,474
Bulilima	203,300	203,300	1	0	22	13	51	7,767
Chipinge	522,300	40,800	1	1	33	2	15	951
Chiredzi	1,710,239	481,004	5	0	32	9	52	9,461
Hurungwe	1,967,834	529,800	2	1	26	7	N/A	N/A
Hwange	376,963	376,963	2	1	20	18	93	13,980
Mbire	781,000	898,000	6	0	17	9	328	12,302
Nyaminyami	369,931	140,000	3	3	12	6	62	5,875
Tsholotsho	833,600	410,000	2	1	22	11	70	10,967
Total	**9,265,667**	**3,754,167**	**26**	**8**	**224**	**104**	**737**	**85,847**

4.1.2 Human resources and equipment employed at the District Level

Each of the RDCs employ staff to manage the CAMPFIRE program in their Districts. The number of people employed and the roles that they play is dependent on the level of income generated by the CAMPFIRE program. The core function of these staff is to monitor wildlife related activities in their respective areas, notably recording and dealing with human and wildlife conflict, coordinating meetings at the Ward level and monitoring outfitter hunting activities.

Most RDCs employ Game Scouts to conduct routine patrols and undertake basic law enforcement activities. In most cases this is low key since the CAMPFIRE program relies on members of the community to report incidents of wildlife crime, and any other matters related to wildlife in their respective Wards and villages.

Table 5: Summary of Human Resources Employed at District Level.

District	Wildlife Managers	Wildlife Officers	Game Scouts	Employees	Patrol Days
Beit Bridge	2	0	0	76	0
Binga	2	0	9	0	48
Bulilima	1	0	4	5	24
Chipinge	1	0	10	0	365
Chiredzi	2	0	8	8	91
Hurungwe	1	1	4	0	31
Hwange	1	0	6	0	144
Mbire	2	0	21	50	255
Nyaminyami	1	0	23	46	112
Tsholotsho	1	0	10	30	162
Total	**14**	**1**	**94**	**215**	**1231**

All RDCs have invested in various equipment that are employed on wildlife management activities. The number and type of equipment depends on the level of income and sophistication of the CAMPFIRE program. For example, the relatively wildlife endowed Mbire RDC has invested in a VHF radio system and camping gear for its scout force.

Table 6: Examples of equipment used in the CAMPFIRE Districts.

District	Vehicle (4 x 4, pick up etc.)	Truck	Tractor	Trailer	Grader/Tow Grader	Motor cycle	Bicycles	Radio Base Station	Radio hand sets	Rifles	Tents	Other
Beit Bridge	2	-	-	-	-	-	-	-	-	7	-	-
Binga	1	-	-	-	-	-	-	-	-	-	-	-
Bulilima	1	1	-	-	-	-	2	-	-	-	-	-
Chiredzi	2	-	1	1	1	-	-	-	-	-	-	-
Chipinge	1	-	-	-	-	-	-	-	-	7	-	-
Hurungwe	1	-	-	-	-	-	-	-	-	-	-	-
Hwange	1	-	-	-	-	3	-	-	-	7	1	-
Mbire	3	-	-	-	-	2	20	6	15	-	23	8
Nyaminyami	1	-	-	-	-	-	-	-	-	27	-	10
Tsholotsho	2	-	-	-	-	-	-	-	-	-	-	-
Total	**15**	**1**	**1**	**1**	**1**	**5**	**22**	**6**	**15**	**48**	**24**	**18**

4.1.3 RDC expenditure

CAMPFIRE related expenditure over the 6-year period is approximately US$6.2 million (or US$1.0 million/year). Figure 7 represents a breakdown of how the RDCs utilize the income from hunting to support the CAMPFIRE Program in their respective areas. These can be broken down into Administration, Management and Law Enforcement which accounts for approximately 80% of the expenses (or approximately US$835,000/year). The remaining 20% are used to support various community benefits and are aggregated under Social Services, Compensation and Other[2] activities. This equates to approximately US$220,000/year.

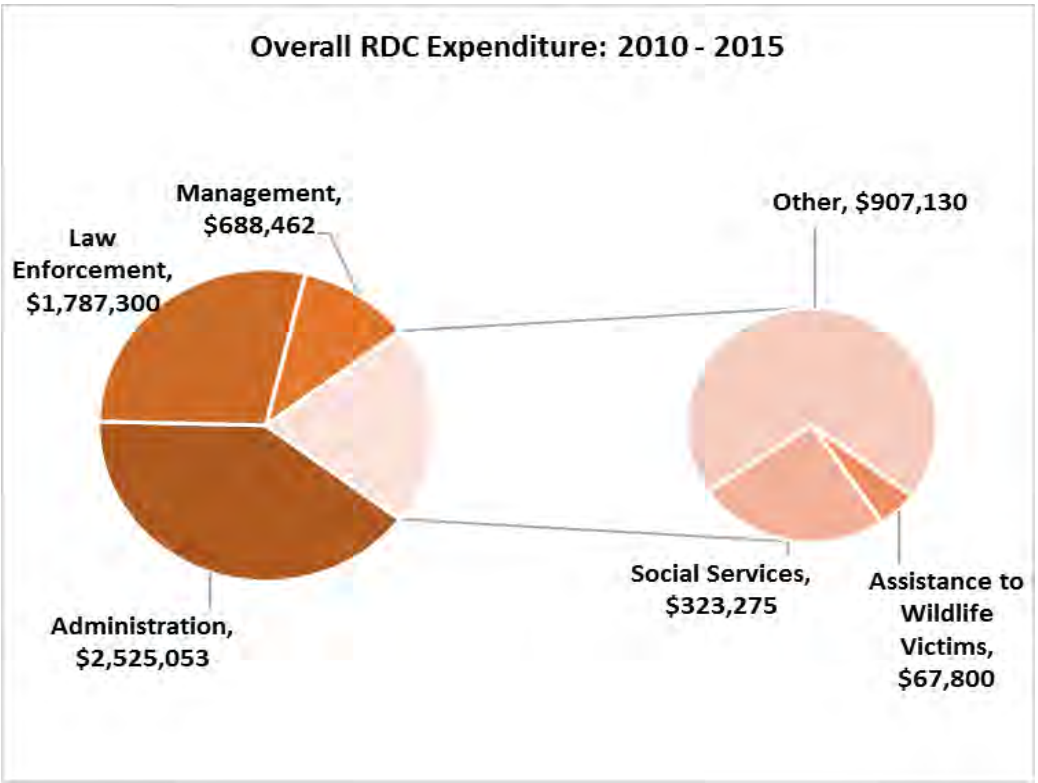

Figure 7: Breakdown of expenditure at the District level on CAMPFIRE program activities

A strategy employed by most RDCs is to invest more in activities related to the management and administration of the CAMPFIRE program rather than on social services. On average, 40% is spent on administration, 20% of law enforcement and 11% on management related expenses while 6% is allocated to support social services. There is no official national compensation scheme, however, RDCs and Wards (including outfitters) assist people and families who are injured or killed by wildlife.

4.2 Profile of CAMPFIRE Producer Wards

[2] The "Other" activities have been skewed by the inclusion of a number of expenses registered by Mbire RDC that include construction and maintenance of staff housing, promoting and managing a community cattle production scheme and purchasing vehicles and office equipment.

The data presented here has been extracted from Tool 2. For ease of understanding, these are presented below as follows:

- Human resources and patrol effort
- Human and Wildlife Conflict
- Investment in equipment
- Expenditure

4.2.1 Human Resources, Patrol Effort and Equipment

Table 7 represents the decision that the CAMPFIRE producer Wards elect to invest in their respective CAMPFIRE Programs. Each Ward is required to establish a Wildlife Committee to which at least 7 members are elected from the villages located in that ward. Each Wildlife Committee employs several people either as ward based monitors or as Game Scouts. This workforce is responsible for approximately 2.6 million hectares of land and represents the 85,847 households that reside in the 737 villages.

The decision to invest in equipment is dictated by the level of income that each producer Ward receives, and the ability of the Ward to service and maintain the equipment in the long term. The records kept at the Ward level under estimate the number of patrol days (minimum 3,002/year) achieved.

Table 7: Average number of staff employed at the Ward level, patrol effort and investment in equipment

District	Number of Wildlife Committee members	Number of Employees paid by community	Number of Game Scouts paid by community	Patrol days per year	Equipment (e.g., vehicles, tractors, grinding mills)	Concession Area (Ha)	Number of Villages	Number of Households
Beit Bridge	66	1	3	152	1	324,300	15	5,070
Binga	7	-	-	-	-	364,000	51	19,474
Bulilima	-	-	100	7	-	193,984	51	7,767
Chiredzi	56	32	-	-	3	N/A	52	9,461
Chipinge	9	5	5	1,584	4	9,400	15	951
Hwange	49	-	-	-	-	342,750	93	13,980
Mbire	76	90	48	1,259	19	898,000	328	12,302
Nyaminyami	45	30	12	-	-	140,000	62	5,875
Tsholotsho	77	2	-	-	1	410,000	70	10,967
Total	**385**	**161**	**168**	**3,002**	**28**	**2,682,434**	**737**	**85,847**

4.2.2 Human and Wildlife Conflict and Problem Animal Control

Communities living in CAMPFIRE areas are on the front line and are required to deal with wildlife problems almost on a daily basis. Table 8 below provides a summary of the magnitude of human and wildlife conflict (HWC) recorded over a 6-year period (2010 – 2015) in 9 CAMPFIRE Districts.

Conflict with wildlife falls under two areas: crop damage and livestock deaths. While there are many other wildlife species responsible for crop damage (baboons, monkeys, bushpig, rats, quelea birds etc.), elephant are considered the greatest threat and problem.

Although the data are incomplete, it is estimated that 7,000ha of crops were destroyed by elephant during the 6-year period under review. It is not possible to accurately place a monetary value to this because crop production varies greatly from one year to the next, and from one region to another. It is important however to take into consideration that the impact of crop destruction in the highly prone drought areas and areas of low rainfall (e.g. Beit Bridge, Binga, Tsholotsho) is more acute than in areas where crop production may be higher. To place this into perspective, the national average maize yield is estimated at 300 – 600kg/ha, and the minimum cash value is US$180/ton[3]. The approximate value of the maize lost is therefore US$500,000 – US$1.0 million. Applying this to livestock losses, the average price of cattle is US$400 – US$700/head depending on the time of year and condition of the livestock. Lion and crocodile are responsible for most cattle deaths and at these prices, the value of stock lost to these predators is US$500,000 – US$1.0 million. Hyena equally destroy cattle but are more likely to kill small livestock (goats, sheep). At US$75 – US$125/head, the minimum cost of predation on small livestock is estimated at US$170,000 – US$300,000 (Table 8).

Table 8: Summary of the extent of human – wildlife conflict recorded in CAMPFIRE Wards: 2010 - 2015

District	Crop Damage (estimated Ha)			Livestock killed (cattle, goats, sheep)				Human deaths
	Elephant	Hippo	Buffalo	Lion	Leopard	Crocodile	Hyena	
Beit Bridge	268	-	1	3	-	-	30	4
Binga	26	35	-	1	-	32	29	7
Bulilima	522	-	-	5	-	-	231	-
Chiredzi	18	9	-	122	-	21	-	2
Chipinge	22	10	-	5	-	7	-	7
Hwange	461	-	-	71	2	15	-	2
Mbire	3,878	475	1,146	426	52	416	1,870	53
Nyaminyami	1,216	49	102	59	6	9	-	13
Tsholotsho	1,085	-	20	175	19	-	211	8
Total	**7,495**	**578**	**1,269**	**867**	**79**	**500**	**2,371**	**96**
	9,342ha			**3,817**				
Cost (US$)	**@300kg/ha*$180/ton**		**$504,473**	**Cattle@$400 - $700/head**		**$546,800 - $1,040,400**		
	@600kg/ha*$180/ton		**$1,008,947**	**Small livestock@$75 - $125/head**		**$177,825 - $296,375**		

Communities who live with wildlife also pay the ultimate price and 96 people have lost their lives and others injured after encountering dangerous animals. Crocodile and hippo are responsible for most human deaths and injuries but there are many incidents where elephant have killed and maimed people who were tending their fields or traversing wildlife areas.

[3] Note: the official price for maize is approximately $350/ton but sellers rarely receive this price from the millers and other interested buyers.

Table 9 summarizes the incidents of problem animal control and illegal activities recorded in the 9 major CAMPFIRE RDCs (data extracted from The Proceedings of the CAMPFIRE workshop, Gandiwa et. al. 2014).

Table 9: Summary of problem elephant destroyed and through illegal activities in 9 CAMPFIRE Districts

	2009	2010	2011	2012	2013	2014	Total
Conflict	250	283	340	208	295	478	**1854**
PAC	55	66	41	33	36	66	**297**
Illegal	7	14	12	11	16	19	**79**

It is not unexpected that local communities will seek to mitigate these losses either through retaliatory killings (this applies mostly to the carnivores) or through removal of problem animals. With respect to elephant, it is important to understand the relationship between trophy hunting, problem animal control and illegal offtake. The interactions amongst all three variables are not simply additive. For example, a relatively small offtake of problem animals can have a significant influence on the mean tusk weight of hunting trophies taken from the population and, hence, the income derived from hunting. Martin (pers. comm.) uses a population simulation model (Craig et. al. 2011) to carry out an analysis to examine these interactions. This model assumes that Problem Animal Control (PAC) is selective, and that most of the elephants killed are males between the ages of 13-36 years old and females between the ages of 22-42 years old. Moreover, more males are killed than females (5:1).

Martin demonstrates that the combined effect of trophy hunting quotas and level of PAC shows that in a scenario where there is no PAC, trophy hunting quotas can be set ranging from 0.1 - 0.6 % of the population. However, as PAC increases, so the trophy hunting quotas must be decreased to maintain trophy quality. The magnitude of the changes caused by relatively minor increments in PAC are highly significant. The modelling shows that increases in the trophy hunting quotas and PAC offtake causes only a minor drop in the rate of increase of the population which remains above 4% per annum, however, if the PAC offtake exceeds 1% of the population, then hunting quotas should not exceed 0.1% of the population. Unless these ratios are maintained, there is a real risk that the elephant populations will decline with the consequential loss of income from sport hunting.

Currently Zimbabwe adheres to quotas set at 0.3 – 0.4% of the population, and slightly higher in the CAMPFIRE areas. The PAC levels shown in Table 9 do not approach these critical thresholds, however, close attention needs to be paid to trophy quality and age (see discussion of elephant hunting in Mbire - in The Proceedings of the CAMPFIRE workshop, Gandiwa et. al. 2014).

4.2.3 Beneficiaries of CAMPFIRE Income at the Ward Level

The beneficiaries of revenues from the CAMPFIRE program are the community's resident in the producer Wards. However, the volume of people residing in these areas precludes providing individuals with direct dividends since the value of such dividends would be meaningless. The CAMPFIRE wards have therefore elected to invest in projects that provide social services to the whole community and only in special circumstances are dividends paid out for food security and direct cash benefits.

Table 10: Examples of Social Services funded in selected CAMPFIRE areas from Ward Revenues generated from sport hunting: 2010-15

District	Project
Beitbridge	Rehabilitation of schools, clinics and protection of irrigation schemes
Bililima	Rehabilitation of 3 clinics and 3 primary schools, hall, fencing of fields and rehabilitation of lodge, community truck, tractor, dam repair machinery.
Chipinge	3 grinding mills, lorry, teachers houses, community office, shop
Chiredzi	Clinic, teachers' houses, primary school, community-grinding mill, Police sub-office, piped water and electrification of clinic.
Hurungwe	Construction of classroom block Nyamakate Secondary, Maintenance of Nyamakate bridge. Purchase of tractor tube, payment of carpenters, Roofing Chipfuko Primary School and Huyo Secondary School, CAMPFIRE Ward tractor major service, Purchase of Treasurers bicycle, Payment of Nyamakate Clinic guard, 7 resource monitors allowances, 26 bag cement Chitindiva, Kabidza , Manyenyedzi and Mawau schools for toilets construction, renovation Karuru School (5 bags cement), and toilet construction, Chitindiva Clinic toilet construction, Roofing Chikova Secondary School, Purchase of buiding materials Chikova Secondary Block, Painting Dete Primary School, Building toilets Makwiye school, Building shed Mupuse school, Roofing Bhashungwe primary school, Sanyati Bridge camp renovation, Purchase of Cement Tashinga Primary School, 6 pairs uniform for resource monitors, Purchase of 20 bags cement Chisipite Primary School, Purchase of tires for Ward tractor, Bridge maintenance
Mbire	Clinic, nurse's houses, office, storerooms, 14 classrooms, 7 teachers houses, grinding mill, school office, wildlife administration offices, 2 hand pump boreholes, water piping, toilet, water storage tanks, 2 tractors, a basic tourist camp with 4 chalets;
Nyaminyami	Tillage tractors, renovation of dispensary at clinic, nurse's house. Construction of Mayovhe classroom block, 3 grinding mills, Teacher's house, Jongola school. School bursaries x 3 students at Seke Teacher's College. Renovation of pre-schools x 2. Negande: Rehabilitation of water pipeline, grinding mill. Nebiri: Chikuro primary block, rehabilitation of Harudziva water pipeline. Kasvisva: Rehabilitation of water pipeline to supply water to Kasvisva clinic, Kasvisva Secondary school block. Msampa: Teacher's house, Majazu primary, renovation of ward warehouse; Kanyati: Cement for teacher's house renovation.
Tsholotsho	Classroom blocks and furniture (Sihazela, Mlevu, Mtshwayeli, Ntulula, Dibutibu, Gwaai, Nkwizhi, Zibalongwe, Malindi, Mgodimasili, Phelela, Mpilo, Jimila, and Kapane Primary schools), 2 F14 cottages, 10 sewing machines (Dibutibu Secondary school), 7km piped water system for Thembile primary school, Sikente Clinic, Tshitatshawa and Jowa clinics construction, fencing of Madlangombe clinic, 10 water engines, borehole drilling and repairs and repair kits, Lister diesel engines for 6 villages in ward 21 and at Sihazela Line in ward 1, grinding mills, solar water pumping in wards 1, 2 and 4. 2 pickup trucks for wildlife monitoring purchased in 2015.

Figure 8 summaries the distribution of the US$5.4 million that Wards in 9 CAMPFIRE areas received over the 6-year period under review (2010 – 2015). As with the District expenditure, the Ward Wildlife Committees allocate 42% of the funds (US$2.2 million) for administrative functions (i.e. Meetings and Administration, Wages and Salaries, Management and Projects) and 55% of the funds (US$2.9 million) to

community benefits. Most of the funds are allocated to social services (US$2.4 million) that support schools, clinics and other infrastructure that benefit the whole community. Examples of this support are provided in Annex 1.

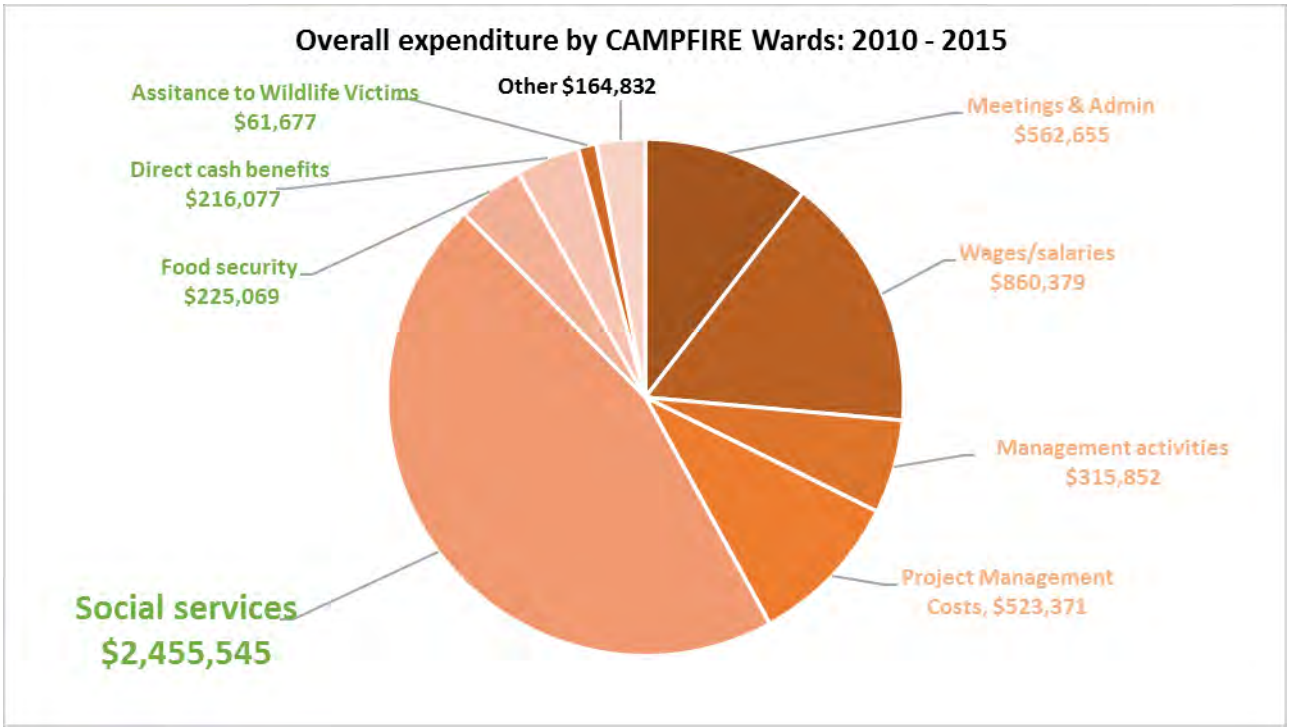

Figure 8: Allocation of Ward Campfire funds

5 Impact of the Suspension of Elephant Trophy Imports to the United States on THE CAMPFIRE Program

The income to CAMPFIRE from the sustainable use of elephants has been declining since 2013, with 2014 registering a significant drop following the announcement of the ban on ivory imports into America (Figure 9). Although the hunting industry responded by seeking alternative markets (e.g. Russia, Middle East), this trend continued through 2015 and unconfirmed reports suggest that the decline has continued in 2016.

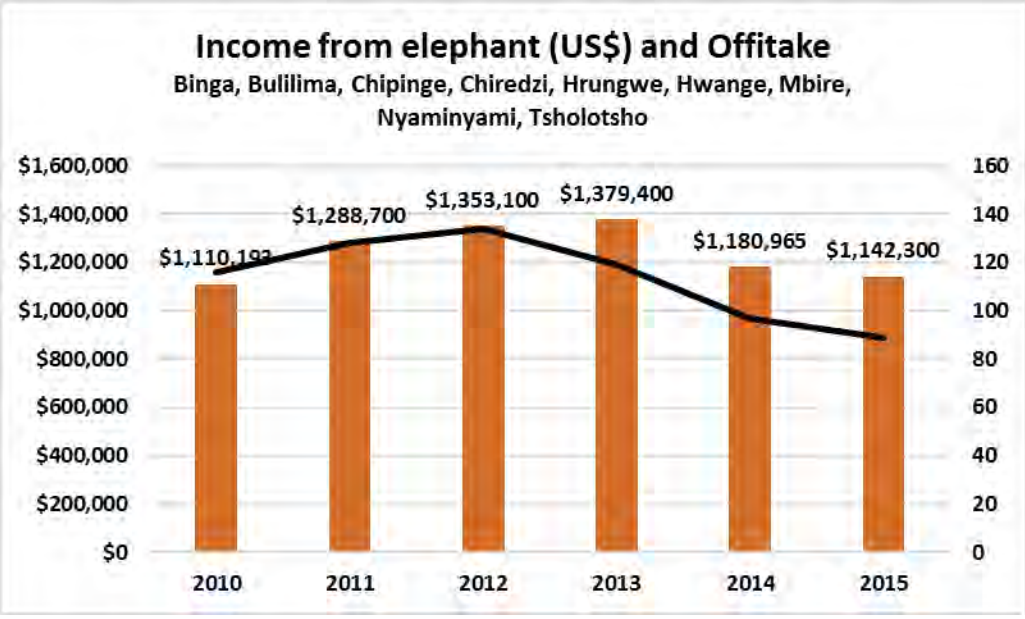

Figure 9: Annual income (US$) and offtake of elephants in 10 CAMPFIRE Districts

It is difficult to show concisely how the American ban on importation of elephant ivory from Zimbabwe has contributed to the decline in CAMPFIRE revenue and how hunting has enhanced the conservation of this species, due to the nature of the hunting industry in the CAMPFIRE areas. The hunting sector is integrated across a wide range of socio-economic activities and withdrawing one segment adversely affects a range of other wildlife based activities. Several indicators are provided here to demonstrate this:

1. The US suspension of ivory imports from Zimbabwe has had a significant impact on CAMPFIRE, and resulted in the cancellation of 108 out of 189 (57%) elephant hunts in all major districts initially booked by US citizens in 2014. The net impact of this was a reduction of CAMPFIRE income for all areas from US$2.2m in 2013 to US$1.7m in 2014. A similar pattern prevailed in 2015 (US$1.6m), and a further decline is anticipated in 2016 where outfitters struggled to sell elephant safaris and those that did had to heavily discount their prices.
2. The key trophy species (elephant, buffalo, leopard, hippo, crocodile and lion) contribute approximately US$1.2 million/year to CAMPFIRE revenues. Elephant account for 64% of these fees.

3. Quota utilisation of elephant prior to the ban did not exceed 60% of the CAMPFIRE quota allocation.
4. American hunters make up 53% of the clients in CAMPFIRE areas.
5. CAMPFIRE producer Wards receive on average 57% of all trophy revenues.
6. The CAMPFIRE hunting industry in the 9 RDCs covered in this analysis directly supports 104 producer Wards, representing 737 villages or 85,847 households.
7. The CAMPFIRE program employs managers, officers and game scouts at both the District and Ward level who are responsible for monitoring wildlife based land use activities in their areas and these are directly paid from safari hunting income.
8. Both RDCs and Wards invest in a variety of equipment that benefits communities and wildlife management. The operational and maintenance costs for this equipment are drawn from safari hunting income.
9. RDCs utilise 80% of the CAMPFIRE revenues to support administration and management of the program. 20% is invested in global social services that benefit communities at the District level.
10. Producer Wards, representing approximately 2.6 million hectares, bear the cost of living with wildlife. Under the 6-year period under review, elephants are responsible for the destruction of approximately 7,000ha of croplands in the 9 Districts. The minimum cost of this in terms of food production is estimated at US$500,000 – US$1.0 million.
11. Producer Wards have elected to invest 55% of their dividends from CAMPFIRE revenues in social services (schools, clinics etc.). 74% of these revenues are generated through trophy fees where elephant play a significant role.
12. Although CAMPFIRE communities suffer most from elephant crop damage, the number of elephant destroyed as problem animals is well within acceptable limits and with few exceptions, has little or no impact on population numbers.

In conclusion, the CAMPFIRE program relies almost exclusively on revenues generated through hunting. These revenues cannot be replaced through alternative wildlife based activities. This places almost two million hectares of wild land at risk, including the risk of increasing retaliatory killing through poisoning and illegal wildlife crime.

Wildlife in Communal Lands is under pressure. Removing any benefits will tip the balance and disgruntled CAMPFIRE communities will turn to pastoralism and unsustainable agricultural practices, thereby reducing wildlife habitat. The suspension of trophy imports is effectively encouraging communities to become willing tools for poaching – a forced abandonment of CAMPFIRE.

6 The Way Forward

The ZPWMA has recently developed and approved its 5-year Elephant Management Plan (ZPWMA, 2015). This plan recognizes that if elephants are to survive in the future, they must have a value, both to the governing authorities and to the local people. Unless the local communities, who live closest to elephants, are tolerant of this charismatic yet destructive species, it is unlikely that they will survive in the long term.

The Elephant Management Plan recognizes that "*regulated sport hunting converts wildlife into assets for the benefit of local people and the country as a whole. Wildlife can be a most valuable asset and in turn empower local communities and provide basic necessities. When it is viewed as a valuable asset, wildlife becomes an economically competitive land use in Zimbabwe, which leads to habitat preservation instead of habitat destruction and conversion to agriculture or livestock production*."

The presence of regulated hunting can also reduce illegal activities, and private outfitters' lease agreements are being reviewed to include anti-poaching as an obligation of the concessionaire. Trophy hunting revenues are vital to facilitating not only law enforcement activities but also general wildlife management. Alternative wildlife land use practices, e.g. eco-tourism, cannot generate sufficient revenues to cover these costs, and certainly not to justify wildlife as a land use outside of protected areas.

Hunting can generate revenues under a wider range of scenarios than eco-tourism, including in remote areas lacking infra-structure, attractive scenery, or high densities of viewable wildlife. Consequently, elephant and other wildlife populations will be negatively affected through reduced conservation efforts arising from low funding and reduced goodwill from the communities.

CAMPFIRE has been widely regarded as one of Africa's most successful contemporary conservation initiatives. Hunting of elephants plays an integral part in promoting CAMPFIRE as it permits the residents of communal lands to share in the benefits generated by wildlife utilization on those lands.

As shown above, the bulk of CAMPFIRE's revenue comes from hunting, with elephant hunting contributing more than 60% of annual revenue. The current revenue sharing guidelines require safari outfitters to pay revenue directly into community-controlled bank accounts and this has had a positive impact on community attitudes to wildlife conservation. These funds have been used by RDCs and producer Wards to promote wildlife conservation, but despite its achievements, CAMPFIRE still faces fundamental challenges.

The most crucial of these challenges is developing strategies to accommodate the increasing human populations averaging 16-20 people per km^2 in some key CAMPFIRE areas. Understandably, the focus of these households is on food security requiring the extension of basic agricultural schemes and increased livestock numbers. Such land uses are incompatible with wildlife based land use.

Other CAMPFIRE challenges include: (i) the downturn in Zimbabwe's economy and tourism sector post-2000, (ii) great reliance on consumptive trophy hunting and less focus on other uses and non-consumptive uses of natural resources due to viability considerations, and (iii) low re-investment in development, fixed assets, human capital, and management and protection of wildlife in CAMPFIRE areas.

Despite these challenges, CAMPFIRE stands very high in the agenda of Zimbabwe's Government, and an evaluation dedicated to improving the program is ongoing and should be finalized by the end of 2017. Zimbabwe's Government recognizes that the survival of wild animals depends entirely on those among whom they live. Unless local people want to save them, wildlife will be poached to the point where just a few remain in fortified reserves. CAMPFIRE is meant to avoid this and the future of wildlife in communal areas rests on the success of this program.

The hunting of elephants, under sustainable and well-regulated conditions, has the potential to raise adequate funds to support itself and other species in CAMPFIRE areas. For these reasons, Zimbabwe confirms its commitment to the sustainable use of elephant and other wildlife in its Elephant Management Plan, and recognizes the role that elephant play in the CAMPFIRE program.

7 ANNEX 1: EXAMPLES OF SOCIAL SERVICES PROJECTS SUPPORTED BY CAMPFIRE FUNDS AT THE DISTRICT AND WARD LEVEL

CHINONGE WARD Binga District: Clinic under construction and example of Ward bank statement.

Results 1 - 11 of 11

Account Statement
Account : 103000008919 Currency : USD
Customer : 174696 Name : CHINONGE WARD CAMPFIRE FUND
Address 1 CHINONGE WARD CAMPFIRE FUND
Address 2 CHINONGE WARD CAMPFIRE FUND
Address 3 BOX 23 BINGA

Value date	Description	Reference	Post date	Debit	Credit	Amount
	Balance at Period Start				3,030.45	
16 SEP 14	Cash Withdrawal Charge 06011533Z06 NEVER NDLOVU	TT14259HDYZH	16 SEP 14	-29.30		3,001.15
16 SEP 14	Cash Withdrawal 06011533Z06 NEVER NDLOVU	TT14259HDYZH	16 SEP 14	-2,930.00		71.15
01 OCT 14	Ledger Fees	103000008919-2014093	30 SEP 14	-12.50		58.65
01 OCT 14	Service Fees 103000008919	103000008919.SERVICE	30 SEP 14	-2.00		56.65
01 NOV 14	Ledger Fees	103000008919-2014103	31 OCT 14	-12.50		44.15
01 NOV 14	Service Fees 103000008919	103000008919.SERVICE	31 OCT 14	-2.00		42.15
10 NOV 14	TRANSFER LODZI HUNTERS	FT143140JG30\TRE	10 NOV 14		2,800.00	2,842.15
10 NOV 14	TRANSFER	FT143150JG40\TRE	11 NOV 14	-2,800.00		42.15
10 NOV 14	TRANSFER LODZI HUNTERS	FT143150JG41\TRE	11 NOV 14		2,800.00	2,842.15
01 DEC 14	Ledger Fees	103000008919-2014113	29 NOV 14	-12.50		2,829.65
01 DEC 14	Service Fees 103000008919	103000008919.SERVICE	29 NOV 14	-2.00		2,827.65
	Balance at Period End				2,827.65	

Agriculture & Development Sector Of Zimbabwe, Harare AGRITEX 16 DEC 2014 ENQUIRIES BINGA BRANCH

Beit Bridge CAMPFIRE Program: Masera Secondary School Classroom Block and Staff Housing

Tsholotsho RDC: CAMPFIRE Vehicles, Tshitatshawa Clinic under construction in Ward 8, Tsholotsho CAMPFIRE District Wildlife Committee, Hunting Camp, and solar powered 7km piped water scheme

8 REFERENCES

Chitauro. 2016. Status of the hunting sector in Zimbabwe. Internal report prepared by the Director of Exchange Control om behalf of the Reserve Bank of Zimbabwe. Unpublished.

Craig G.C., Martin, R.B. and Peake, D.A. 2011. The Elephants of Northern Botswana: Trophy Hunting, Population Dynamics and Future Management. Study funded by the Conservation Trust Fund (CTF) of the Ministry of Environment, Wildlife and Tourism, Botswana. Awaiting publication.

Dunham, K.M. 2008. Detection of anthropogenic mortality in elephant *Loxodonta africana* populations: a long-term case study from the Sebungwe region of Zimbabwe. Oryx, 42, 36– 48.

Dunham, K.M. Mackie, C.S. and Nyaguse, G. 2015a. Aerial Survey of Elephants and other Large Herbivores in the Zambezi Valley (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 118 pp.

Dunham, K.M., Mackie, C.S., Nyaguse, G. and Zhuwau, C. 2015b. Aerial Survey of Elephants and other Large Herbivores in north-west Matabeleland (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 126 pp.

Dunham, K.M., Mackie, C.S., Nyaguse, G. and Zhuwau, C. 2015c. Aerial Survey of Elephants and other Large Herbivores in the Sebungwe (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 111 pp.

Dunham, K.M. & van der Westhuizen, H.F. 2015d Aerial Survey of Elephants and other Large Herbivores in Gonarezhou National Park and Save Valley Conservancy (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 115 pp.

Gandiwa, E., Jonga, C. and Mufute, O. (editors). 2014. *Proceedings of the CAMPFIRE stakeholders' workshop: Towards the development of a new Elephant Management Plan and Policy*. Harare, Zimbabwe, 17–18 November 2014.

Jones, B. and Murphree. M. 2001. The Evolution of Policy on Community Conservation in Namibia and Zimbabwe. In: *African wildlife and livelihoods: The promise and performance of community conservation*. (Eds. D. Hulme and M. Murphree). James Currey, Oxford.

Khumalo, A. 2003. CAMPFIRE Monitoring and Evaluation Data, 2001. WWF SARPO, Harare.

Mazambani, D. and Dembetembe, P. 2010. *Community Based Natural Resource Management. Stocktaking Assessment: Zimbabwe Profile*. Publication produced for review by the United States Agency for International Development (USAID). It was prepared by DAI in collaboration with World Wildlife Fund, Inc. (WWF).

Murphree, M.W. 1993. Communal Land Wildlife Resources and Rural District Council Revenues. CASS Occasional Paper No.53/93. 10pp.

ZPWMA. 2015. Zimbabwe National Elephant Management Plan (2015-2020). Ministry of Environment, Water and Climate. Harare, Zimbabwe. 84 pages.

MANA POOLS ANTIPOACHING WORKSHOP: OUTPUTS	MANA POOLS ANTIPOACHING WORKSHOP: ACTIVITIES	CITES MIKES: ACTIVITIES SHOWING SYNERGY OF PROJECT WITH MANA POOLS (LOWER ZAMBEZI VALLEY) ANTIPOACHING STRATEGIC PLAN
1.1 Informer network, investigation and Intelligence system established	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistleblowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social enforcement) - Establish intelligence database - liaise with existing successful anti-poaching units in the Zambezi Valley (e.g. DAPU)	Support the establishment and operation of an informer network, in collaboration with ZPWMA Investigations Office Establish an auditable fund and payment schedule for rewards made for information on wildlife crime that leads to encounters, arrests or prosecutions, in collaboration with ZPWMA Investigations Office
1.2 Well equipped, trained and fully operational units in place	Carry out an assessment / audit of current capacity, prioritise needs and mobilize resources to fill gaps - Recruit and train field rangers and research staff - Explore the Gonarezhou model for NGO employment of cadet rangers - Conduct frequent	Identify and prioritise basic ranger field equipment needs in collaboration with site-based patrol staff, and provide equipment to 60 rangers based across Mana Pools, Sapi and Chewore Develop new vegetable garden at Kapirinengu to provide fresh produce to supplement patrol rations, and identify key maintenance and management issues with Mana Pools vegetable garden and rehabilitate once addressed
1.3 Patrols strengthened	Establish effective patrolling force of 40 deployable rangers (exclusive of those on other duties or on leave) - Establish (or review?) Standard Operating Procedures - Establish regular training and retraining schedule - Establish well-equipped reaction	Define key patrol staff training needs in collaboration with Mana Pools and Sapi/Chewore Area Managers, and carry out three training courses for selected patrol staff Carry out basic training of wildlife law enforcement patrol staff based at Mana Pools National Park in ranger-based monitoring

	teams - Re-examine the practice of appointing Honorary officers	principles and practices
1.6 Joint operations (national and cross-border) established	Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) - Conduct joint operations	Support the establishment and operation of an informer network, in collaboration with ZPWMA Investigations Office
2.6 Access: 3 4x4 vehicles (operational for law enforcement only) 1 lorry 1 tractor 3 boats (1 Pelican and 2 Aluminium – 90HP Mercury or Marina) Aircraft: Microlight / Bathawk / Plane / Helicopter - rental	Acquire vehicles and boats - Establish management and maintenance protocols and packages for vehicles and boats, including supporting a capable mechanic based at the Park. - Outsource aircraft and pilot package	Purchase one Pelikan boat and deploy to Chewore North (Kapirinengu), and organise training for two coxswains in boat operation and maintenance Provide Anti-poaching vehicle
2.7 Field stations	Undertake feasibility study for new bases and pickets in relation to hotspots. - Establish anti-poaching bases at Nyakisakana - Establish [anti-poaching or picket?] base at Sore Sore - Establish boundary pickets & hot spot pickets (refer to Maps) - [Use MPNP Management Plan Zone Plans and develop approaches	Provide support for Lower Zambezi law enforcement coordination and rapid response operational base Carry out assessment of existing operational control rooms at Mana Pools and Chewore Headquarters, and rehabilitate facilities in line with findings Review optimal outpost construction type, facilities and location with area managers, and construct outposts in accordance with agreed plans

2.8 Communications - VHF - Solar power - [Cell phones - Computer - GIS - SMART software Cyber Tracking]	Establish digital VHF radio GPS communication tracking systems across LZV (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes) - Complete activity list for other tech needs.	Review communication equipment needs with Area Managers, and purchase and provide VHF radio handsets and spare batteries in line with requirements Review GPS needs, identify optimal GPS model and supplier, and provide units to patrol staff involved in ranger-based monitoring data collection in Mana Pools, Sapi and Chewore
3.1 Monitoring system for wildlife populations and illegal activities established	Carry out regular surveys (ground counts carried out by rangers) - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations and RDCs in LZV - Introduce ranger-based monitoring (SMART, MIKE, ETIS) across all stations in LZV - Analyze the data and use in adaptive	Review capacity needs of senior law enforcement staff based at Mana Pools and Chewore, and support training opportunities to meet defined needs Provide laptop computers and basic SMART training (led by Chewore administrator) on data management to selected staff at Mana Pools and Chewore North Offices Identify key staff in Mana Pools and Chewore operational bases for further training in SMART data management and reporting, with a particular focus on generating management orientated reports and MIKE data

MANA POOLS ANTIPOACHING WORKSHOP: OUTPUTS	MANA POOLS ANTIPOACHING WORKSHOP: ACTIVITIES	CITES MIKES: ACTIVITIES SHOWING SYNERGY OF PROJECT WITH MANA POOLS (LOWER ZAMBEZI VALLEY) ANTIPOACHING STRATEGIC PLAN
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1.3 Patrols strengthened	Establish effective patrolling force of 40 deployable rangers (exclusive of those on other duties or on leave) - Establish (or review?) Standard Operating Procedures - Establish regular training and retraining schedule - Establish well-equipped reaction	Define key patrol staff training needs in collaboration with Mana Pools and Sapi/Chewore Area Managers, and carry out three training courses for selected patrol staff Carry out basic training of wildlife law enforcement patrol staff based at Mana Pools National Park in ranger-based monitoring

	teams - Re-examine the practice of appointing Honorary officers	principles and practices
1.6 Joint operations (national and cross-border) established	Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) - Conduct joint operations	Support the establishment and operation of an informer network, in collaboration with ZPWMA Investigations Office
2.6 Access: 3 4x4 vehicles (operational for law enforcement only) 1 lorry 1 tractor 3 boats (1 Pelican and 2 Aluminium – 90HP Mercury or Marina) Aircraft: Microlight / Bathawk / Plane / Helicopter - rental	Acquire vehicles and boats - Establish management and maintenance protocols and packages for vehicles and boats, including supporting a capable mechanic based at the Park. - Outsource aircraft and pilot package	Purchase one Pelikan boat and deploy to Chewore North (Kapirinengu), and organise training for two coxswains in boat operation and maintenance Provide Anti-poaching vehicle
2.7 Field stations	Undertake feasibility study for new bases and pickets in relation to hotspots. - Establish anti-poaching bases at Nyakisakana - Establish [anti-poaching or picket?] base at Sore Sore - Establish boundary pickets & hot spot pickets (refer to Maps) - [Use MPNP Management Plan Zone Plans and develop approaches	Provide support for Lower Zambezi law enforcement coordination and rapid response operational base Carry out assessment of existing operational control rooms at Mana Pools and Chewore Headquarters, and rehabilitate facilities in line with findings Review optimal outpost construction type, facilities and location with area managers, and construct outposts in accordance with agreed plans

2.8 Communications - VHF - Solar power - [Cell phones - Computer - GIS - SMART software Cyber Tracking]	Establish digital VHF radio GPS communication tracking systems across LZV (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes) - Complete activity list for other tech needs.	Review communication equipment needs with Area Managers, and purchase and provide VHF radio handsets and spare batteries in line with requirements Review GPS needs, identify optimal GPS model and supplier, and provide units to patrol staff involved in ranger-based monitoring data collection in Mana Pools, Sapi and Chewore
3.1 Monitoring system for wildlife populations and illegal activities established	Carry out regular surveys (ground counts carried out by rangers) - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations and RDCs in LZV - Introduce ranger-based monitoring (SMART, MIKE, ETIS) across all stations in LZV - Analyze the data and use in adaptive	Review capacity needs of senior law enforcement staff based at Mana Pools and Chewore, and support training opportunities to meet defined needs Provide laptop computers and basic SMART training (led by Chewore administrator) on data management to selected staff at Mana Pools and Chewore North Offices Identify key staff in Mana Pools and Chewore operational bases for further training in SMART data management and reporting, with a particular focus on generating management orientated reports and MIKE data

Zimbabwe: 12 Milllion Euro Boost for Campfire Review

By Tendai Mugabe

Government yesterday launched the Campfire review process in Harare that seeks to increase community participation in wildlife conservation activities. The review process is being supported by the European Union to the tune of 12 million Euros for the next 18 months and is likely to start in February next year.Campfire was established in the late 1980s to ensure sustainable utilisation of wildlife and other natural resources in communal areas.

Launching the review process, Environment, Water and Climate Minister Oppah Muchinguri-Kashiri said the process seeks to provide new avenues of improving policy, regulatory and institutional framework to empower communities as custodians and beneficiaries of their natural resources.

She said the review process was in line with Zim-Asset objectives on employment creation.

"Issues of employment creation, value-addition and beneficiation are the underpinning principles of the Campfire review process," she said.

"More importantly, the Campfire review process signals initial steps of re-engagement between EU and the Government of Zimbabwe. It is the Government's hope that the review process will be done in the best interest of empowering communities to participate and benefit from environmental, social and economic sustainable management of natural resources and strengthening capacity and governance frameworks for natural resources management in Zimbabwe."

Minister Muchinguri-Kashiri said natural resources were critical in the development of communities. She said Zimbabwe was endowed with vast natural resources including animals and plant species.

"It is sad to note that the sustainable utilisation philosophy is under threat from several countries and animal rights groups that are strongly opposed to it.

"Sustainable utilisation is done for conservation benefits and for the people who live with wildlife or in close proximity to protected areas," added Minister Muchinguri-Kashiri.

Minister Muchinguri said Zimbabwe's Campfire model introduced in the late 1980s became a world leader in community based natural resource management.

She, however, said its gains were eroded over the years as communities were sidelined from directly benefiting from their natural resources.

President of the Chiefs Council of Zimbabwe chief Fortune Charumbira hailed the involvement of traditional leaders in the review process.

He said traditional leaders were key stakeholders in all projects undertaken in their areas of jurisdiction.

"We are very excited by this approach to business. Let us practically involve the right people in every initiative. The right people at times are said to be illiterate or not civilised, " he said.

"For Campfire to be a leading framework for robust wildlife management it has to restructure itself and look to the people directly and traditional leaders."

Head of the EU Delegation in Zimbabwe Philippe Van Damme and other stakeholders in wildlife conservation also attended the launch.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

SAFARI CLUB INTERNATIONAL, et al.	)	
	)	
Plaintiffs,	)	Civ. No. 14-cv-00670-RCL;
	)	15-cv-01026-RCL (consolidated)
v.	)	
	)	
SALLY M. R. JEWELL, et al.	)	
	)	
Defendants.	)	
	)	

SAFARI CLUB INTERNATIONAL AND NATIONAL RIFLE ASSOCIATION OF AMERICA'S (1) OPPOSITION TO FEDERAL DEFENDANTS' CROSS-MOTIONS FOR SUMMARY JUDGMENT AND (2) REPLY TO OPPOSITIONS TO MOTION FOR SUMMARY JUDGMENT

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GLOSSARY

APA	Administrative Procedure Act
April 2014 Finding	Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe during 2014 (dated April 17, 2014)
AR	Administrative Record in the district court for the Zimbabwe importation ban decisions
CAMPFIRE	Zimbabwe's Communal Areas Management Programme for Indigenous Resources
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
Decl.	Declaration
D-I Opp.	Defendant-Intervenors' Memorandum In Opposition To Plaintiffs' Motion For Summary Judgment
Dkt.	Docket
Elephant Survey	Pan African Aerial Elephant Survey
ESA	Endangered Species Act
Federal Defendants	Federal Defendants Secretary of the Interior, Sally Jewell *et al*.
Internal guidelines	Guidelines that the U.S. Fish and Wildlife Service previously used to evaluate importation applications for sport-hunted elephants. They were withdrawn in 60 Fed. Reg. 12969 (Mar. 9, 1995)
IUCN	International Union for Conservation of Nature

IUCN Report	Report from the African Elephant Database entitled "Zimbabwe, 2012 ('2013 Africa' analysis)"
July 2014 Finding	Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe during 2014 (dated July 22, 2014)
March 2015 Finding	Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe On or After January 1, 2015
MIKE	Monitoring the Illegal Killing of Elephants
Motion or MSJ	Safari Club International and National Rifle Association of America's Motion for Summary Judgment and Memorandum in Support
Opposition or Opp.	Memorandum in Support of Federal Defendants' Cross-Motion for Summary Judgment and in Opposition to Plaintiffs' Motion for Summary Judgment
PIKE	Proportion of Illegally Killed Elephants
SCI/NRA	Safari Club International and the National Rifle Association of America
Service	United States Fish and Wildlife Service
Special Rule	Regulation that provides criteria for the importation of legally hunted African elephants into the United States. 50 C.F.R. §17.40(e).
ZPWMA	Zimbabwe Parks & Wildlife Management Authority
1997 Finding	1997 Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe, July 2, 1997

I. INTRODUCTION

Defendant U.S. Fish and Wildlife Service ("Service") seems bent on using its import authority to force Zimbabwe to modify its management of elephants. Hunters and elephants are suffering the costs of the Service's illegal conduct. In a Motion for Summary Judgment ("Motion" or "MSJ") and in this Opposition and Reply brief, plaintiffs Safari Club International and the National Rifle Association of America ("SCI/NRA") explain how the Service relied on inadequate information, misapplied relevant information, and twisted the law, all in an attempt to justify its decision not to allow hunters to import sport-hunted elephants from Zimbabwe. In reviewing SCI/NRA's claims, the Court should determine whether the Service has exceeded the narrow task the law authorizes the Service to perform – to determine whether sport-hunting enhances the survival of Zimbabwe's elephants, rather than whether Zimbabwe's management of elephants is flawless. This Court must examine whether the Service misapplied the law by not conducting rulemaking, requiring an enhancement finding, or failing to correctly apply the statutory presumption that sport-hunting does enhance the survival of the species. In their Motion, SCI/NRA demonstrated that the Service's three enhancement findings, and other actions taken by the Service, were arbitrary and capricious and otherwise contrary to law under the Endangered Species Act ("ESA") and the Administrative Procedure Act ("APA"). MSJ at 14-64.[1]

In their Cross-Motion for Summary Judgment/Opposition ("Opposition" or "Opp."), Federal Defendants fail to refute these arguments. Other than agreeing with SCI/NRA that enhancement findings must be adopted through rulemaking and asserting that SCI/NRA are not

[1] SCI/NRA refer to the three enhancement findings as the "April 2014 Finding," "July 2014 Finding," and "March 2015 Finding." Likewise, the July 2, 1997 enhancement finding is "1997 Finding."

entitled to meaningful relief if they prevail, Defendant-Intervenors Friends of Animals *et al.*'s opposition brief ("D-I Opp.") adds little to the defense of this case. In essence, Defendants ask the Court to ignore a host of factual and legal errors, and afford unwarranted deference to the Service's decision-making.[2]

II. ARGUMENT

A. The April 2014 and July 2014 Findings Are Arbitrary and Contrary to Law

1. Federal Defendants Have No Defense To the Fact That the Service Breached the Commitments It Published in the Federal Register

The only defense that Federal Defendants offer to dispute the fact that the Service made commitments in the Federal Register regarding what it would do if and when it planned to alter the 1997 Finding is – ***the Service said it but didn't really mean it***. Federal Defendants do not dispute that the Service stated, in a Federal Register Notice dated August 22, 1997, that

> The enhancement findings for importation of sport-hunted elephant trophies from Botswana, Namibia, and Zimbabwe are on file in the Office of Management Authority and ***remain in effect*** until the Service finds, ***based on new information***, that the conditions of the special rule are no longer met ***and has published a notice of any change in the Federal Register***.

62 Fed. Reg. 44627, 44633 (emphasis added). Despite committing to these terms, the Service reversed the 1997 Finding based on a lack of, rather than new, information and without first publishing the change in the Federal Register.

Federal Defendants claim that the August 22, 1997 commitments cannot be binding because the Service did not incorporate the promises into a regulation. They argue that the only way the Court can hold the Service to its commitment is if the Court can find "extrinsic

[2] SCI/NRA demonstrated their standing to bring these claims. Motion for Summary Judgment ("MSJ") at 62-64. No party disputes their standing. SCI/NRA filed a Statement of Material Facts because, as explained in that Statement, L.Cv.R 7(h) is unclear whether one is needed in an administrative record case to demonstrate the facts relevant to standing.

evidence" demonstrating that the agency intended to be bound. Opp. at 31. The extrinsic evidence shows that the Service did intend to be bound.

Evidence of the Service's intent comes from a second Federal Register notice in which the Service repeated the exact same commitment concerning an enhancement finding for the importation of elephants from another African country:

> The enhancement findings for the importation of sport-hunted elephant trophies from South Africa are on file in the Division of Management Authority and remain in effect until the Service finds, based on new information, that the conditions of the special rule are no longer met and has published a notice of any change in the Federal Register.

66 Fed. Reg. 27601, 27609 (May 18, 2001). Statements of intent need not be part of regulatory language to commit the agency to carry out specific promises. As this Court acknowledged in *Empresa Cuban Exportadora v. U.S. Dep't of Treas.*, "[c]ourts may glean such standards not only from statutes and regulations but also from formal and informal policy statements that create binding norms by imposing rights or obligations on the respective parties.'" 516 F. Supp. 2d 43, 58 (D.D.C. 2007) (quoting *Steenholdt v. FAA,* 314 F.3d 633, 638 (D.C. Cir. 2003)).[3]

The Service's own statement in May 2014 provides further compelling extrinsic evidence. The Service characterized the April 4, 2014 importation ban as an "interim suspension" and restated the binding commitment the Service had published in the 1997 Federal Register. "If, based on new information, the conditions of the special rule are no longer met, the Service explained that it would publish a notice in the Federal Register of any change." 79 Fed. Reg. 26986 (May 12, 2014). Implicitly acknowledging that it could not make a final

[3] The fact that, during the almost two decades between August 22, 1997 and April 4, 2014, the Service had never breached its commitments concerning the enhancement findings for the elephants of Zimbabwe, Namibia, Botswana or South Africa, undermines rather than supports Federal Defendants' argument that the Service did not intend to be bound by the commitments or that the term of the Service's commitment had expired.

enhancement determination unless that decision was based on new information and published in the Federal Register, the Service reiterated its commitment for future enhancement findings:

> The Service has requested the information necessary to make a final decision from the Government of Zimbabwe. After the Service has an opportunity to review ***new information*** and obtain additional information, if necessary, we will make a final decision. If the Service finds that sport hunting of African elephants in Zimbabwe enhances the survival of the species, the suspension will be lifted. If, after reviewing the ***new information***, the Service finds that sport hunting of African elephants in Zimbabwe does not enhance the survival of the species, the suspension will continue until the Service receives new information in the future that would allow it to make a positive enhancement finding. Either way, the final finding ***will be published in the Federal Register*** and made available on the Service's Web page.

Id. at 26987 (emphasis added). The May 12, 2014 notice demonstrates two things: (1) on April 4, 2014, the Service had violated its own commitments by not collecting, reviewing and ultimately relying on new information from Zimbabwe to change its pre-existing enhancement finding; and (2) the Service was aware that it could not make a final change to the 1997 Finding until it published the finding in the Federal Register.

Federal Defendants' alternative argument that the Service kept its promises also fails. First, they contend that the Service met its publication promise because the "advent" of the Internet obviated the need to publish decisions in "official publications." Opp. at 32. While the internet is effective for the purposes of communication, the Federal Register remains the statutorily required site for the Service's publication of rules and other decision-making affecting the public. 5 U.S.C. § 553. The internet does not relieve the Service of its own commitment to publish in the Federal Register.

Federal Defendants also argue that the Service's April 2014 Finding was based on "new information," inappropriately asserting that "new information" is the equivalent of a "lack of information." Opp. at 31. While Federal Defendants may argue that a lack of sufficient

information could qualify as a "new" situation, that situation did not exist on April 4, 2014. In fact, the Service sent Zimbabwe a questionnaire in 2007 seeking information about Zimbabwe's elephants and received a set of answers from Zimbabwe on May 31, 2007. Administrative Record ("AR") 35b; AR35c. Federal Defendants admit that, after receiving Zimbabwe's response, the Service received no new information from Zimbabwe before issuing the April 2014 Finding. Federal Defendants also concede, by omission, that the Service never directly asked Zimbabwe to supplement the information provided in May 2007.[4] Consequently, the Service's alleged "lack of sufficient information" (1) was not a new situation, but had been the status quo since 2007, and (2) was the result of the Service's own failure to request information and/or to inform Zimbabwe that unless it provided additional information, the Service would ban elephant importation from the country.

2. The Service Failed to Ask For New Information and Reached a Foregone Conclusion

The Service was aware of information available from Zimbabwe but purposely chose not to seek that information until *after* making the decision to ban importation. MSJ at 18-20. Although Federal Defendants try to defend the Service's failure to ask for relevant information, they present no persuasive explanation for why the Service made its decision first and asked for information later. Opp. at 33-34.

Federal Defendants unsuccessfully dispute SCI/NRA's argument that the Service's April 4, 2014 actions amounted to a foregone conclusion. MSJ at 23-24; Opp. at 17. Federal

[4] Although the April 2014 and July 2014 Findings both make vague references about Service personnel meeting in person with Zimbabwean officials at meetings and conventions, these accounts never state that Service personnel actually requested new elephant data from Zimbabwe during these meetings, or that the Service communicated to Zimbabwe the possibility that a negative enhancement finding would result if Zimbabwe provided no new data. AR102 at 2819; AR206 at 4507.

Defendants rely on a single inapposite case that discusses whether a court should defer to the opinion of a specific agency employee over the position of the final agency decision-maker. *Serono Laboratories Inc. v. Shalala*, 158 F.3d 1313, 1321 (D.C. Cir. 1998). SCI/NRA do not ask the Court to defer to Service employee Pamela Scruggs's position, but offer her statement solely to demonstrate that the Service decided to ban importation first and obtain the reasons to justify that decision second. In any event Ms. Scruggs's statements merely supplemented other proof that the importation ban was a foregone conclusion. The Service's decision not to seek scientific information from Zimbabwe until after banning the importation of Zimbabwe's elephants solidly establishes this fact.

3. Numerous Factual Errors Add Up to Arbitrary Decisions

Numerous factual errors made by the Service in both the 2014 Findings demonstrate arbitrary and capricious conduct. Federal Defendants would have the Court believe that SCI/NRA argue that each error alone resulted in the arbitrary decisions. While some of the more impactful factual errors could alone demonstrate arbitrary determinations, SCI/NRA point to the numerous errors, both in this brief and SCI/NRA's Motion, as a collective demonstration of inaccurate and illegal findings and arbitrary and capricious action.

Federal Defendants incorrectly assume that this Court should afford deference to the Service's decision-making, because enhancement findings should be based on science within the Service's expertise. Opp. at 9. Although a Court must afford an agency deference in its review of the science required for decision-making, that deference does not apply when the agency misconstrues the science, ignores obvious findings, relies on evidence of an inferior nature, or fails to seek out the best available science. "While the Court is required to defer to the agency's technical expertise in areas of scientific specialization, the Court is not required to ignore simple

probability." *HSUS v. Pritzker*, 75 F. Supp. 3d 1, *12 (D.D.C. 2014) (Court rejected NMFS 90-day finding because agency ignored evidence of decline in the Northwest Atlantic porbeagle population).

Even in cases where courts must defer to an agency's choice as to what qualifies as "best available scientific data," courts do not allow agencies to ignore data of a higher quality than the information upon which the agency relied. *Kern Cnty. Farm Bureau,* 450 F.3d 1072, 1080 (9th Cir. 2006) (quoting *Sw. Ctr. for Biological Diversity v. Babbitt,* 215 F.3d 58, 60 (D.C. Cir. 2000)) ("The best available data requirement 'merely prohibits [an agency] from disregarding available scientific evidence that is in some way better than the evidence [it] relies on.'"). '"All that is required of the agencies is to seek out and consider all existing scientific evidence relevant to the decision at hand. They cannot ignore existing data.'" *Ecology Ctr., Inc. v. U.S. Forest Serv*., 451 F.3d 1183, 1194 (10th Cir. 2006) (quoting *Heartwood Inc. v. U.S. Forest Serv.,* 380 F.3d 428, 436 (8th Cir. 2004)).

In making the April 2014 Finding, the Service ignored the fact that better data was available from Zimbabwe and did not seek superior scientific data until after issuing its decision. In addition, the Service ignored studies more recent than the ones upon which it relied, and grossly misconstrued the data upon which it did rely. Consequently, the Service's consideration of the scientific data deserves no special deference.

Emblematic of the Service's careless treatment of the facts is a statement in the April 2014 Finding that, "[t]he 2013 CITES Panel of Experts raised concerns as to the status of the ZimParks relating to its weak financial base, lack of management skills, inadequate and old equipment, and poor infrastructure." AR102 at 3822. This statement is false. No 2013 CITES

Panel of Experts regarding elephants existed to raise such concerns in 2013.[5] After the Service published the April 2014 Finding, it was alerted to its error. AR171 at 4313-14 (email from CITES Secretariat; "There was no Panel of Experts *sensu* Resolution Conf. 10.9 in 2013 [], and the most recent one in 2010 looked at the situation of African elephants in the United Republic of Tanzania and Zambia, not Zimbabwe. So the reference must be wrong.").

The Service then modified the statement in the July 2014 Finding, arbitrarily choosing 2002 for the Panel year. *See* AR206 at 4511-12. The Service merely parroted the same statement but attributed it to a Panel of Experts from 2002, ignoring the fact that there never was a 2002 CITES Panel of Experts for Zimbabwe.

The Service apparently was once again alerted to the error. In the March 2015 Finding, the Service corrected itself, stating, "[t]he 1997 CITES Panel of Experts raised concerns as to the status of ZPWMA relating to its weak financial base, lack of management skills, inadequate and old equipment, and poor infrastructure." AR344 at 7264. On its third try, the Service finally accurately reflected that it was a 1997 CITES Panel of Experts that expressed concerns. The Service does not explain why concerns from the 1997 Panel did not defeat a positive determination of enhancement from 1997 to 2013, but were sufficient to help justify the Service's decision as of April 2014 that it was unable to make a positive enhancement finding.

Not realizing that the Service's stroke of a pen had invented the 2013 CITES Panel of Experts, Federal Defendants claim that the same 2013 Panel raised concerns regarding Zimbabwean government officials' involvement in wildlife trafficking and that the Service partially based the April 2014 Finding on that information. Opp. at 14. Of course, because no

[5] In the April 2014 Finding, the Service simply added the year "2013" to a statement made in the 1997 Finding. *See* AR20 at 2559. Much of the language in the April 2014 Finding is simply copied from the 1997 Finding. *Compare* AR102 *with* AR20.

such panel existed, this argument is inaccurate. TRAFFIC, a non-governmental organization that monitors wildlife trade, not CITES, did publish such a report in 2009, not 2013. AR38a at 3236-1. The TRAFFIC report cited two news articles that discussed Zimbabwean officials who were implicated in illegal rhino horn trafficking and a subsequent cover-up. *Id.* at 3236-20-21; AR37; AR38. It is unclear why the Service relied on a five-year-old rhino horn trafficking incident to raise concerns in 2014 over potential government involvement with elephant poaching.

Federal Defendants then argue that, in making the April 2014 Finding, the Service also relied on (1) a 2013 poaching incident in Hwange National Park; (2) a finding that poaching rates increased in Zimbabwe; and (3) a determination that the IUCN Report data were stale. Opp. at 14-15. The Service's failure to fully investigate and analyze all of these factual matters undermines the rationality of its decision.

In their Motion, SCI/NRA provided a detailed discussion of the Service's reliance on inaccurate reporting regarding the 2013 poaching incident. MSJ at 20-21. Not only did the Service fail to verify the accuracy of the information used in the finding, it did not address the fact that the hunting community played a pivotal role in apprehending the poachers. MSJ at 10.

Regarding the increase in poaching rates in Zimbabwe, the Service over-extrapolated the data. *See* MSJ at 30, 35; *infra* at Argument Section B (complete discussion of the MIKE/PIKE data). Moreover, elephant poaching is not a new concern for Zimbabwe or for Africa generally. In the 1997 Finding, the Service noted that certain "elephant populations have been affected by increased human populations and by drought. There were also high levels of poaching and management offtake which took place in these areas in the late 1980's." AR20 at 2558; *see also* April 2014 AR4 at 183-84 (discussion in 2007 of poaching concerns). Despite emphasizing poaching as a primary reason for its 2014 findings, the Service offered nothing, other than the

incorrectly reported 2013 Hwange poaching incident and the over-extrapolated MIKE/PIKE data, to demonstrate how and why hunting enhanced the survival of the species from 1997 to 2013, but not in 2014 or 2015.

For both 2014 findings, Federal Defendants argue that the Service did not rely on the IUCN Report population data, but "simply noted" that many of the surveys were outdated. Opp. at 12, 15, 16. Federal Defendants argue that SCI/NRA put too much weight on the Service's use of the IUCN Report. The Service's actions and the three enhancement findings prove otherwise.

The Service's reliance on the IUCN Report (subsequently admitted by the Service in the March 2015 Finding) and its misinterpretation of the data affected the Service's analysis of all the factors considered for the April 2014 Finding. Owing to the fact that the IUCN Report was one of only three new sources of data that the Service consulted – the Report, CITES documents, and inaccurate news articles of the 2013 Hwange poaching incident – the Service's reliance on the data is obvious. By starting with the conclusion that "the elephant population in Zimbabwe has declined from 84,416 elephants in 2007 to 47,366 elephants in 2012," the Service may have been justified in questioning the management plans, quota setting system, poaching levels, etc. *Id.* at 3822.[6] But, because the Service grossly misinterpreted that data, the starting point of its analysis was drastically different from reality. This, combined with the Service's other multiple errors, resulted in an analysis that was arbitrary and capricious. Thus, while not the only source of information on which the Service relied – an argument that SCI/NRA do not make – the

[6] If Zimbabwe's elephant population had plummeted nearly 50% in 5 years, the Service's concern might have been justified. However, Zimbabwe's 2013 population estimates, that the Service summarily rejected, were far more accurate than the Service's assumptions based on the IUCN data. Zimbabwe's elephant population is well above carrying capacity at 82,000 – 83,000, according to the most recent national survey. AR274 at 5854.

Service did rely significantly on the IUCN data. Federal Defendants are incorrect in arguing that the Service merely "noted that the IUCN's estimates were based on stale data." Opp. at 16.

In fact, in the March 2015 Finding, the Service itself confirmed that it did more than merely note the age of the IUCN data. "At the time the Service made its April and July 2014 findings, we ***relied heavily on population information*** in the [IUCN Report]." AR344 at 7262. Federal Defendants attempt to distance themselves from the Service's errors regarding the IUCN Report, but they cannot escape the Service's own words. The Service's inaccurate reliance on IUCN Report data contributed to arbitrary and capricious findings.

Federal Defendants incorrectly defend the Service's criticism of methodologies used for many of the IUCN Report surveys. In response to SCI/NRA's argument concerning the Service's incorrect statements regarding the survey methodologies, Federal Defendants argue that in the July 2014 Finding, "the Service explained its view that properly conducted aerial surveys (like the Hwange survey, AR 35), are more accurate than dung or sample counts . . ." and that the Service was simply describing the IUCN data. Opp. at 13 n.4; *see* MSJ at 29. While the Service did make statements to that effect in the finding, the Service was wrong.

Specifically, the Service stated in the July 2014 Finding that "[o]nly 304 'definite' animals were counted by aerial or ground counts, while the remaining 41,840 'definite' animals were counted through sample counts or dung counts, a less accurate methodology than properly conducted aerial surveys, and the remainder were what the IUCN report called 'other guess.'" AR206 at 4510. The Service then stated, "[t]he summary in the IUCN report indicates that, of recent surveys, only about 1% of the country has been covered by more reliable aerial or ground surveys for population estimates, while about 50% was covered by sample counts or dung

counts, a less robust methodology." *Id.*[7] First, as SCI/NRA previously explained, these statements are inaccurate. MSJ at 29. The point of classifying the surveys into the four different categories is to determine "the level of certainly that can be placed on a given estimate" regardless of methodology used. April 2014 AR4 at 37. Thus, the sample counts and dung counts listed as "definite" are not less reliable than the aerial total or ground total counts also classified as "definite." Even "other guesses" listed as "definite" constitute "the number [of elephants] actually seen." *Id.* at 38.

Second, the Service appears to misunderstand that sample counts are, in fact, a form of aerial and ground counts. Aerial and ground counts can be either direct counts or sample counts. Of the 41 total surveys included in the IUCN Report, 27 were conducted using an aerial sampling methodology. AR80. It is unclear how, according to the Service's statements, aerial and ground surveys are "more reliable" than sample counts, when sample counts are aerial and ground counts. Of course, dung counts must be conducted on the ground, and thus cannot be less reliable than ground counts, as the Service states. *See* April 2014 AR4 at 35 ("dung-counting techniques can provide estimates that are at least as accurate as those from direct methods, and more precise than those of aerial sample counts").[8] The Service apparently does not know how sample and dung counts are conducted. Nevertheless, in the Opposition, Federal Defendants again wrongly rely on the Service's inaccurate conclusions.

[7] The Service made similar statements in the March 2015 Finding, even after Dr. Dublin specifically explained that the Service made the statements in error. AR344 at 7262; AR256 at 5741-42. SCI/NRA's arguments apply to the 2015 statements as well.

[8] Additionally, in the 2007 IUCN Report, the number of elephants counted via direct aerial or ground counts was 236, lower than the 304 elephants counted in the 2013 IUCN Report. April 2014 AR4 at 185. The Service was untroubled in 2007 that such low numbers were counted by direct aerial or ground counts, but arbitrarily found the numbers unacceptable in 2014.

Third, Federal Defendants may attempt to justify the Service's conclusions by arguing that direct aerial and ground counts are more "proper" than sampling methodologies, and therefore should be used in Zimbabwe. *See* AR206 at 4510 (Service comparing "properly conducted aerial surveys" to the other "definite" surveys). This conclusion is betrayed by the fact that the 2007 ***Service-sponsored*** survey in Hwange National Park was conducted using a sample aerial methodology – a point that Federal Defendants completely confuse in their argument. *See* AR35 at 3117; Opp. at 13 n.4. SCI/NRA can only assume that the Service would not fund a survey that used a methodology that was less than proper, robust, and reliable.

Federal Defendants also argue that the Service's methodology-related statements were nothing more than the Service's effort to describe the IUCN Report. Opp. at 13 n.4. However, the Service's statements had only one purpose – to improperly cast doubt on the surveys that did not use aerial or ground total counts. Otherwise, the statements had no value to the Finding. Regardless, the Service inaccurately described the methodologies used in the IUCN Report.

Even if the Service only referenced the IUCN Report to note that most of its data was old, the record shows that the Service was wrong. In all three findings, the Service expressed concern about the age of many of the surveys. AR102 at 3821; AR206 at 4510; AR344 at 7262. The IUCN Report does indicate that "[h]alf of the estimates . . . are now older than 10 years . . . ." AR80 at 3627. As the chart reflects, from data gathered in 2012, 21 of 41 surveys were from 2002 or older; 20 of 41 were from 2003 or newer. The Service erroneously stated that "23 of 40 population estimates included in 2012 are older than 10 years." AR344 at 7262. Had the Service included the 2007 Hwange survey in its analysis, the balance would have tipped such that a majority of surveys were less than 10 years old. AR35. Replacing the 2001 Bubi Valley Conservancy survey with the 2013 survey would have provided more recent data. MSJ at 21-22.

The Service also improperly failed to assess the significance of the individual surveys. For example, had the Service bothered to look in its own files and included the 2007 Hwange survey in its analysis, it would have concluded that the actual number of elephants surveyed within the last 10 years greatly outnumbered the number cited from surveys a decade or older. The 20 surveys ten years or older counted a total of 6,105 elephants. Including the 2007 Hwange survey at 39,765 elephants, the elephants counted in the 21 surveys newer than ten years amounted to 85,684. AR80.[9] With the record analyzed as a whole, far more elephants had been counted within the last decade and should have been classified to exist "definitely" than the number inaccurately chosen by the Service.

Federal Defendants try to justify the Service's failure to include and analyze the 2007 Hwange survey in the July 2014 Finding (not to mention the April 2014 Finding), by arguing that it was "inadvertently omitted" from analysis because it was not in the IUCN Report. Opp. at 12. Federal Defendants do not explain why the Service failed to include the 2007 Hwange survey even though it was in the July 2014 AR. Unfortunately for Federal Defendants, they cannot hide behind the IUCN's error. The IUCN is not required to meet ESA and APA decision-making standards, but the Service is. The Service's omission of the 2007 Hwange survey from its analysis contributed to its arbitrary and capricious finding in July 2014.

Finally, in both 2014 Findings, the Service stated that "[s]everal areas that were covered in the current surveys (2006 – 2010) indicate that there has been a substantial decline in the population . . . ." This statement is not reflected in the IUCN Report. Directly compared to the

[9] Note that the total amounts in the summary table "are derived by pooling the variances of individual estimates . . . . As a result, totals do not necessarily match the simple sum of the entries within a given category." AR80 at 3627.

2007 IUCN Report,[10] five surveys that reflect a change were conducted between 2006 and 2010 and included in the 2012 IUCN Report. *Compare* April 2014 AR4 at 186 *with* AR80.[11] Of the five surveys, two showed an increase of a combined 4,358 elephants and three showed a decrease of a combined 536 elephants. *Id.* The Service incorrectly asserts the 2006-2010 surveys reflect a ***substantial*** decline.[12]

Misinterpretations, failure to properly analyze data, incorrect assessments of survey methodologies, and improper reliance on inaccurate data combined to collectively result in arbitrary and capricious findings. The Service's inappropriate use and analysis of the scientific data deprives it of any deference afforded to such decision-making. The Court should set aside the 2014 enhancement findings as in violation of the ESA and APA.

B. The March 2015 Enhancement Finding Arbitrarily Ignored or Misapplied Relevant Information

Despite obtaining much of the information it claimed it lacked for earlier findings – about the elephant population, benefits of sport-hunting, anti-poaching efforts – the Service continued to look for reasons to justify its decision not to make a positive enhancement finding. MSJ at 32-39. One of the most significant examples involves new population data from the Elephant Survey and correspondence from the chief decision-maker for the enhancement finding – Tim Van Norman – in which he stated that removing 500 elephants from a population of 100,000 is

[10] The 2007 version was the previous IUCN elephant database report prior to the 2012 IUCN Report.

[11] These surveys occurred in Gonarezhou National Park in 2009 (which has since been re-surveyed in 2013 at an increase), Chewore 4 in 2010, Malapati Safari Area in 2009, Sengwe Communal Land in 2009, and Sentinel & Nottingham in 2010.

[12] After receiving Dr. Dublin's second letter that explained the Service's incorrect claim, including discussion of other areas that have shown increases – those that cannot be compared directly from the two IUCN Reports – the Service removed this statement altogether from the March 2015 Finding. AR256 at 5740-41.

"not a problem." MSJ at 35-36. Federal Defendants argue that the document was really focused on the quality of the data and the impact of a lower population number, and that, by implication, Mr. Van Norman's statement was meaningless. Opp. at 20. Federal Defendants cannot overcome the context of the statement. In that correspondence, Mr. Van Norman responded to a question from a representative of the Assistant Director of International Affairs asking "what ***specifically*** ZPWMA would need to show us in order for us to ***lift the suspension.***" MSJ at 35, quoting AR228 at 4640 (emphasis added). The numbers Mr. Van Norman discusses respond to that question. Federal Defendants' post hoc rationalization that Mr. Van Norman was expressing concern over the lower population number and data quality does ***not*** respond to the request.

SCI/NRA appropriately argued that, in light of Mr. Van Norman's statement, the 82,000-83,000 population numbers from the Elephant Survey would "strongly support a positive enhancement finding." MSJ at 35. In response, Federal Defendants attempt to deflect attention from the substance of Mr. Van Norman's statement by claiming that SCI/NRA are trying to "extrapolate" from the statement a "hard-and-fast rule." Opp. at 20. This attempt fails because, as evidenced by Mr. Van Norman's correspondence, the Service wanted census data. The Service then failed to look at the data it received in the way Mr. Van Norman said was necessary.

Mr. Van Norman's statement is even more significant if the offtake and quota were lower than 500, as SCI/NRA asserted. MSJ at 36. Federal Defendants did not even respond to SCI/NRA's point that the actual hunting offtake is much less than the quota (possibly as low as 160 elephants a year). MSJ at 36 & n.17. As SCI/NRA previously explained, by analyzing the numbers based on a population of 82,000 elephants, an offtake of up to 380 elephants would be "not a problem" and would be grounds for "lift[ing] the suspension." MSJ at 36.

Federal Defendants cited the quota reported by the CITES website to respond to SCI/NRA's argument that the 2015 quota was 380, not 500. Opp. at 21. Federal Defendants' supporting citation, AR7 at 1944, simply says that the 2014 quota is limited by the CITES limit of 500 elephants. While the document SCI/NRA cited does establish a proposed quota of 380 (reduced based on on-the-ground research and data), the Service offered no justification for its assumption that the actual quota would be 500. Once again, the Service failed to seek out critical information. Instead, the Service assumed that the quota would remain at 500 despite evidence of Zimbabwe's proposal to lower it. AR344 at 7266. Federal Defendants attempted to excuse this error but did not reference anything in the AR to support the Service's reliance on the current CITES website. Opp. at 21. This Court should disregard Federal Defendants' post hoc rationalization of the Service's disregard of the evidence of a possible reduction in the quota.

Another example of the Service disregarding relevant information to reach the desired conclusion involves the carrying capacity of elephants in Zimbabwe and possible lower-than-expected population numbers. The Service used the Pan African Aerial Elephant Survey ("Elephant Survey") to conclude that the 6% decline from 2001 to 2014 represented in the survey is "troubling." The Service suggested that the elephant population should have been above 139,000 in 2014. AR344 at 7263. The Service gave no explanation for why it is troubling to have a 6% decline over the course of 13 years or why a 5% per annum growth is necessary. The Service also completely disregarded the fact that the carrying capacity for elephants in Zimbabwe is only 43,000 – nearly 100,000 less than what the Service hoped the population would be in 2014. *See* AR11 at 2078 (1989 Elephant Management Plan stated that 43,000 elephants is the desired level – "a compromise between conservation of habitats and biological diversity and the tourist industry."); AR325 at 7127 (2002 email from Service employee stated

that the "carrying capacity of the elephant range is thought to be in the 42,000-45,000 range."); AR165 at 4246 ("'Zimbabwe can support at most 50 000 elephants on the land available in the country. The effects of exceeding the ecological carrying capacity for elephants are glaringly evident – habitats are being destroyed, carrying capacity for wildlife in general is being reduced and elephants are dying of poverty. An ecological disaster is imminent.'"). The Service apparently based its findings on the premise that Zimbabwe should support an overpopulation of elephants to the detriment of the elephants, other wildlife, and their habitat.

Federal Defendants misrepresent SCI/NRA's argument regarding the Service's interpretation of the MIKE/PIKE data. *See* Opp. at 12-13, 20. SCI/NRA do not argue that the Service used that data as an exclusive "basis" for the July 2014 Finding, or any of the findings. Rather, like other flaws committed by the Service in its decision-making process, the Service's over-extrapolation of the data contributed to the arbitrary determinations. MSJ at 30. The two MIKE sites study elephant take in only a small portion of Zimbabwe. Even though Dr. Dublin warned the Service after the April 2014 Finding that applying the PIKE data across Zimbabwe constituted bad science, the Service repeated the misuse of the data in the July 2014 Finding. *Id.* The impact of the Service's error is further exacerbated by the fact that the jump from 24% to 67% occurred in only one of the two MIKE sites in Zimbabwe. AR42a at 3334-14. For the other MIKE site, the proportion of illegally killed elephants decreased by 19% and was the lowest it had been in 4 years. *Id.* The Service ignored the fact that in 50% of Zimbabwe's MIKE sites, evidence of poaching decreased and instead extrapolated the poaching rate from one small area to the entire country, reaching the conclusion of a nationwide increase in poaching.

Federal Defendants cannot explain away the Service's errors. In both 2014 findings, the Service stated, "the percentage of illegally killed elephants (PIKE) ***in Zimbabwe*** was circa 24%,

whereas in 2011 that number jumped to 67%." AR102 at 3821; AR206 at 4511. Nowhere in either finding did the Service explain that the PIKE data came from one small area of Zimbabwe or that the nationwide proportion of illegally killed elephants in Zimbabwe could have been drastically different from the numbers collected at the single MIKE site. Citing a January 2014 Briefing Paper, Federal Defendants argue that the Service "clearly understood that the data came from particular MIKE sites, not from a nationwide survey." Opp. at 13 *citing* AR79 at 3624. The Briefing Paper primarily demonstrates one of two scenarios occurred: (1) the Briefing Paper authors knew the relevance of the PIKE data, but the 2014 findings author did not; or (2) the Service purposefully over-extrapolated the PIKE data when justifying its two 2014 findings.

Federal Defendants also cannot defend the Service's failure to correct mistakes identified by Dr. Holly Dublin. Federal Defendants argued that the Service promised it "would look into" Dr. Dublin's concerns regarding its use of the PIKE data after the April 2014 Finding. Opp. at 13. In response to Dr. Dublin's first letter, a Service employee did write that the Service would look into her concern. AR151. As discussed above, however, the July 2014 Finding repeated, word-for-word, the same incorrect application of the PIKE data that was in the April 2014 Finding – the only difference being that the Service added a citation to indicate the source of its information. *Compare* AR102 at 3821 *with* AR206 at 4511. The Service did not address the concerns raised by Dr. Dublin.

It was not until Dr. Dublin expressed her concerns about this data in a second letter, which she also sent to the government of Zimbabwe, that the Service attempted to fix its errors. AR256 at 5742-43. As it had done for other errors, the Service then attempted to back away from its use of the MIKE/PIKE data in the March 2015 Finding. The Service cited the data with confidence when it appeared useful for the Service's purposes as a clear indication of increased

poaching and a population in decline across Zimbabwe. AR102 at 3821; AR206 at 4511. Upon finding that the data did not necessarily demonstrate an increase in poaching, the Service conditioned its reliance on the data with skepticism in the March 2015 Finding: "it appears that there was an increase in elephant poaching in 2012, but the poaching level ***might have*** declined in 2013 to below the 2011 level." AR344 at 7263. As the record indicates, poaching levels had certainly declined in the MIKE sites. *See* SC65 Inf.1, p.3.[13] For one MIKE site, the PIKE declined from 79% in 2012 to 40% in 2013; for the other MIKE site, the PIKE declined from 27% in 2012 to 22% in 2013. *Id.*

In the March 2015 Finding, the Service stated that the "PIKE numbers . . . showed an increase in 2012 to 0.79 . . . and 0.27." AR344 at 7263. This statement is incorrect. In the Nyaminyami district, PIKE numbers decreased significantly from 0.81 in 2011 to 0.27 in 2012, the lowest PIKE number for the site since at least 2003 (data in chart only dates back to 2004). SC65 Inf.1, p.3. The AR offers no explanation for the Service's incorrect statement.

In an attempt to direct the Court's attention away from these mistakes, Federal Defendants suggest that the PIKE numbers undermine SCI/NRA's argument regarding the benefits of hunting to anti-poaching efforts. Opp. at 20. Instead, the PIKE data undermine the credibility and quality of the Service's findings. Federal Defendants provide no support for an argument that the importation bans caused a decrease in poaching in one of the MIKE sites, nor does the record indicate that elephant hunting occurs at the site. *Id.* Federal Defendants grasp at straws in an attempt to hide the Service's numerous errors regarding the MIKE/PIKE data.

[13] Although directly cited in the March 2015 Finding, SCI/NRA are unable to find this document in the AR. The document is available at https://cites.org/sites/default/files/eng/com/sc/65/Inf/E-SC65-Inf-01.pdf.

The Service also inaccurately addressed information concerning the benefits from hunting and Federal Defendants fail to explain away these errors. For example, SCI/NRA referenced the benefits delivered by the communal CAMPFIRE program, even if this program cannot address all lands in Zimbabwe. MSJ at 38. Federal Defendants rationalized that "recent estimates from the Pan African Aerial Elephant Survey show significant population declines in areas with communal lands." Opp. at 21. Federal Defendants cannot mask the fact that the March Finding stated something different: that the Survey results "appear to confirm that elephant populations in [two areas] have decreased significantly. These areas include communal lands." AR344 at 7270-71. The Finding provided no specificity about whether the amount of communal lands in the two referenced areas was significant enough that it would be expected to offset whatever is causing the declines. Federal Defendants could not provide the specificity that the Finding lacked. Neither the Service nor Federal Defendants offered any argument to refute the fact that the CAMPFIRE program and other conservation benefits of sport-hunting do provide a source of "enhancement" to the survival of Zimbabwe's elephants, especially in light of the newly-confirmed, strong population numbers.

Federal Defendants simply cannot defend the rationality of the Service's decisions. The strong population numbers and limited offtake, the benefits of U.S. hunters for conservation programs and their on-the-ground presence that deters poaching, the existence of which the Service does not dispute (AR344 at 7271), all strongly support a positive enhancement finding. In other words, weighing these benefits with the lack of a "problem" with the hunting offtake (*e.g.,* something less than 500) in light of the 82,000 population number shows that the Service was arbitrary in determining that it was unable to make a positive enhancement finding.

C. The Service Applied an Illegal Enhancement Standard and Used Prohibited Guidelines

As discussed in SCI/NRA's Motion, the Service violated the ESA and APA by applying illegal standards in all three enhancement findings. MSJ at 39-49. The Service arbitrarily required that it find that sport hunting meets a higher standard – ensure the survival of the species – instead of enhance it, which is all the law requires. MSJ at 45-49. In response, Federal Defendants mostly argue that the factors the Service reviewed did not change from 1997 to 2014-15. Opp. at 23-24. This point is irrelevant. SCI/NRA's argument focuses not on what the Service ***reviewed*** but instead on the nature of the 2014-2015 ***standard***, which was to require that sport-hunting essentially ensure the survival of the elephants in Zimbabwe. Enhance and ensure are very different standards. Enhancement, properly understood, requires an improvement in the survival of the species. MSJ at 45. The Service's illegal and arbitrary "ensure" standard is the crux of the matter, not the factors considered (*e.g.,* population, management plans), as Federal Defendants argue.

SCI/NRA cited statements that confirmed the meaning of enhance in the 1997 Finding. MSJ at 46. Federal Defendants argue that a statement in the preamble of a 1992 Federal Register notice, finalizing an amendment of the elephant Special Rule, referred to a CITES requirement, not an ESA requirement. Opp. at 23. But that preamble demonstrates that the Service specifically intended to include the CITES requirement in the amendment of the Special Rule, making that requirement relevant to the meaning of the current enhancement requirement:

> CITES requirements included a determination that the killing of elephants for sport-hunting enhances the survival of the species by providing financial support programs for elephant conservation. ***This requirement is retained in the final revised special rule*** for the import of sport-hunted trophies from threatened populations that are on CITES appendix I.

57 Fed. Reg. 35473, 35485 (Aug. 10, 1992) (emphasis added).

SCI/NRA acknowledges that the 1995 Federal Register notice SCI/NRA referenced did involve guidelines concerning non-detriment findings. Opp. at 23. The 1995 notice is still relevant because part of its analysis involved "whether the killing of the animals whose trophies are intended for import would ***enhance the survival of the species***." 60 Fed. Reg. 12969, 12970 (Mar. 9, 1995) (emphasis added). Moreover, Federal Defendants did not respond to SCI/NRA's point about the Service's own statement, in a 2010 letter denying an elephant import permit, about the meaning of "enhancement." MSJ at 46.

SCI/NRA also explained that the Service improperly used withdrawn internal guidelines. *Id.* at 41-45. Federal Defendants incorrectly contend that SCI/NRA did not include this claim in their Complaint. Opp. at 24. SCI/NRA made several allegations in their Complaint regarding the illegal enhancement standards applied by the Service, including in Count II. 3rd Am. Compl., Dkt. 82, ¶¶ 100-106; *see also*, *id.,* ¶ 57. SCI/NRA are not attempting to amend their complaint through their brief. Instead, SCI/NRA's Motion simply explains and clarifies one of their claims. *See Coleman v. Pension Benefit Guaranty Corp.*, 94 F. Supp. 2d 18, 24 n.8 (D.D.C. 2000) (Court held that plaintiffs could argue a different theory for claim in opposition brief because the complaint identified the prohibited transaction and general nature of the violation).

All three enhancement findings show that the Service used the withdrawn guidelines as a basis for its determinations. While this Court has held that the Service did not use the guidelines in other circumstances, the findings at issue in this case show more than "some overlap" between the requirements imposed by the Service and the illegal guidelines. *See Marcum v. Salazar*, 810 F.Supp.2d 56, 72 n.3 (D.D.C. 2011), *vacated on other grounds* 694 F.3d 123 (D.C. Cir. 2012). In all three findings, the Service evaluated the same factors that it promised and were ordered not to use when it withdrew the internal guidelines.

D. The Service Failed to Conduct Required Rulemaking and Cannot Retroactively Apply the July 2014 Finding to Correct Earlier Errors

1. The Enhancement Findings Are Rulemakings, Not Adjudications

SCI/NRA explained that the Service needed to conduct rulemaking in adopting the enhancement findings. MSJ at 49-50. Federal Defendants erroneously argue that the enhancement findings qualify as informal adjudications because they are the equivalent of licensing or permit approvals. In doing so, Federal Defendants fail to acknowledge the major differences between the approval of licenses/permits and the enhancement decisions at issue in this litigation. First, a license or permit is applied for by and granted to a single entity, based on a specific application previously submitted by that entity. If granted, the permission authorized by the license or permit has no binding impact on license/permit applications submitted by entities other than the original applicant. In contrast, the enhancement findings did not respond to a specific request made by any identifiable individual or entity. Instead, those findings applied generally to all who sought to import elephants from Zimbabwe from the date that the findings were announced and into the future.

> Two principal characteristics distinguish rulemaking from adjudication. First, adjudications resolve disputes among specific individuals in specific cases, whereas rulemaking affects the rights of broad classes of unspecified individuals. *See United States v. Florida E. Coast Ry.,* 410 U.S. 224, 244–45, 93 S.Ct. 810, 820–21, 35 L.Ed.2d 223 (1973); *Ford Motor Co. v. FTC.,* 673 F.2d 1008, 1010 (9th Cir.1981), *cert. denied* 459 U.S. 999, 103 S.Ct. 358, 74 L.Ed.2d 394 (1982). Second, because adjudications involve concrete disputes, they have an immediate effect on specific individuals (those involved in the dispute). Rulemaking, in contrast, is prospective, and has a definitive effect on individuals only after the rule subsequently is applied.

Yesler Terrace Cmty. Council v. Cisneros, 37 F.3d 442, 449 (9th Cir. 1994) ("The sole effect of HUD's decision was to deprive a broad category of people of the right to an informal grievance hearing prior to eviction, and this effect had legal consequences for yet-to-be-identified

individuals only prospectively. These are the effects of a rule, not of an adjudication."); *see also Marcum*, 810 F. Supp. 2d at 72; *City of Arlington, Tex. v. F.C.C.,* 668 F.3d 229 (5th Cir. 2012). The enhancement findings require rulemaking because they impact the general ability of all individuals to import legally hunted elephants from Zimbabwe into the United States from the date the importation ban decision is published and into the future.

Federal Defendants wrongly cite *Franks v. Salazar* to support their inaccurate characterization of the enhancement findings as adjudications. Opp. at 26. Federal Defendants' reliance on *Franks* fails because that case involved the Service's denial of specific importation permit applications. 816 F. Supp. 2d 49, 59 (D.D.C. 2011). In *Franks*, this Court concluded that the permit application denials were adjudications because they affected no other applications. "These decisions do not bind future permit applicants and do not even bar the specific plaintiffs in this case from filing new applications. Thus, they simply are not "rules" under the APA, since they are not intended to have "future effect." *Id.* quoting 5 U.S.C. § 551(4). In contrast, the enhancement findings at issue in this case affect every hunter seeking to import an elephant.

Based on its own analysis in *Franks,* this Court should not find the general importation decisions at issue here to qualify as adjudications.[14] In contrast to the individual permit application decisions addressed in *Franks*, the importation ban decisions that SCI/NRA challenge in this case apply to all individuals who would, after April 4, 2014 (or July 30, 2014, or March 26 2015), seek to import legally-hunted elephants from Zimbabwe. The enhancement

[14] The Service does not currently require permits for hunters to import elephants from CITES Appendix II countries, including Zimbabwe. Consequently, the Service has no opportunity to consider individual applications and makes only a general, broad decision governing the importation by everyone seeking to import such an elephant. As a consequence, none of the requirements for adjudication are present.

findings and importation ban decisions have significant "future effect" that disqualify them as adjudications.

Federal Defendants cite inapposite cases to support their argument. With one exception, their cases expressly apply to permit and licensing decisions affecting individual entities. Opp. at 26 (citing *Nat'l Wildlife Fed'n v. Marsh,* 568 F. Supp. 985, 988 (D.D.C. 1983)) (permit issued by the Secretary of the Army to a company for permission to build an oil refinery); *Abenaki Nation of Mississquoi v. Hughes*, 805 F. Supp. 234 (D. Vt. 1992), *aff'd* 990 F.2d 729 (2nd Cir. 1993) (permit granted by the Army Corps of Engineers to a village to raise the spillway elevation of a generating station); *City of St. Paul v. FAA*, 865 F.2d 1329 (table), 1989 WL 3871 (D.C. Cir. 1989) (order by the FAA authorizing a six-month test involving an airport runway).

Only one of Federal Defendants' cases even remotely resembles the facts of this case. A closer examination of that case, however, demonstrates differences. In that case, the D.C. Circuit considered whether FAA advisory circulars that established testing requirements and product specifications for items used at airports qualified as informal adjudications. *Safe Extensions Inc. v. FAA*, 509 F.3d 593 (D.C. Cir. 2007). Despite the general applicability of the circulars, the FAA did not treat these documents as orders addressing the conduct of the general public. Instead, the FAA e-mailed the draft version of the challenged circular to a few select companies that made or installed a product covered by the circular, solicited comment only from these select businesses, and communicated their comment responses only to these few entities. *Id*. at 596-97. The FAA's focus on very specific companies, rather than on the general public, made the advisory circular much more like an individual permit or license than a general rulemaking decision. For that reason, the D.C. Circuit's decision to classify the advisory circular as an

adjudication offers this Court little guidance about how to classify the Zimbabwe enhancement findings.

Contrary to Federal Defendants' arguments, SCI/NRA's challenge to the enhancement findings does not involve "licensing," "the grant of a license," "a permit," or to a decision "to issue permits." Federal Defendants incorrectly try to fit a square peg in a round hole by suggesting that enhancement findings "are designed to adjudicate disputed facts in particular cases." Opp. at 27. Enhancement findings are determinations of a general nature because they address the legality of importation of all members of a species from a country, regardless of the circumstances behind the importation. The Service does not individually consider variation in the status of the particular species' populations from which the hunted animal was taken, specific hunting conditions in different locations, qualifications of the specific importer, etc. Enhancement findings for elephants in Zimbabwe are broad-based decisions that extend to the general hunting public – not to any specific applicant, permittee or licensee.

This case involves the Service's decision to impose a blanket ban on the importation of all sport-hunted elephants from Zimbabwe from the publication date into the future. The nature and impact of these decisions do not fit the judicial criteria for adjudications. Instead, the general and future application of enhancement findings qualify them as rulemakings. As a result, the Service was obligated to comply with APA procedural requirements and to provide notice and an opportunity for meaningful comment. Based on the Service's failure to meet these requirements, the Court should set aside the enhancement findings.

2. The Failure to Conduct Rulemaking Was Not Harmless Error

The Service's failure to conduct notice and comment rulemaking for the three enhancement findings was not harmless error, as Defendant-Intervenors contend. Had the

Service complied with their APA requirements, SCI/NRA and their members would have been spared some of the harms they suffered as the result of the Service's illegal actions. Defendant-Intervenors, in suggesting that SCI/NRA "in all likelihood" "had actual notice" of the Service's final decisions to ban importation of elephants (D-I Opp. at 3, 6-7), misstate the facts and fail to address the significance of the APA notice and comment requirements. 5 U.S.C. § 553(b).

Defendant-Intervenors argue that SCI/NRA "had actual notice of both the April 4 and July 22, 2014 Findings." D-I Opp. at 3.[15] SCI/NRA had no notice of the April 2014 Finding until receiving a call from the Director of the Service on the afternoon of April 3, 2014, the day before the Service implemented the ban. AR90 at 3661. Any so-called "notice" SCI/NRA had of the July 2014 and March 2015 findings was based solely on the information contained in the preceding findings (*i.e.*, the April 2014 and July 2014 findings, respectfully). In contrast to proper rulemaking procedures, the Service did not publish any decision-making documents for the public to analyze and upon which to respond. Instead, SCI/NRA had no notice of, or opportunity to meaningfully comment on, any proposed findings, as would be required under notice and comment rulemaking. The Service's failure to follow these procedures deprived SCI/NRA of their statutorily mandated opportunity to argue against the Service's proposed findings, including all of the Service's numerous scientific and analytical errors.

In addition, the Service would have published the proposed finding well before publication of any final version. Under such circumstances, SCI/NRA members would have utilized their knowledge of a potential ban in making their decisions about whether to book and/or proceed with elephant hunts. The Service was well aware that several hunting

[15] Contradictorily, Defendant-Intervenors later in their opposition assert that they were deprived of the same notice and comment opportunities they assert SCI/NRA had. D-I Opp. at 9-10.

organizations held their annual conventions during January and February of each year, at which many hunts are booked. Despite recommendations from some Service personnel that advance notice of the importation bans be announced prior to these conventions, the Service chose to wait to announce their final decision until the afternoon before the importation ban went into effect – less than two months after the hunting conventions had been held. AR90 at 3661; MSJ at 20.

In fact, several SCI/NRA members traveled to Zimbabwe prior to the imposition of the ban only to find that by the date of their return to the U.S., they could no longer bring home the elephants that had been importable when they left. Grieb Decl., ¶7, Dkt. 87-6; Rhyne Decl., ¶7, Dkt. 87-8; Whaley Decl., ¶10, Dkt. 87-10; MSJ at 62. For those individuals alone, the Service's compliance with APA requirements for the publication of proposed rules would have at least given them the opportunity to make informed decisions about their hunting plans. This failure to comply with those requirements caused them, and SCI/NRA, significant harm.

3. The Service Cannot Retroactively Apply the July 2014 Finding to Correct Errors in the April 2014 Finding

Federal Defendants defend both the April 2014 and the July 2014 findings with unsupported assumptions about the Service's ability to engage in retroactive decision-making in order to correct previous rulemaking errors. Based on the erroneous premise that enhancement findings are adjudications, Federal Defendants argue that such findings can be applied retroactively. Opp. at 28-30.[16]

[16] Federal Defendant's attempt to invoke the "foreign affairs" exception to notice and comment rulemaking provided in 5 U.S.C. §553(a) makes no sense. Opp. at 28 n. 9. The Service has not applied this exception when adopting other rules relevant to the importation of elephants. For example, the Service complied with rulemaking procedures by seeking public comment when proposing a rule to require permits for the importation of all African elephants listed on CITES Appendix II. *See* 80 Fed. Reg. 45165 (July 29, 2015). This rule has not been finalized.

As explained above, the enhancement findings do not qualify as adjudications. For this reason, Federal Defendants must demonstrate some other authority for the Service's attempt to retroactively apply the July 2014 Finding to remedy the legal errors of the April 2014 Finding.

Federal Defendants contend that, to give the July 2014 decisions retroactive impact, all the Service needed to do was to state that the July 2014 decision "superseded" the April 2014 decision. *Id.* at 29. Federal Defendants incorrectly suggest that SCI/NRA have taken the position that a superseding regulation can *never* apply retroactively. *Id*. at 28. Instead, SCI/NRA argue that labeling alone cannot authorize retroactive effect. An agency may retroactively apply a regulation if a statute or regulation gives the agency that authority:

> Retroactivity is not favored in the law. Thus, congressional enactments and administrative rules will not be construed to have retroactive effect unless their language requires this result. … By the same principle, a statutory grant of legislative rulemaking authority will not, as a general matter, be understood to encompass the power to promulgate retroactive rules unless that power is conveyed by Congress in express terms. … Even where some substantial justification for retroactive rulemaking is presented, courts should be reluctant to find such authority absent an express statutory grant.

Bowen v. Georgetown Univ. Hosp., 488 U.S. 204, 208-09 (1988) (citations omitted); *see also Arkema Inc. v. EPA*, 618 F.3d 1, 7 (D.C. Cir. 2010).

SCI/NRA previously explained that the enhancement findings should have been adopted through APA rulemaking and therefore cannot be applied retroactively. MSJ at 25-26. SCI/NRA explained that Section 4(d) of the ESA (16 U.S.C. § 1533(d)) and the elephant Special Rule do not expressly grant the Service the authority to promulgate retroactive regulations and that APA rulemaking authority (5 U.S.C. § 551(4)) only allows adoption of rules with "future effect." Federal Defendants have not cited any statutory or regulatory language to provide the Service with the authority to regulate with retroactive impact.

The three cases that Federal Defendants cite in support of the Service's ability to impose

retroactive importation further undermine their claim that the Service can retroactively ban the importation of elephants. These cases all demonstrate that statutory or regulatory authority to retroactively regulate is a prerequisite to such action. In two of the cases, the courts cited the express retroactive authority granted to the IRS by the Internal Revenue Code. *See Dixon v. U.S.*, 381 U.S. 68, 71 (1965); *see also U.S. v. Lavi,* 2004 WL 2482323 *5 (E.D. N.Y. Sept. 23, 2004). In the third case, a district court, in reviewing a request for retroactive application of a new criminal sentencing statute, explained, "[W]here a newly enacted statute is silent regarding its own retroactivity, the statute only applies prospectively to conduct occurring on or after the date of its enactment." *U.S. v. Jones,* 2010 WL 7697509 *1 (W.D. Pa. Oct. 18, 2010).

Because nothing in the ESA, its regulations, or the APA expressly affords the Service the authority to retroactively regulate the importation of elephants, the Service could not take action to affect past conduct and could not apply the July 2014 Finding retroactively, much less to cure the illegalities of the April 2014 Finding.

Even if this Court were to assume, as Federal Defendants appear to suggest, that in the absence of statutory or regulatory authority, past agency conduct influences whether the Service has the authority to regulate retroactively, nothing in the Service's previous actions supports a retroactive application of the July 2014 Finding. Each of the six decision documents that Federal Defendants cite are ***non-detriment findings***, applicable to species listed on CITES Appendix I. Opp. at 27, citing April 2014 ARs 49, 50, 51, 57, 62, and 67 (Tanzania non-detriment findings for years 2008-2013). The importation of Appendix I elephants cannot be carried out without individual import permits issued by the Service. As indicated above, the permit application process for CITES Appendix I species is quite different than the process for importing CITES Appendix II species for which no permit is required. The Service's process for deciding on

permit applications more closely resembles the criteria for adjudications, while importation decisions where no permits are required bear none of the characteristics of adjudications. As elephants in Zimbabwe are listed on CITES Appendix II, these examples offer nothing to inform this Court as to whether the Service had authority to make determinations concerning CITES Appendix II species retroactively.[17]

If it has any persuasive value for the Court's determination, the Service's own conduct immediately following the April 4, 2014 announcement of the importation ban demonstrates that the Service itself recognizes that enhancement findings should not be given retroactive effect. The April 2014 AR shows that the Service never intended for the Zimbabwe enhancement finding to be applied retroactively. E-mails to and from Service personnel in the weeks after the Service announced the April 4, 2014 importation ban show that the Service imposed the ban without first verifying the date upon which Zimbabwe's elephant hunting season commenced. These e-mails revealed that Service personnel had questions about whether Zimbabwe's hunting season did not begin until May 2014. April 2014 AR227 at 3144-3145. Upon confirming that Zimbabwe's hunting season started on January 1, 2014 and that, as a result, their decisions would prohibit the importation of elephants legally taken prior to announcement of the ban, the Service revised the April 2014 Finding to apply prospectively only – from April 4, 2014 into the future. AR102 at 3818. Presented with the opportunity to give the April 4, 2014 decision a retroactive effect, the Service purposely chose not to do so.

[17] In addition, although the Service may not announce their non-detriment findings for Tanzania until after January 1st of the applicable year, these decisions do not supersede any previous decisions as each non-detriment finding expires on December 31st of the year in which it is made. See, e.g. April 2014 AR67 at 1412. For this reason, when the Service makes its non-detriment decision for any particular year, there is no existing non-detriment finding in effect.

The Service lacked the authority and justification to use the July 2014 Finding to retroactively replace the April 2014 Finding. For these reasons, the Service should not be permitted to use the July 2014 Finding to remedy errors that it made in the April 2014 Finding.

E. The Service Illegally Failed to Comply with Rulemaking Requirements When It Modified the Special Rule's Enhancement Finding Requirements

SCI/NRA's Motion explained that the Service failed to conduct proper APA rulemaking when it modified the Elephant Special Rule by choosing to retain the enhancement requirement after the purpose behind imposing the requirement disappeared. Specifically, the Service failed to adequately explain its decision to maintain the enhancement requirement after it was eliminated from CITES in 1994, never gave proper notice of the rule modification, and failed to give the public an opportunity to comment on the change. MSJ at 51-55.

Federal Defendants offered little response to these arguments. They claimed that 1997 Federal Register Notice *did* adequately explain why the Service retained the enhancement requirement. Opp. at 34. But a review of the Federal Register notice reveals that Federal Defendants' account is inaccurate. The 1997 Federal Register notice explained ***what*** the Service intended to accomplish in making enhancement findings, but not ***why*** the Service found it necessary to retain an enhancement requirement in spite of the fact that CITES had withdrawn it:

> All these conditions will continue to apply after the Appendix II listing for the elephant populations of Botswana, Namibia, and Zimbabwe enters into effect on September 18, 1997. In making the required enhancement findings, the Service reviews the status of the population and the total management program for the elephant in each country to ensure the program is promoting the conservation of the species.

62 Fed. Reg. 44,627, 44,633 (Aug. 22, 1997).

As explained in SCI/NRA's Motion, the Service included the enhancement of survival requirement in the Special Rule for elephants on August 10, 1992, for the sole purpose of

matching a CITES resolution that imposed the same obligation. MSJ at 51, citing 57 Fed. Reg. 35473, 35485**Error! Bookmark not defined.**. In 1994, CITES withdrew the enhancement finding requirement, which eliminated the Service's rationale for imposing an enhancement requirement. The Service's 1997 affirmative decision to continue to impose the requirement constituted a change in the requirement and thereby a change in the rule. *Id.* at 51-52; *see also* 62 Fed. Reg. 44,627, 44,633 (Aug. 22, 1997). The Service had the obligation to explain that change but never did.

Even if the Court determines that the language in the 1997 Federal Register notice describing the Service's retention of the enhancement requirement qualifies as an "explanation," that language is not an "adequate" explanation. Courts routinely find that mere conclusory statements do not satisfy the APA's adequate explanation requirement. *Am. Min. Cong. v. E.P.A.*, 907 F.2d 1179, 1188-89 (D.C. Cir. 1990) (remanding rule because the conclusory statements provided by the EPA did not articulate a rational connection between the data it relied on and its final rule); *see also Milk Indus. Found. v. Glickman*, 949 F. Supp. 882, 894 (D.D.C. 1996) ("[A]n agency must articulate why it has exercised its discretion in a particular way and provide an adequate explanation for its action. Mere conclusory statements are not enough.") (citing *Motor Vehicle Mfrs. Ass'n. v. State Farm Mutual Auto Ins. Co.,* 463 U.S. 29, 48–49 (1983)). The Service's broad statement that enhancement findings ensure that the country of export "is promoting the conservation of the species" is conclusory, and therefore inadequate.

At the very least, the Service's explanation should satisfy the requirements for rulemaking included in Section 4(d) of the ESA. 16 U.S.C. § 1533(d). In accordance with this section, the Service may only promulgate rules for species listed as "threatened" that are necessary and advisable to the conservation of the species. *Id*. Nothing in the Service's 1997

alleged "explanation" demonstrated why the enhancement requirement is "necessary" or "advisable" for African elephants listed on CITES Appendix II.

Federal Defendants also claim that the enhancement requirement should be upheld because CITES allows countries to enact "measures that are more protective of wildlife than the specific provisions of CITES." Opp. at 35. Whether or not this permission would be relevant to elephant importation, the provisions of CITES do not relieve the Service of its obligations under the ESA and APA to provide an adequate, rational explanation of why maintaining the enhancement requirement is necessary and advisable for the conservation of the species.

Ignoring the obvious impact of the changes occasioned by the August 1997 Federal Register Notice, Federal Defendants claim that SCI/NRA failed to demonstrate how the Service passively modified the Special Rule. Opp. at 35. The Service imposed a requirement for those who seek to import elephants and then later purposely modified the rationale behind that requirement. If a regulation requires an adequate explanation for its requirements and the agency revises that explanation, the requirement – and therefore the rule – has been changed and that change must adhere to APA requirements.

In addition to failing to provide an adequate explanation for the change in the Special Rule, the Service deprived the public of proper notice and an opportunity to comment on the rule change. The notice that included the revision of the enhancement finding was in a Federal Register notice, but did not announce to the public that they could comment on changes to the importation requirements for elephants, nor did it solicit comments on those importation requirement changes. The notice's title "Changes in List of Species in Appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora" gave no

indication of changes in importation requirements. The request for comments in the notice very specifically focused only on the change to CITES Appendix listings for specific species:

> This document announces decisions by the Conference of the Parties to CITES on amendments to Appendices I and II, and repeats a previous request (62 FR 31054) for comment on whether the United States should enter reservations on any of the amendments.

62 Fed. Reg. 44627 (Aug. 22, 1997). The Federal Register notice did not fulfill the Service's notice and comment obligations for the change in enhancement requirements. Due to these errors, the Court should set aside the Special Rule and the three enhancement findings.

F. The Service Never Overcame the Section 9(c)(2) Presumption that Sport Hunting Enhances the Survival of Elephants in Zimbabwe

As explained in the Motion, SCI/NRA's argument that the Service failed to apply the Section 9(c)(2) presumption is straightforward. MSJ at 55-61. Section 9(c)(2) creates a presumption that the non-commercial import of a species that is on Appendix II of CITES and is not listed as endangered (such as Zimbabwe's elephants) satisfies any statutory and regulatory condition on that import. SCI/NRA is not arguing, as Federal Defendants seem to believe, that Section 9(c)(2) prevents the Service from imposing any conditions on the import of such wildlife. Instead, the argument is premised on the presumption, under the plain language of the statute, applying to "any regulation issued pursuant to this chapter [*i.e.,* the ESA]." As the elephant Special Rule is a regulation issued under the ESA (adopted after notice and comment rulemaking, codified in the Code of Federal Regulations, set out the public's rights and obligations, etc.), the presumption applies to the Special Rule. It follows that the same regulation that creates the condition and invokes the presumption cannot rebut the presumption. Federal Defendants' attempts to excuse their failure to rebut the presumption all fail.

Without explaining why the plain meaning of the statute should not apply, Federal Defendants first claim that they have "interpreted" Section 9(c)(2) to create a presumption that a regulation such as a special rule can overcome. Opp. at 36-37. This so-called "interpretation" ignores that the presumption applies to the statute and "any ***regulation*** issued pursuant to [the ESA]." 16 U.S.C. § 1538(c)(2) (emphasis added). *See* MSJ at 56. Federal Defendants' Opposition acknowledges that the Special Rule is a regulation, explaining that the Service can rebut the presumption through "the promulgation of a special protective ***regulation*** pursuant to § 4(d) of the Act, 16 U.S.C. § 1533(d)." Opp. at 36 (emphasis added).

The cases that Federal Defendants cite do not support this interpretation, except in unpersuasive dicta, and address claims different than those SCI/NRA raise here. See MSJ at 61 n.25. In one case, the plaintiff asserted a different legal argument than SCI/NRA assert here – that Section 9(c)(2) "*requires* argali trophies be allowed to be imported into the United States … [and that] the CITES rules governing trade in Appendix II species preempt the applicable [E]SA prohibitions and requirements with regard to threatened species …." *Safari Club Int'l v. Babbitt,* 1993 WL 13932673, *12 (W.D. Tx. 1993) ("*Babbitt*") (emphasis in original); *see id.* at *14 (plaintiff's argument was that Section 9(c)(2) "establishes a conclusive presumption"). This argument differs from SCI/NRA's position here. Consistent with SCI/NRA's claim here, the court in *Babbitt* noted that the "effect of this presumption is to shift the burden of producing evidence regarding the import to the [Service] …." *Id.* at *14.

Another district court, in a civil *in rem* action regarding the forfeiture of an etched elephant tusk, addressed in dictum arguments similar to the Service's flawed reasoning here. *U.S. v. One Etched Ivory Tusk of African Elephant*, 871 F.Supp.2d 128 (E.D.N.Y. 2012). The main issue in that case was whether the tusk constituted a legally importable "sports-hunted

trophy." *Id.* at 135; *see id.* at 139 (finding that the tusk was not a sport-hunted trophy). But the court also addressed the claimant's additional argument that the Service must allow the importation under Section 9(c)(2). The court rejected this argument because it had already determined that the tusk was not an Appendix II species because any part of an animal that is not a hunting trophy is treated under Appendix I of CITES. *Id.* at 139-140 ("the statutory presumption is simply inapplicable to the Tusk."). Thus, the court's discussion regarding rebutting the Section 9(c)(2) presumption is dictum. In any event, the court wrongly concluded that the mere adoption of the elephant Special Rule rebutted the presumption for all the same reasons Federal Defendants' arguments here are wrong.

Federal Defendants next argue that either (1) a special rule "is clearly not a 'regulation issued pursuant to this chapter' to which the presumption applies; or (2) "the statute is silent or ambiguous on the issue of whether a special rule is a 'regulation issued pursuant to this chapter' to which the 9(c)(2) presumption applies …." Opp. at 38. Federal Defendants have provided no reason to read the plain language of Section 9(c)(2) to support either of these theories. Section 9(c)(2) applies the presumption to regulations issued "pursuant to this Chapter." 16 U.S.C. §1538(c)(2). "This Chapter" encompasses Sections 1531-1544 and includes Section 1533(d), under which authority the Service promulgated the Special Rule. *See* 54 Fed. Reg. 19146, 19417 (May 5, 1989) (earlier amendment to the Special Rule).

The Service adopted the Special Rule after notice and comment rulemaking, published it in the Federal Register, and codified it in the Code of Federal Regulations. 57 Fed. Reg. 35473, 35475, 35486 (Aug. 10, 1992). These are all signs of a regulation. *See, e.g., The Wilderness Soc. v. Norton,* 434 F.3d 584, 596 (D.C. Cir. 2006) ("The real dividing point between regulations and general statements of policy is publication in the Code of Federal Regulations, which the

statute authorizes to contain only documents 'having general applicability *and legal effect,*' and which the governing regulations provide shall contain only 'each Federal *regulation* of general applicability and current or future effect.'") (quoting *Brock v. Cathedral Bluffs Shale Oil Co.,* 796 F.2d 533, 538–39 (D.C. Cir.1986)) (emphasis in original). Consistent with its actions, the Service itself classified the 1992 Special Rule regarding elephant importation as a "regulation" adopted under the ESA. 57 Fed. Reg. at 35485 (discussing why Service did not need to prepare an environmental assessment "in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act, as amended.").

Instead of following the plain meaning of the statute, Federal Defendants try to create ambiguity and accuse SCI/NRA of "fail[ing] to read Section 9(c)(2) in context." Opp. at 37. But Federal Defendants fail to provide any meaningful "context" that establishes that the plain meaning of the statute should not govern. SCI/NRA do not dispute the so-called "context" Federal Defendants provide – that a special rule can establish conditions for importation. *Id.* SCI/NRA do dispute, however, that Section 9(c)(2) allows the Service in the same regulation to simultaneously create a condition and rebut the presumption that the condition is met.

Further, as SCI/NRA previously explained, when the Service originally adopted and amended the Special Rule, the Service had no reason to overcome the presumption. MSJ at 57-58. The presumption did not apply at that time (all African elephants, including Zimbabwe's, were on Appendix I). Later, in 1997, when Zimbabwe's elephants were moved to Appendix II, the Service made, based on the facts at the time, a positive finding that sport hunting of elephants enhanced the survival of the species. *Id.* at 58-59. The Service never explains why it makes sense that in 1997 it could simultaneously (1) find as a matter of law that the mere adoption of the elephant Special Rule rebutted the factual presumption that the sport hunting of elephants in

Zimbabwe enhanced the survival of the species (*i.e.,* establish that sport hunting did ***not*** enhance the survival of the species), and (2) make a positive finding, based on the facts, that it did.

Federal Defendants also claim that SCI/NRA "fail to identify what other means the Service has at its disposal to rebut the presumption, if not a regulation." Opp. at 37. The answer is straightforward. The Service must make an affirmative finding to overcome the presumed fact that sport-hunting of elephants enhances the survival of the species. The Service could memorialize this finding in an official agency document. Despite claiming no other "means" could serve to rebut the presumption if a special rule cannot, Federal Defendants later argue that the three negative enhancement findings rebut the presumption. Opp. at 39-40.

Federal Defendants' brief and the findings themselves betray this fallback argument that the Service affirmatively rebutted the presumption in the three findings. Federal Defendants argue that "[i]n all three of its findings, the Service determined that ***it was unable to find*** that the killing of elephants from Zimbabwe whose trophies are intended for import would enhance the survival of the species." *Id.* at 39-40 (emphasis added); *see also id*. at 10 (in describing the three enhancement findings, Federal Defendants state that the Service was "unable to find" that sport-hunting enhances the survival of the species). Because the presumption establishes that sport-hunting does enhance the survival of Zimbabwe's elephants, the Service was required to affirmatively find, based on the information before it, that the sport-hunting of those elephants did not enhance the survival of the species (*i.e.,* overcome the presumption), and not simply announce that they are "unable" to make that finding. The Service did not make this type of affirmative determination in the April 2014, July 2014, and March 2015 findings.

Nor has the Service overcome the presumption at any other time. SCI/NRA has already explained that in the adoption and amendment of the Special Rule, the Service never rebutted the

presumption and never had occasion to do so. MSJ at 57. In response, Federal Defendants argue that in 1997, when Zimbabwe's elephants were transferred to Appendix II, the Service retained the enhancement requirement. Opp. at 38-39. This point misses the mark. SCI/NRA acknowledge that, although illegally maintained (*see supra.* Section E), the enhancement requirement and other conditions for importation apply, but SCI/NRA also have established that the Section 9(c)(2) presumption applies to fulfill those conditions unless the Service affirmatively overcomes the presumption, as explained above. In addition, from 1997 until April 4, 2014, the Service concluded that the sport hunting of elephants in Zimbabwe enhanced the survival of the species. In 2014-15, the Service had the burden to overcome this factual finding with an explicit factual finding to the contrary.

This decision-making requirement – applying the presumption – can be determinative, just as which party bears the burden of proof can determine the outcome of a case. *See, e.g., Bruner v. Off. of Personnel Mgt.,* 996 F.2d 290, 292 (Fed. Cir. 1993) ("Because the proper allocation of the burden of proof is an important procedural right that may have substantive consequences," court reviewed assignment of burden of proof in proceeding); *see Babbitt,* 1993 WL 13932673, *14 (Section 9(c)(2) has effect of shifting burden of persuasion). For example, as discussed above, in the April 2014 Finding, the Service never sought information from Zimbabwe that would inform the Service about whether the presumption could be overcome. This failure should have consequences on the Service, not the hunter/importer.

Similarly, Federal Defendants misconstrue SCI/NRA's 9(c)(2) claim when Federal Defendants argue that "where Congress wanted to provide a complete exemption from the prohibitions in Section 9(a)(1)[,] such as the prohibition on importation[,] it did so without providing for a rebuttable presumption." Opp. at 37-38. As made clear in their Motion,

SCI/NRA are not arguing for a "complete exemption." Instead, SCI/NRA acknowledge that Congress created a presumption that *can* be overcome. Nevertheless, the plain meaning of the statute establishes that the presumption cannot be overcome in a regulation to which the presumption applies and that, importantly, it has not been overcome in this case.

In a footnote, Federal Defendants assert that language in a 2016 proposed amendment to the elephant Special Rule reiterates that the Service has rebutted the presumption, so "any suggestion that the Service must explicitly rebut the presumption is harmless error." Opp. at 39 n.15. Referencing a 2016 proposed amendment to the special rule represents a post hoc rationalization involving non-finalized statements made by the Service one to two years after the challenged actions in this case. The Court cannot accept this tardy explanation for illegal behavior. *Motor Veh. Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.,* 463 U.S. 29, 50 (1983) ("the courts may not accept appellate counsel's *post hoc* rationalizations for agency action."). If anything, the attempt to rebut the presumption through reference to the 2016 proposed amendment to the Special Rule is an acknowledgement both that the Service should have attempted to rebut the presumption earlier and that the Service does have a vehicle other than the Special Rule itself to rebut the presumption (contrary to the Service's assertion earlier in its Opposition).

In addition, Federal Defendants' attempt to invoke the "rule of prejudicial error" or harmless error is misplaced. "Neither a showing of actual prejudice nor proof that the agency would have reached a different result is required to establish prejudicial error." *AFL-CIO v. Chao,* 496 F. Supp. 2d 76, 89 (D.D.C. 2007). In addition, the D.C. Circuit has explained that "the harmless error rule is 'not ... a particularly onerous requirement' .... If prejudice is obvious to the court, the party challenging agency action need not demonstrate anything further."

Jicarilla Apache Nation v. U.S. Dept. of Int., 613 F.3d 1112, 1121 (D.C. Cir. 2010) (citations omitted; first ellipsis in original). Federal Defendants cite in support a case in which a federal agency engaged in significant environmental analysis before reaching a decision but failed to comply precisely with NEPA procedures. *Nevada v. Dept. of Energy*, 457 F.3d 78, 90 (D.C. Cir. 2006). Here, in contrast, the Service did not merely fail to comply with procedures that had no bearing on the substantive decision; the Service committed a fundamental error in how it must assess the facts before it. As the Service admits it was "unable" to make the determination required of it based on the facts before it, disregarding a presumption that would work against the Service is prejudicial to SCI/NRA and its members.

Finally, as part of their claim, SCI/NRA challenged that (1) a Service regulation, 50 C.F.R. §17.8(b), "goes too far in claiming that the mere issuance of a special rule means that the statutory presumption does not apply"; (2) the regulation "must give way to the statute" it purports to implement; and (3) the Service's reading would render the presumption a disfavored nullity. MSJ at 58. In response, Federal Defendants claim that Section 17.8(b) embodies the Service's interpretation and SCI/NRA have not challenged it. Opp. at 38 n.14. In fact, SCI/NRA have done exactly what the case Federal Defendants cite requires: "A regulation is presumed to be valid unless ***it is shown by those attacking it to be contrary to law***." *Id.* (quoting *Forester v. Consumer Prod. Safety Comm.*, 559 F.2d 774, 783 (D.C. Cir. 1977)) (emphasis added). Like the Service's interpretation, this regulation is contrary to the plain meaning of the statute and cannot rescue the Service's failure to affirmatively overcome the presumption by means other than a regulation.[18]

[18] SCI/NRA explained that the Service's so-called interpretation that a special rule automatically rebuts the Section 9(c)(2) presumption creates a nonsensical situation in contrast to a more heavily regulated Appendix II, threatened species without a special rule (to which all the

G. SCI/NRA Properly Seek Vacatur of the Three Enhancement Findings

SCI/NRA are not asking the Court to do anything other than set aside the three findings, which would have the effect of reinstating the 1997 finding. The 1997 Finding governed until April 4, 2014 and included no internal expiration date. The Service's protestation that it is too stale is belied by this fact. In fact, the Service continue to apply findings made on the same date to elephant importation from Namibia and South Africa.

Vacating the three findings (and consequential reinstatement of the 1997 Finding) will have the effect of allowing U.S. hunters who harvested an elephant in Zimbabwe in 2014 or 2015 to import their elephant, much as hunters could through April 3, 2014. These hunters include some who were in Zimbabwe hunting when the Service abruptly announced the ban on importation. *See, e.g.,* Decl. of Rhyne, ¶7, Dkt. 87-8 (Feb. 18, 2016).

Defendant-Intervenors suggest what Federal Defendants have not asked for – a remand to the agency without vacatur of the three enhancement findings. D-I Opp. at 8-9. A remand in this case is not necessary at all, as the 1997 Finding will continue to apply until the Service adopts a new, legal enhancement finding, which would apply only prospectively. Nor are the errors alleged here of a kind that the Court should keep three illegal findings in place while the Service takes further action.

For the period following any Court order, if it chooses, the Service can follow proper APA procedures to amend the illegally adopted Special Rule, in any future enhancement finding correct the procedural errors identified by SCI/NRA, apply the correct standards based on the

prohibitions of Section 9 apply). MSJ at 59-60. The Service did not even to attempt to respond to this point. The Court should disregard any attempt by Federal Defendants to respond to this point for the first time in their final reply brief.

information available at that time, and issue properly adopted rules and legally supportable decisions. Defendant-Intervenors would be free at that time to participate in any rulemaking or otherwise submit to the Service the information they claim to have. The Court should vacate the Special Rule and the three enhancement findings and let the Service take action to address the future of importation of sport hunted elephants from Zimbabwe.

III. CONCLUSION

For all these reasons, SCI/NRA moves the Court to grant them summary judgment on their claims and deny the Federal Defendants' motion for summary judgment.

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Respectfully submitted,

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National Rifle Association of America

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

SAFARI CLUB INTERNATIONAL, et al.	)	
	)	
Plaintiffs,	)	Civ. No. 14-cv-00670-RCL;
	)	15-cv-01026-RCL (consolidated)
v.	)	
	)	
SALLY M. R. JEWELL, et al.	)	
	)	
Defendants.	)	
	)	

SAFARI CLUB INTERNATIONAL AND NATIONAL RIFLE ASSOCIATION OF AMERICA'S (1) OPPOSITION TO FEDERAL DEFENDANTS' CROSS-MOTIONS FOR SUMMARY JUDGMENT AND (2) REPLY TO OPPOSITIONS TO MOTION FOR SUMMARY JUDGMENT

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GLOSSARY

APA	Administrative Procedure Act
April 2014 Finding	Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe during 2014 (dated April 17, 2014)
AR	Administrative Record in the district court for the Zimbabwe importation ban decisions
CAMPFIRE	Zimbabwe's Communal Areas Management Programme for Indigenous Resources
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
Decl.	Declaration
D-I Opp.	Defendant-Intervenors' Memorandum In Opposition To Plaintiffs' Motion For Summary Judgment
Dkt.	Docket
Elephant Survey	Pan African Aerial Elephant Survey
ESA	Endangered Species Act
Federal Defendants	Federal Defendants Secretary of the Interior, Sally Jewell *et al*.
Internal guidelines	Guidelines that the U.S. Fish and Wildlife Service previously used to evaluate importation applications for sport-hunted elephants. They were withdrawn in 60 Fed. Reg. 12969 (Mar. 9, 1995)
IUCN	International Union for Conservation of Nature

IUCN Report	Report from the African Elephant Database entitled "Zimbabwe, 2012 ('2013 Africa' analysis)"
July 2014 Finding	Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe during 2014 (dated July 22, 2014)
March 2015 Finding	Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe On or After January 1, 2015
MIKE	Monitoring the Illegal Killing of Elephants
Motion or MSJ	Safari Club International and National Rifle Association of America's Motion for Summary Judgment and Memorandum in Support
Opposition or Opp.	Memorandum in Support of Federal Defendants' Cross-Motion for Summary Judgment and in Opposition to Plaintiffs' Motion for Summary Judgment
PIKE	Proportion of Illegally Killed Elephants
SCI/NRA	Safari Club International and the National Rifle Association of America
Service	United States Fish and Wildlife Service
Special Rule	Regulation that provides criteria for the importation of legally hunted African elephants into the United States. 50 C.F.R. §17.40(e).
ZPWMA	Zimbabwe Parks & Wildlife Management Authority
1997 Finding	1997 Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe, July 2, 1997

I. INTRODUCTION

Defendant U.S. Fish and Wildlife Service ("Service") seems bent on using its import authority to force Zimbabwe to modify its management of elephants. Hunters and elephants are suffering the costs of the Service's illegal conduct. In a Motion for Summary Judgment ("Motion" or "MSJ") and in this Opposition and Reply brief, plaintiffs Safari Club International and the National Rifle Association of America ("SCI/NRA") explain how the Service relied on inadequate information, misapplied relevant information, and twisted the law, all in an attempt to justify its decision not to allow hunters to import sport-hunted elephants from Zimbabwe. In reviewing SCI/NRA's claims, the Court should determine whether the Service has exceeded the narrow task the law authorizes the Service to perform – to determine whether sport-hunting enhances the survival of Zimbabwe's elephants, rather than whether Zimbabwe's management of elephants is flawless. This Court must examine whether the Service misapplied the law by not conducting rulemaking, requiring an enhancement finding, or failing to correctly apply the statutory presumption that sport-hunting does enhance the survival of the species. In their Motion, SCI/NRA demonstrated that the Service's three enhancement findings, and other actions taken by the Service, were arbitrary and capricious and otherwise contrary to law under the Endangered Species Act ("ESA") and the Administrative Procedure Act ("APA"). MSJ at 14-64.[1]

In their Cross-Motion for Summary Judgment/Opposition ("Opposition" or "Opp."), Federal Defendants fail to refute these arguments. Other than agreeing with SCI/NRA that enhancement findings must be adopted through rulemaking and asserting that SCI/NRA are not

[1] SCI/NRA refer to the three enhancement findings as the "April 2014 Finding," "July 2014 Finding," and "March 2015 Finding." Likewise, the July 2, 1997 enhancement finding is "1997 Finding."

entitled to meaningful relief if they prevail, Defendant-Intervenors Friends of Animals *et al.*'s opposition brief ("D-I Opp.") adds little to the defense of this case. In essence, Defendants ask the Court to ignore a host of factual and legal errors, and afford unwarranted deference to the Service's decision-making.[2]

II. ARGUMENT

A. The April 2014 and July 2014 Findings Are Arbitrary and Contrary to Law

1. Federal Defendants Have No Defense To the Fact That the Service Breached the Commitments It Published in the Federal Register

The only defense that Federal Defendants offer to dispute the fact that the Service made commitments in the Federal Register regarding what it would do if and when it planned to alter the 1997 Finding is – ***the Service said it but didn't really mean it***. Federal Defendants do not dispute that the Service stated, in a Federal Register Notice dated August 22, 1997, that

> The enhancement findings for importation of sport-hunted elephant trophies from Botswana, Namibia, and Zimbabwe are on file in the Office of Management Authority and ***remain in effect*** until the Service finds, ***based on new information***, that the conditions of the special rule are no longer met ***and has published a notice of any change in the Federal Register***.

62 Fed. Reg. 44627, 44633 (emphasis added). Despite committing to these terms, the Service reversed the 1997 Finding based on a lack of, rather than new, information and without first publishing the change in the Federal Register.

Federal Defendants claim that the August 22, 1997 commitments cannot be binding because the Service did not incorporate the promises into a regulation. They argue that the only way the Court can hold the Service to its commitment is if the Court can find "extrinsic

[2] SCI/NRA demonstrated their standing to bring these claims. Motion for Summary Judgment ("MSJ") at 62-64. No party disputes their standing. SCI/NRA filed a Statement of Material Facts because, as explained in that Statement, L.Cv.R 7(h) is unclear whether one is needed in an administrative record case to demonstrate the facts relevant to standing.

evidence" demonstrating that the agency intended to be bound. Opp. at 31. The extrinsic evidence shows that the Service did intend to be bound.

Evidence of the Service's intent comes from a second Federal Register notice in which the Service repeated the exact same commitment concerning an enhancement finding for the importation of elephants from another African country:

> The enhancement findings for the importation of sport-hunted elephant trophies from South Africa are on file in the Division of Management Authority and remain in effect until the Service finds, based on new information, that the conditions of the special rule are no longer met and has published a notice of any change in the Federal Register.

66 Fed. Reg. 27601, 27609 (May 18, 2001). Statements of intent need not be part of regulatory language to commit the agency to carry out specific promises. As this Court acknowledged in *Empresa Cuban Exportadora v. U.S. Dep't of Treas.*, "[c]ourts may glean such standards not only from statutes and regulations but also from formal and informal policy statements that create binding norms by imposing rights or obligations on the respective parties.'" 516 F. Supp. 2d 43, 58 (D.D.C. 2007) (quoting *Steenholdt v. FAA,* 314 F.3d 633, 638 (D.C. Cir. 2003)).[3]

The Service's own statement in May 2014 provides further compelling extrinsic evidence. The Service characterized the April 4, 2014 importation ban as an "interim suspension" and restated the binding commitment the Service had published in the 1997 Federal Register. "If, based on new information, the conditions of the special rule are no longer met, the Service explained that it would publish a notice in the Federal Register of any change." 79 Fed. Reg. 26986 (May 12, 2014). Implicitly acknowledging that it could not make a final

[3] The fact that, during the almost two decades between August 22, 1997 and April 4, 2014, the Service had never breached its commitments concerning the enhancement findings for the elephants of Zimbabwe, Namibia, Botswana or South Africa, undermines rather than supports Federal Defendants' argument that the Service did not intend to be bound by the commitments or that the term of the Service's commitment had expired.

enhancement determination unless that decision was based on new information and published in the Federal Register, the Service reiterated its commitment for future enhancement findings:

> The Service has requested the information necessary to make a final decision from the Government of Zimbabwe. After the Service has an opportunity to review ***new information*** and obtain additional information, if necessary, we will make a final decision. If the Service finds that sport hunting of African elephants in Zimbabwe enhances the survival of the species, the suspension will be lifted. If, after reviewing the ***new information***, the Service finds that sport hunting of African elephants in Zimbabwe does not enhance the survival of the species, the suspension will continue until the Service receives new information in the future that would allow it to make a positive enhancement finding. Either way, the final finding ***will be published in the Federal Register*** and made available on the Service's Web page.

Id. at 26987 (emphasis added). The May 12, 2014 notice demonstrates two things: (1) on April 4, 2014, the Service had violated its own commitments by not collecting, reviewing and ultimately relying on new information from Zimbabwe to change its pre-existing enhancement finding; and (2) the Service was aware that it could not make a final change to the 1997 Finding until it published the finding in the Federal Register.

Federal Defendants' alternative argument that the Service kept its promises also fails. First, they contend that the Service met its publication promise because the "advent" of the Internet obviated the need to publish decisions in "official publications." Opp. at 32. While the internet is effective for the purposes of communication, the Federal Register remains the statutorily required site for the Service's publication of rules and other decision-making affecting the public. 5 U.S.C. § 553. The internet does not relieve the Service of its own commitment to publish in the Federal Register.

Federal Defendants also argue that the Service's April 2014 Finding was based on "new information," inappropriately asserting that "new information" is the equivalent of a "lack of information." Opp. at 31. While Federal Defendants may argue that a lack of sufficient

information could qualify as a "new" situation, that situation did not exist on April 4, 2014. In fact, the Service sent Zimbabwe a questionnaire in 2007 seeking information about Zimbabwe's elephants and received a set of answers from Zimbabwe on May 31, 2007. Administrative Record ("AR") 35b; AR35c. Federal Defendants admit that, after receiving Zimbabwe's response, the Service received no new information from Zimbabwe before issuing the April 2014 Finding. Federal Defendants also concede, by omission, that the Service never directly asked Zimbabwe to supplement the information provided in May 2007.[4] Consequently, the Service's alleged "lack of sufficient information" (1) was not a new situation, but had been the status quo since 2007, and (2) was the result of the Service's own failure to request information and/or to inform Zimbabwe that unless it provided additional information, the Service would ban elephant importation from the country.

2. The Service Failed to Ask For New Information and Reached a Foregone Conclusion

The Service was aware of information available from Zimbabwe but purposely chose not to seek that information until *after* making the decision to ban importation. MSJ at 18-20. Although Federal Defendants try to defend the Service's failure to ask for relevant information, they present no persuasive explanation for why the Service made its decision first and asked for information later. Opp. at 33-34.

Federal Defendants unsuccessfully dispute SCI/NRA's argument that the Service's April 4, 2014 actions amounted to a foregone conclusion. MSJ at 23-24; Opp. at 17. Federal

[4] Although the April 2014 and July 2014 Findings both make vague references about Service personnel meeting in person with Zimbabwean officials at meetings and conventions, these accounts never state that Service personnel actually requested new elephant data from Zimbabwe during these meetings, or that the Service communicated to Zimbabwe the possibility that a negative enhancement finding would result if Zimbabwe provided no new data. AR102 at 2819; AR206 at 4507.

Defendants rely on a single inapposite case that discusses whether a court should defer to the opinion of a specific agency employee over the position of the final agency decision-maker. *Serono Laboratories Inc. v. Shalala*, 158 F.3d 1313, 1321 (D.C. Cir. 1998). SCI/NRA do not ask the Court to defer to Service employee Pamela Scruggs's position, but offer her statement solely to demonstrate that the Service decided to ban importation first and obtain the reasons to justify that decision second. In any event Ms. Scruggs's statements merely supplemented other proof that the importation ban was a foregone conclusion. The Service's decision not to seek scientific information from Zimbabwe until after banning the importation of Zimbabwe's elephants solidly establishes this fact.

3. Numerous Factual Errors Add Up to Arbitrary Decisions

Numerous factual errors made by the Service in both the 2014 Findings demonstrate arbitrary and capricious conduct. Federal Defendants would have the Court believe that SCI/NRA argue that each error alone resulted in the arbitrary decisions. While some of the more impactful factual errors could alone demonstrate arbitrary determinations, SCI/NRA point to the numerous errors, both in this brief and SCI/NRA's Motion, as a collective demonstration of inaccurate and illegal findings and arbitrary and capricious action.

Federal Defendants incorrectly assume that this Court should afford deference to the Service's decision-making, because enhancement findings should be based on science within the Service's expertise. Opp. at 9. Although a Court must afford an agency deference in its review of the science required for decision-making, that deference does not apply when the agency misconstrues the science, ignores obvious findings, relies on evidence of an inferior nature, or fails to seek out the best available science. "While the Court is required to defer to the agency's technical expertise in areas of scientific specialization, the Court is not required to ignore simple

probability." *HSUS v. Pritzker*, 75 F. Supp. 3d 1, *12 (D.D.C. 2014) (Court rejected NMFS 90-day finding because agency ignored evidence of decline in the Northwest Atlantic porbeagle population).

Even in cases where courts must defer to an agency's choice as to what qualifies as "best available scientific data," courts do not allow agencies to ignore data of a higher quality than the information upon which the agency relied. *Kern Cnty. Farm Bureau,* 450 F.3d 1072, 1080 (9th Cir. 2006) (quoting *Sw. Ctr. for Biological Diversity v. Babbitt,* 215 F.3d 58, 60 (D.C. Cir. 2000)) ("The best available data requirement 'merely prohibits [an agency] from disregarding available scientific evidence that is in some way better than the evidence [it] relies on.'"). '"All that is required of the agencies is to seek out and consider all existing scientific evidence relevant to the decision at hand. They cannot ignore existing data.'" *Ecology Ctr., Inc. v. U.S. Forest Serv*., 451 F.3d 1183, 1194 (10th Cir. 2006) (quoting *Heartwood Inc. v. U.S. Forest Serv.,* 380 F.3d 428, 436 (8th Cir. 2004)).

In making the April 2014 Finding, the Service ignored the fact that better data was available from Zimbabwe and did not seek superior scientific data until after issuing its decision. In addition, the Service ignored studies more recent than the ones upon which it relied, and grossly misconstrued the data upon which it did rely. Consequently, the Service's consideration of the scientific data deserves no special deference.

Emblematic of the Service's careless treatment of the facts is a statement in the April 2014 Finding that, "[t]he 2013 CITES Panel of Experts raised concerns as to the status of the ZimParks relating to its weak financial base, lack of management skills, inadequate and old equipment, and poor infrastructure." AR102 at 3822. This statement is false. No 2013 CITES

Panel of Experts regarding elephants existed to raise such concerns in 2013.[5] After the Service published the April 2014 Finding, it was alerted to its error. AR171 at 4313-14 (email from CITES Secretariat; "There was no Panel of Experts *sensu* Resolution Conf. 10.9 in 2013 [], and the most recent one in 2010 looked at the situation of African elephants in the United Republic of Tanzania and Zambia, not Zimbabwe. So the reference must be wrong.").

The Service then modified the statement in the July 2014 Finding, arbitrarily choosing 2002 for the Panel year. *See* AR206 at 4511-12. The Service merely parroted the same statement but attributed it to a Panel of Experts from 2002, ignoring the fact that there never was a 2002 CITES Panel of Experts for Zimbabwe.

The Service apparently was once again alerted to the error. In the March 2015 Finding, the Service corrected itself, stating, "[t]he 1997 CITES Panel of Experts raised concerns as to the status of ZPWMA relating to its weak financial base, lack of management skills, inadequate and old equipment, and poor infrastructure." AR344 at 7264. On its third try, the Service finally accurately reflected that it was a 1997 CITES Panel of Experts that expressed concerns. The Service does not explain why concerns from the 1997 Panel did not defeat a positive determination of enhancement from 1997 to 2013, but were sufficient to help justify the Service's decision as of April 2014 that it was unable to make a positive enhancement finding.

Not realizing that the Service's stroke of a pen had invented the 2013 CITES Panel of Experts, Federal Defendants claim that the same 2013 Panel raised concerns regarding Zimbabwean government officials' involvement in wildlife trafficking and that the Service partially based the April 2014 Finding on that information. Opp. at 14. Of course, because no

[5] In the April 2014 Finding, the Service simply added the year "2013" to a statement made in the 1997 Finding. *See* AR20 at 2559. Much of the language in the April 2014 Finding is simply copied from the 1997 Finding. *Compare* AR102 *with* AR20.

such panel existed, this argument is inaccurate. TRAFFIC, a non-governmental organization that monitors wildlife trade, not CITES, did publish such a report in 2009, not 2013. AR38a at 3236-1. The TRAFFIC report cited two news articles that discussed Zimbabwean officials who were implicated in illegal rhino horn trafficking and a subsequent cover-up. *Id.* at 3236-20-21; AR37; AR38. It is unclear why the Service relied on a five-year-old rhino horn trafficking incident to raise concerns in 2014 over potential government involvement with elephant poaching.

Federal Defendants then argue that, in making the April 2014 Finding, the Service also relied on (1) a 2013 poaching incident in Hwange National Park; (2) a finding that poaching rates increased in Zimbabwe; and (3) a determination that the IUCN Report data were stale. Opp. at 14-15. The Service's failure to fully investigate and analyze all of these factual matters undermines the rationality of its decision.

In their Motion, SCI/NRA provided a detailed discussion of the Service's reliance on inaccurate reporting regarding the 2013 poaching incident. MSJ at 20-21. Not only did the Service fail to verify the accuracy of the information used in the finding, it did not address the fact that the hunting community played a pivotal role in apprehending the poachers. MSJ at 10.

Regarding the increase in poaching rates in Zimbabwe, the Service over-extrapolated the data. *See* MSJ at 30, 35; *infra* at Argument Section B (complete discussion of the MIKE/PIKE data). Moreover, elephant poaching is not a new concern for Zimbabwe or for Africa generally. In the 1997 Finding, the Service noted that certain "elephant populations have been affected by increased human populations and by drought. There were also high levels of poaching and management offtake which took place in these areas in the late 1980's." AR20 at 2558; *see also* April 2014 AR4 at 183-84 (discussion in 2007 of poaching concerns). Despite emphasizing poaching as a primary reason for its 2014 findings, the Service offered nothing, other than the

incorrectly reported 2013 Hwange poaching incident and the over-extrapolated MIKE/PIKE data, to demonstrate how and why hunting enhanced the survival of the species from 1997 to 2013, but not in 2014 or 2015.

For both 2014 findings, Federal Defendants argue that the Service did not rely on the IUCN Report population data, but "simply noted" that many of the surveys were outdated. Opp. at 12, 15, 16. Federal Defendants argue that SCI/NRA put too much weight on the Service's use of the IUCN Report. The Service's actions and the three enhancement findings prove otherwise.

The Service's reliance on the IUCN Report (subsequently admitted by the Service in the March 2015 Finding) and its misinterpretation of the data affected the Service's analysis of all the factors considered for the April 2014 Finding. Owing to the fact that the IUCN Report was one of only three new sources of data that the Service consulted – the Report, CITES documents, and inaccurate news articles of the 2013 Hwange poaching incident – the Service's reliance on the data is obvious. By starting with the conclusion that "the elephant population in Zimbabwe has declined from 84,416 elephants in 2007 to 47,366 elephants in 2012," the Service may have been justified in questioning the management plans, quota setting system, poaching levels, etc. *Id.* at 3822.[6] But, because the Service grossly misinterpreted that data, the starting point of its analysis was drastically different from reality. This, combined with the Service's other multiple errors, resulted in an analysis that was arbitrary and capricious. Thus, while not the only source of information on which the Service relied – an argument that SCI/NRA do not make – the

[6] If Zimbabwe's elephant population had plummeted nearly 50% in 5 years, the Service's concern might have been justified. However, Zimbabwe's 2013 population estimates, that the Service summarily rejected, were far more accurate than the Service's assumptions based on the IUCN data. Zimbabwe's elephant population is well above carrying capacity at 82,000 – 83,000, according to the most recent national survey. AR274 at 5854.

Service did rely significantly on the IUCN data. Federal Defendants are incorrect in arguing that the Service merely "noted that the IUCN's estimates were based on stale data." Opp. at 16.

In fact, in the March 2015 Finding, the Service itself confirmed that it did more than merely note the age of the IUCN data. "At the time the Service made its April and July 2014 findings, we ***relied heavily on population information*** in the [IUCN Report]." AR344 at 7262. Federal Defendants attempt to distance themselves from the Service's errors regarding the IUCN Report, but they cannot escape the Service's own words. The Service's inaccurate reliance on IUCN Report data contributed to arbitrary and capricious findings.

Federal Defendants incorrectly defend the Service's criticism of methodologies used for many of the IUCN Report surveys. In response to SCI/NRA's argument concerning the Service's incorrect statements regarding the survey methodologies, Federal Defendants argue that in the July 2014 Finding, "the Service explained its view that properly conducted aerial surveys (like the Hwange survey, AR 35), are more accurate than dung or sample counts . . ." and that the Service was simply describing the IUCN data. Opp. at 13 n.4; *see* MSJ at 29. While the Service did make statements to that effect in the finding, the Service was wrong.

Specifically, the Service stated in the July 2014 Finding that "[o]nly 304 'definite' animals were counted by aerial or ground counts, while the remaining 41,840 'definite' animals were counted through sample counts or dung counts, a less accurate methodology than properly conducted aerial surveys, and the remainder were what the IUCN report called 'other guess.'" AR206 at 4510. The Service then stated, "[t]he summary in the IUCN report indicates that, of recent surveys, only about 1% of the country has been covered by more reliable aerial or ground surveys for population estimates, while about 50% was covered by sample counts or dung

counts, a less robust methodology." *Id.*[7] First, as SCI/NRA previously explained, these statements are inaccurate. MSJ at 29. The point of classifying the surveys into the four different categories is to determine "the level of certainly that can be placed on a given estimate" regardless of methodology used. April 2014 AR4 at 37. Thus, the sample counts and dung counts listed as "definite" are not less reliable than the aerial total or ground total counts also classified as "definite." Even "other guesses" listed as "definite" constitute "the number [of elephants] actually seen." *Id.* at 38.

Second, the Service appears to misunderstand that sample counts are, in fact, a form of aerial and ground counts. Aerial and ground counts can be either direct counts or sample counts. Of the 41 total surveys included in the IUCN Report, 27 were conducted using an aerial sampling methodology. AR80. It is unclear how, according to the Service's statements, aerial and ground surveys are "more reliable" than sample counts, when sample counts are aerial and ground counts. Of course, dung counts must be conducted on the ground, and thus cannot be less reliable than ground counts, as the Service states. *See* April 2014 AR4 at 35 ("dung-counting techniques can provide estimates that are at least as accurate as those from direct methods, and more precise than those of aerial sample counts").[8] The Service apparently does not know how sample and dung counts are conducted. Nevertheless, in the Opposition, Federal Defendants again wrongly rely on the Service's inaccurate conclusions.

[7] The Service made similar statements in the March 2015 Finding, even after Dr. Dublin specifically explained that the Service made the statements in error. AR344 at 7262; AR256 at 5741-42. SCI/NRA's arguments apply to the 2015 statements as well.

[8] Additionally, in the 2007 IUCN Report, the number of elephants counted via direct aerial or ground counts was 236, lower than the 304 elephants counted in the 2013 IUCN Report. April 2014 AR4 at 185. The Service was untroubled in 2007 that such low numbers were counted by direct aerial or ground counts, but arbitrarily found the numbers unacceptable in 2014.

Third, Federal Defendants may attempt to justify the Service's conclusions by arguing that direct aerial and ground counts are more "proper" than sampling methodologies, and therefore should be used in Zimbabwe. *See* AR206 at 4510 (Service comparing "properly conducted aerial surveys" to the other "definite" surveys). This conclusion is betrayed by the fact that the 2007 ***Service-sponsored*** survey in Hwange National Park was conducted using a sample aerial methodology – a point that Federal Defendants completely confuse in their argument. *See* AR35 at 3117; Opp. at 13 n.4. SCI/NRA can only assume that the Service would not fund a survey that used a methodology that was less than proper, robust, and reliable.

Federal Defendants also argue that the Service's methodology-related statements were nothing more than the Service's effort to describe the IUCN Report. Opp. at 13 n.4. However, the Service's statements had only one purpose – to improperly cast doubt on the surveys that did not use aerial or ground total counts. Otherwise, the statements had no value to the Finding. Regardless, the Service inaccurately described the methodologies used in the IUCN Report.

Even if the Service only referenced the IUCN Report to note that most of its data was old, the record shows that the Service was wrong. In all three findings, the Service expressed concern about the age of many of the surveys. AR102 at 3821; AR206 at 4510; AR344 at 7262. The IUCN Report does indicate that "[h]alf of the estimates . . . are now older than 10 years . . . ." AR80 at 3627. As the chart reflects, from data gathered in 2012, 21 of 41 surveys were from 2002 or older; 20 of 41 were from 2003 or newer. The Service erroneously stated that "23 of 40 population estimates included in 2012 are older than 10 years." AR344 at 7262. Had the Service included the 2007 Hwange survey in its analysis, the balance would have tipped such that a majority of surveys were less than 10 years old. AR35. Replacing the 2001 Bubi Valley Conservancy survey with the 2013 survey would have provided more recent data. MSJ at 21-22.

The Service also improperly failed to assess the significance of the individual surveys. For example, had the Service bothered to look in its own files and included the 2007 Hwange survey in its analysis, it would have concluded that the actual number of elephants surveyed within the last 10 years greatly outnumbered the number cited from surveys a decade or older. The 20 surveys ten years or older counted a total of 6,105 elephants. Including the 2007 Hwange survey at 39,765 elephants, the elephants counted in the 21 surveys newer than ten years amounted to 85,684. AR80.[9] With the record analyzed as a whole, far more elephants had been counted within the last decade and should have been classified to exist "definitely" than the number inaccurately chosen by the Service.

Federal Defendants try to justify the Service's failure to include and analyze the 2007 Hwange survey in the July 2014 Finding (not to mention the April 2014 Finding), by arguing that it was "inadvertently omitted" from analysis because it was not in the IUCN Report. Opp. at 12. Federal Defendants do not explain why the Service failed to include the 2007 Hwange survey even though it was in the July 2014 AR. Unfortunately for Federal Defendants, they cannot hide behind the IUCN's error. The IUCN is not required to meet ESA and APA decision-making standards, but the Service is. The Service's omission of the 2007 Hwange survey from its analysis contributed to its arbitrary and capricious finding in July 2014.

Finally, in both 2014 Findings, the Service stated that "[s]everal areas that were covered in the current surveys (2006 – 2010) indicate that there has been a substantial decline in the population . . . ." This statement is not reflected in the IUCN Report. Directly compared to the

[9] Note that the total amounts in the summary table "are derived by pooling the variances of individual estimates . . . . As a result, totals do not necessarily match the simple sum of the entries within a given category." AR80 at 3627.

2007 IUCN Report,[10] five surveys that reflect a change were conducted between 2006 and 2010 and included in the 2012 IUCN Report. *Compare* April 2014 AR4 at 186 *with* AR80.[11] Of the five surveys, two showed an increase of a combined 4,358 elephants and three showed a decrease of a combined 536 elephants. *Id.* The Service incorrectly asserts the 2006-2010 surveys reflect a ***substantial*** decline.[12]

Misinterpretations, failure to properly analyze data, incorrect assessments of survey methodologies, and improper reliance on inaccurate data combined to collectively result in arbitrary and capricious findings. The Service's inappropriate use and analysis of the scientific data deprives it of any deference afforded to such decision-making. The Court should set aside the 2014 enhancement findings as in violation of the ESA and APA.

B. The March 2015 Enhancement Finding Arbitrarily Ignored or Misapplied Relevant Information

Despite obtaining much of the information it claimed it lacked for earlier findings – about the elephant population, benefits of sport-hunting, anti-poaching efforts – the Service continued to look for reasons to justify its decision not to make a positive enhancement finding. MSJ at 32-39. One of the most significant examples involves new population data from the Elephant Survey and correspondence from the chief decision-maker for the enhancement finding – Tim Van Norman – in which he stated that removing 500 elephants from a population of 100,000 is

[10] The 2007 version was the previous IUCN elephant database report prior to the 2012 IUCN Report.

[11] These surveys occurred in Gonarezhou National Park in 2009 (which has since been re-surveyed in 2013 at an increase), Chewore 4 in 2010, Malapati Safari Area in 2009, Sengwe Communal Land in 2009, and Sentinel & Nottingham in 2010.

[12] After receiving Dr. Dublin's second letter that explained the Service's incorrect claim, including discussion of other areas that have shown increases – those that cannot be compared directly from the two IUCN Reports – the Service removed this statement altogether from the March 2015 Finding. AR256 at 5740-41.

"not a problem." MSJ at 35-36. Federal Defendants argue that the document was really focused on the quality of the data and the impact of a lower population number, and that, by implication, Mr. Van Norman's statement was meaningless. Opp. at 20. Federal Defendants cannot overcome the context of the statement. In that correspondence, Mr. Van Norman responded to a question from a representative of the Assistant Director of International Affairs asking "what ***specifically*** ZPWMA would need to show us in order for us to ***lift the suspension.***" MSJ at 35, quoting AR228 at 4640 (emphasis added). The numbers Mr. Van Norman discusses respond to that question. Federal Defendants' post hoc rationalization that Mr. Van Norman was expressing concern over the lower population number and data quality does ***not*** respond to the request.

SCI/NRA appropriately argued that, in light of Mr. Van Norman's statement, the 82,000-83,000 population numbers from the Elephant Survey would "strongly support a positive enhancement finding." MSJ at 35. In response, Federal Defendants attempt to deflect attention from the substance of Mr. Van Norman's statement by claiming that SCI/NRA are trying to "extrapolate" from the statement a "hard-and-fast rule." Opp. at 20. This attempt fails because, as evidenced by Mr. Van Norman's correspondence, the Service wanted census data. The Service then failed to look at the data it received in the way Mr. Van Norman said was necessary.

Mr. Van Norman's statement is even more significant if the offtake and quota were lower than 500, as SCI/NRA asserted. MSJ at 36. Federal Defendants did not even respond to SCI/NRA's point that the actual hunting offtake is much less than the quota (possibly as low as 160 elephants a year). MSJ at 36 & n.17. As SCI/NRA previously explained, by analyzing the numbers based on a population of 82,000 elephants, an offtake of up to 380 elephants would be "not a problem" and would be grounds for "lift[ing] the suspension." MSJ at 36.

Federal Defendants cited the quota reported by the CITES website to respond to SCI/NRA's argument that the 2015 quota was 380, not 500. Opp. at 21. Federal Defendants' supporting citation, AR7 at 1944, simply says that the 2014 quota is limited by the CITES limit of 500 elephants. While the document SCI/NRA cited does establish a proposed quota of 380 (reduced based on on-the-ground research and data), the Service offered no justification for its assumption that the actual quota would be 500. Once again, the Service failed to seek out critical information. Instead, the Service assumed that the quota would remain at 500 despite evidence of Zimbabwe's proposal to lower it. AR344 at 7266. Federal Defendants attempted to excuse this error but did not reference anything in the AR to support the Service's reliance on the current CITES website. Opp. at 21. This Court should disregard Federal Defendants' post hoc rationalization of the Service's disregard of the evidence of a possible reduction in the quota.

Another example of the Service disregarding relevant information to reach the desired conclusion involves the carrying capacity of elephants in Zimbabwe and possible lower-than-expected population numbers. The Service used the Pan African Aerial Elephant Survey ("Elephant Survey") to conclude that the 6% decline from 2001 to 2014 represented in the survey is "troubling." The Service suggested that the elephant population should have been above 139,000 in 2014. AR344 at 7263. The Service gave no explanation for why it is troubling to have a 6% decline over the course of 13 years or why a 5% per annum growth is necessary. The Service also completely disregarded the fact that the carrying capacity for elephants in Zimbabwe is only 43,000 – nearly 100,000 less than what the Service hoped the population would be in 2014. *See* AR11 at 2078 (1989 Elephant Management Plan stated that 43,000 elephants is the desired level – "a compromise between conservation of habitats and biological diversity and the tourist industry."); AR325 at 7127 (2002 email from Service employee stated

that the "carrying capacity of the elephant range is thought to be in the 42,000-45,000 range."); AR165 at 4246 ("'Zimbabwe can support at most 50 000 elephants on the land available in the country. The effects of exceeding the ecological carrying capacity for elephants are glaringly evident – habitats are being destroyed, carrying capacity for wildlife in general is being reduced and elephants are dying of poverty. An ecological disaster is imminent.'"). The Service apparently based its findings on the premise that Zimbabwe should support an overpopulation of elephants to the detriment of the elephants, other wildlife, and their habitat.

Federal Defendants misrepresent SCI/NRA's argument regarding the Service's interpretation of the MIKE/PIKE data. *See* Opp. at 12-13, 20. SCI/NRA do not argue that the Service used that data as an exclusive "basis" for the July 2014 Finding, or any of the findings. Rather, like other flaws committed by the Service in its decision-making process, the Service's over-extrapolation of the data contributed to the arbitrary determinations. MSJ at 30. The two MIKE sites study elephant take in only a small portion of Zimbabwe. Even though Dr. Dublin warned the Service after the April 2014 Finding that applying the PIKE data across Zimbabwe constituted bad science, the Service repeated the misuse of the data in the July 2014 Finding. *Id.* The impact of the Service's error is further exacerbated by the fact that the jump from 24% to 67% occurred in only one of the two MIKE sites in Zimbabwe. AR42a at 3334-14. For the other MIKE site, the proportion of illegally killed elephants decreased by 19% and was the lowest it had been in 4 years. *Id.* The Service ignored the fact that in 50% of Zimbabwe's MIKE sites, evidence of poaching decreased and instead extrapolated the poaching rate from one small area to the entire country, reaching the conclusion of a nationwide increase in poaching.

Federal Defendants cannot explain away the Service's errors. In both 2014 findings, the Service stated, "the percentage of illegally killed elephants (PIKE) ***in Zimbabwe*** was circa 24%,

whereas in 2011 that number jumped to 67%." AR102 at 3821; AR206 at 4511. Nowhere in either finding did the Service explain that the PIKE data came from one small area of Zimbabwe or that the nationwide proportion of illegally killed elephants in Zimbabwe could have been drastically different from the numbers collected at the single MIKE site. Citing a January 2014 Briefing Paper, Federal Defendants argue that the Service "clearly understood that the data came from particular MIKE sites, not from a nationwide survey." Opp. at 13 *citing* AR79 at 3624. The Briefing Paper primarily demonstrates one of two scenarios occurred: (1) the Briefing Paper authors knew the relevance of the PIKE data, but the 2014 findings author did not; or (2) the Service purposefully over-extrapolated the PIKE data when justifying its two 2014 findings.

Federal Defendants also cannot defend the Service's failure to correct mistakes identified by Dr. Holly Dublin. Federal Defendants argued that the Service promised it "would look into" Dr. Dublin's concerns regarding its use of the PIKE data after the April 2014 Finding. Opp. at 13. In response to Dr. Dublin's first letter, a Service employee did write that the Service would look into her concern. AR151. As discussed above, however, the July 2014 Finding repeated, word-for-word, the same incorrect application of the PIKE data that was in the April 2014 Finding – the only difference being that the Service added a citation to indicate the source of its information. *Compare* AR102 at 3821 *with* AR206 at 4511. The Service did not address the concerns raised by Dr. Dublin.

It was not until Dr. Dublin expressed her concerns about this data in a second letter, which she also sent to the government of Zimbabwe, that the Service attempted to fix its errors. AR256 at 5742-43. As it had done for other errors, the Service then attempted to back away from its use of the MIKE/PIKE data in the March 2015 Finding. The Service cited the data with confidence when it appeared useful for the Service's purposes as a clear indication of increased

poaching and a population in decline across Zimbabwe. AR102 at 3821; AR206 at 4511. Upon finding that the data did not necessarily demonstrate an increase in poaching, the Service conditioned its reliance on the data with skepticism in the March 2015 Finding: "it appears that there was an increase in elephant poaching in 2012, but the poaching level ***might have*** declined in 2013 to below the 2011 level." AR344 at 7263. As the record indicates, poaching levels had certainly declined in the MIKE sites. *See* SC65 Inf.1, p.3.[13] For one MIKE site, the PIKE declined from 79% in 2012 to 40% in 2013; for the other MIKE site, the PIKE declined from 27% in 2012 to 22% in 2013. *Id.*

In the March 2015 Finding, the Service stated that the "PIKE numbers . . . showed an increase in 2012 to 0.79 . . . and 0.27." AR344 at 7263. This statement is incorrect. In the Nyaminyami district, PIKE numbers decreased significantly from 0.81 in 2011 to 0.27 in 2012, the lowest PIKE number for the site since at least 2003 (data in chart only dates back to 2004). SC65 Inf.1, p.3. The AR offers no explanation for the Service's incorrect statement.

In an attempt to direct the Court's attention away from these mistakes, Federal Defendants suggest that the PIKE numbers undermine SCI/NRA's argument regarding the benefits of hunting to anti-poaching efforts. Opp. at 20. Instead, the PIKE data undermine the credibility and quality of the Service's findings. Federal Defendants provide no support for an argument that the importation bans caused a decrease in poaching in one of the MIKE sites, nor does the record indicate that elephant hunting occurs at the site. *Id.* Federal Defendants grasp at straws in an attempt to hide the Service's numerous errors regarding the MIKE/PIKE data.

[13] Although directly cited in the March 2015 Finding, SCI/NRA are unable to find this document in the AR. The document is available at https://cites.org/sites/default/files/eng/com/sc/65/Inf/E-SC65-Inf-01.pdf.

The Service also inaccurately addressed information concerning the benefits from hunting and Federal Defendants fail to explain away these errors. For example, SCI/NRA referenced the benefits delivered by the communal CAMPFIRE program, even if this program cannot address all lands in Zimbabwe. MSJ at 38. Federal Defendants rationalized that "recent estimates from the Pan African Aerial Elephant Survey show significant population declines in areas with communal lands." Opp. at 21. Federal Defendants cannot mask the fact that the March Finding stated something different: that the Survey results "appear to confirm that elephant populations in [two areas] have decreased significantly. These areas include communal lands." AR344 at 7270-71. The Finding provided no specificity about whether the amount of communal lands in the two referenced areas was significant enough that it would be expected to offset whatever is causing the declines. Federal Defendants could not provide the specificity that the Finding lacked. Neither the Service nor Federal Defendants offered any argument to refute the fact that the CAMPFIRE program and other conservation benefits of sport-hunting do provide a source of "enhancement" to the survival of Zimbabwe's elephants, especially in light of the newly-confirmed, strong population numbers.

Federal Defendants simply cannot defend the rationality of the Service's decisions. The strong population numbers and limited offtake, the benefits of U.S. hunters for conservation programs and their on-the-ground presence that deters poaching, the existence of which the Service does not dispute (AR344 at 7271), all strongly support a positive enhancement finding. In other words, weighing these benefits with the lack of a "problem" with the hunting offtake (*e.g.,* something less than 500) in light of the 82,000 population number shows that the Service was arbitrary in determining that it was unable to make a positive enhancement finding.

C. The Service Applied an Illegal Enhancement Standard and Used Prohibited Guidelines

As discussed in SCI/NRA's Motion, the Service violated the ESA and APA by applying illegal standards in all three enhancement findings. MSJ at 39-49. The Service arbitrarily required that it find that sport hunting meets a higher standard – ensure the survival of the species – instead of enhance it, which is all the law requires. MSJ at 45-49. In response, Federal Defendants mostly argue that the factors the Service reviewed did not change from 1997 to 2014-15. Opp. at 23-24. This point is irrelevant. SCI/NRA's argument focuses not on what the Service ***reviewed*** but instead on the nature of the 2014-2015 ***standard***, which was to require that sport-hunting essentially ensure the survival of the elephants in Zimbabwe. Enhance and ensure are very different standards. Enhancement, properly understood, requires an improvement in the survival of the species. MSJ at 45. The Service's illegal and arbitrary "ensure" standard is the crux of the matter, not the factors considered (*e.g.,* population, management plans), as Federal Defendants argue.

SCI/NRA cited statements that confirmed the meaning of enhance in the 1997 Finding. MSJ at 46. Federal Defendants argue that a statement in the preamble of a 1992 Federal Register notice, finalizing an amendment of the elephant Special Rule, referred to a CITES requirement, not an ESA requirement. Opp. at 23. But that preamble demonstrates that the Service specifically intended to include the CITES requirement in the amendment of the Special Rule, making that requirement relevant to the meaning of the current enhancement requirement:

> CITES requirements included a determination that the killing of elephants for sport-hunting enhances the survival of the species by providing financial support programs for elephant conservation. ***This requirement is retained in the final revised special rule*** for the import of sport-hunted trophies from threatened populations that are on CITES appendix I.

57 Fed. Reg. 35473, 35485 (Aug. 10, 1992) (emphasis added).

SCI/NRA acknowledges that the 1995 Federal Register notice SCI/NRA referenced did involve guidelines concerning non-detriment findings. Opp. at 23. The 1995 notice is still relevant because part of its analysis involved "whether the killing of the animals whose trophies are intended for import would ***enhance the survival of the species***." 60 Fed. Reg. 12969, 12970 (Mar. 9, 1995) (emphasis added). Moreover, Federal Defendants did not respond to SCI/NRA's point about the Service's own statement, in a 2010 letter denying an elephant import permit, about the meaning of "enhancement." MSJ at 46.

SCI/NRA also explained that the Service improperly used withdrawn internal guidelines. *Id.* at 41-45. Federal Defendants incorrectly contend that SCI/NRA did not include this claim in their Complaint. Opp. at 24. SCI/NRA made several allegations in their Complaint regarding the illegal enhancement standards applied by the Service, including in Count II. 3rd Am. Compl., Dkt. 82, ¶¶ 100-106; *see also*, *id.,* ¶ 57. SCI/NRA are not attempting to amend their complaint through their brief. Instead, SCI/NRA's Motion simply explains and clarifies one of their claims. *See Coleman v. Pension Benefit Guaranty Corp.*, 94 F. Supp. 2d 18, 24 n.8 (D.D.C. 2000) (Court held that plaintiffs could argue a different theory for claim in opposition brief because the complaint identified the prohibited transaction and general nature of the violation).

All three enhancement findings show that the Service used the withdrawn guidelines as a basis for its determinations. While this Court has held that the Service did not use the guidelines in other circumstances, the findings at issue in this case show more than "some overlap" between the requirements imposed by the Service and the illegal guidelines. *See Marcum v. Salazar*, 810 F.Supp.2d 56, 72 n.3 (D.D.C. 2011), *vacated on other grounds* 694 F.3d 123 (D.C. Cir. 2012). In all three findings, the Service evaluated the same factors that it promised and were ordered not to use when it withdrew the internal guidelines.

D. The Service Failed to Conduct Required Rulemaking and Cannot Retroactively Apply the July 2014 Finding to Correct Earlier Errors

1. The Enhancement Findings Are Rulemakings, Not Adjudications

SCI/NRA explained that the Service needed to conduct rulemaking in adopting the enhancement findings. MSJ at 49-50. Federal Defendants erroneously argue that the enhancement findings qualify as informal adjudications because they are the equivalent of licensing or permit approvals. In doing so, Federal Defendants fail to acknowledge the major differences between the approval of licenses/permits and the enhancement decisions at issue in this litigation. First, a license or permit is applied for by and granted to a single entity, based on a specific application previously submitted by that entity. If granted, the permission authorized by the license or permit has no binding impact on license/permit applications submitted by entities other than the original applicant. In contrast, the enhancement findings did not respond to a specific request made by any identifiable individual or entity. Instead, those findings applied generally to all who sought to import elephants from Zimbabwe from the date that the findings were announced and into the future.

> Two principal characteristics distinguish rulemaking from adjudication. First, adjudications resolve disputes among specific individuals in specific cases, whereas rulemaking affects the rights of broad classes of unspecified individuals. *See United States v. Florida E. Coast Ry.,* 410 U.S. 224, 244–45, 93 S.Ct. 810, 820–21, 35 L.Ed.2d 223 (1973); *Ford Motor Co. v. FTC.,* 673 F.2d 1008, 1010 (9th Cir.1981), *cert. denied* 459 U.S. 999, 103 S.Ct. 358, 74 L.Ed.2d 394 (1982). Second, because adjudications involve concrete disputes, they have an immediate effect on specific individuals (those involved in the dispute). Rulemaking, in contrast, is prospective, and has a definitive effect on individuals only after the rule subsequently is applied.

Yesler Terrace Cmty. Council v. Cisneros, 37 F.3d 442, 449 (9th Cir. 1994) ("The sole effect of HUD's decision was to deprive a broad category of people of the right to an informal grievance hearing prior to eviction, and this effect had legal consequences for yet-to-be-identified

individuals only prospectively. These are the effects of a rule, not of an adjudication."); *see also Marcum*, 810 F. Supp. 2d at 72; *City of Arlington, Tex. v. F.C.C.,* 668 F.3d 229 (5th Cir. 2012). The enhancement findings require rulemaking because they impact the general ability of all individuals to import legally hunted elephants from Zimbabwe into the United States from the date the importation ban decision is published and into the future.

Federal Defendants wrongly cite *Franks v. Salazar* to support their inaccurate characterization of the enhancement findings as adjudications. Opp. at 26. Federal Defendants' reliance on *Franks* fails because that case involved the Service's denial of specific importation permit applications. 816 F. Supp. 2d 49, 59 (D.D.C. 2011). In *Franks*, this Court concluded that the permit application denials were adjudications because they affected no other applications. "These decisions do not bind future permit applicants and do not even bar the specific plaintiffs in this case from filing new applications. Thus, they simply are not "rules" under the APA, since they are not intended to have "future effect." *Id.* quoting 5 U.S.C. § 551(4). In contrast, the enhancement findings at issue in this case affect every hunter seeking to import an elephant.

Based on its own analysis in *Franks,* this Court should not find the general importation decisions at issue here to qualify as adjudications.[14] In contrast to the individual permit application decisions addressed in *Franks*, the importation ban decisions that SCI/NRA challenge in this case apply to all individuals who would, after April 4, 2014 (or July 30, 2014, or March 26 2015), seek to import legally-hunted elephants from Zimbabwe. The enhancement

[14] The Service does not currently require permits for hunters to import elephants from CITES Appendix II countries, including Zimbabwe. Consequently, the Service has no opportunity to consider individual applications and makes only a general, broad decision governing the importation by everyone seeking to import such an elephant. As a consequence, none of the requirements for adjudication are present.

findings and importation ban decisions have significant "future effect" that disqualify them as adjudications.

Federal Defendants cite inapposite cases to support their argument. With one exception, their cases expressly apply to permit and licensing decisions affecting individual entities. Opp. at 26 (citing *Nat'l Wildlife Fed'n v. Marsh,* 568 F. Supp. 985, 988 (D.D.C. 1983)) (permit issued by the Secretary of the Army to a company for permission to build an oil refinery); *Abenaki Nation of Mississquoi v. Hughes*, 805 F. Supp. 234 (D. Vt. 1992), *aff'd* 990 F.2d 729 (2nd Cir. 1993) (permit granted by the Army Corps of Engineers to a village to raise the spillway elevation of a generating station); *City of St. Paul v. FAA*, 865 F.2d 1329 (table), 1989 WL 3871 (D.C. Cir. 1989) (order by the FAA authorizing a six-month test involving an airport runway).

Only one of Federal Defendants' cases even remotely resembles the facts of this case. A closer examination of that case, however, demonstrates differences. In that case, the D.C. Circuit considered whether FAA advisory circulars that established testing requirements and product specifications for items used at airports qualified as informal adjudications. *Safe Extensions Inc. v. FAA*, 509 F.3d 593 (D.C. Cir. 2007). Despite the general applicability of the circulars, the FAA did not treat these documents as orders addressing the conduct of the general public. Instead, the FAA e-mailed the draft version of the challenged circular to a few select companies that made or installed a product covered by the circular, solicited comment only from these select businesses, and communicated their comment responses only to these few entities. *Id*. at 596-97. The FAA's focus on very specific companies, rather than on the general public, made the advisory circular much more like an individual permit or license than a general rulemaking decision. For that reason, the D.C. Circuit's decision to classify the advisory circular as an

adjudication offers this Court little guidance about how to classify the Zimbabwe enhancement findings.

Contrary to Federal Defendants' arguments, SCI/NRA's challenge to the enhancement findings does not involve "licensing," "the grant of a license," "a permit," or to a decision "to issue permits." Federal Defendants incorrectly try to fit a square peg in a round hole by suggesting that enhancement findings "are designed to adjudicate disputed facts in particular cases." Opp. at 27. Enhancement findings are determinations of a general nature because they address the legality of importation of all members of a species from a country, regardless of the circumstances behind the importation. The Service does not individually consider variation in the status of the particular species' populations from which the hunted animal was taken, specific hunting conditions in different locations, qualifications of the specific importer, etc. Enhancement findings for elephants in Zimbabwe are broad-based decisions that extend to the general hunting public – not to any specific applicant, permittee or licensee.

This case involves the Service's decision to impose a blanket ban on the importation of all sport-hunted elephants from Zimbabwe from the publication date into the future. The nature and impact of these decisions do not fit the judicial criteria for adjudications. Instead, the general and future application of enhancement findings qualify them as rulemakings. As a result, the Service was obligated to comply with APA procedural requirements and to provide notice and an opportunity for meaningful comment. Based on the Service's failure to meet these requirements, the Court should set aside the enhancement findings.

2. The Failure to Conduct Rulemaking Was Not Harmless Error

The Service's failure to conduct notice and comment rulemaking for the three enhancement findings was not harmless error, as Defendant-Intervenors contend. Had the

Service complied with their APA requirements, SCI/NRA and their members would have been spared some of the harms they suffered as the result of the Service's illegal actions. Defendant-Intervenors, in suggesting that SCI/NRA "in all likelihood" "had actual notice" of the Service's final decisions to ban importation of elephants (D-I Opp. at 3, 6-7), misstate the facts and fail to address the significance of the APA notice and comment requirements. 5 U.S.C. § 553(b).

Defendant-Intervenors argue that SCI/NRA "had actual notice of both the April 4 and July 22, 2014 Findings." D-I Opp. at 3.[15] SCI/NRA had no notice of the April 2014 Finding until receiving a call from the Director of the Service on the afternoon of April 3, 2014, the day before the Service implemented the ban. AR90 at 3661. Any so-called "notice" SCI/NRA had of the July 2014 and March 2015 findings was based solely on the information contained in the preceding findings (*i.e.*, the April 2014 and July 2014 findings, respectfully). In contrast to proper rulemaking procedures, the Service did not publish any decision-making documents for the public to analyze and upon which to respond. Instead, SCI/NRA had no notice of, or opportunity to meaningfully comment on, any proposed findings, as would be required under notice and comment rulemaking. The Service's failure to follow these procedures deprived SCI/NRA of their statutorily mandated opportunity to argue against the Service's proposed findings, including all of the Service's numerous scientific and analytical errors.

In addition, the Service would have published the proposed finding well before publication of any final version. Under such circumstances, SCI/NRA members would have utilized their knowledge of a potential ban in making their decisions about whether to book and/or proceed with elephant hunts. The Service was well aware that several hunting

[15] Contradictorily, Defendant-Intervenors later in their opposition assert that they were deprived of the same notice and comment opportunities they assert SCI/NRA had. D-I Opp. at 9-10.

organizations held their annual conventions during January and February of each year, at which many hunts are booked. Despite recommendations from some Service personnel that advance notice of the importation bans be announced prior to these conventions, the Service chose to wait to announce their final decision until the afternoon before the importation ban went into effect – less than two months after the hunting conventions had been held. AR90 at 3661; MSJ at 20.

In fact, several SCI/NRA members traveled to Zimbabwe prior to the imposition of the ban only to find that by the date of their return to the U.S., they could no longer bring home the elephants that had been importable when they left. Grieb Decl., ¶7, Dkt. 87-6; Rhyne Decl., ¶7, Dkt. 87-8; Whaley Decl., ¶10, Dkt. 87-10; MSJ at 62. For those individuals alone, the Service's compliance with APA requirements for the publication of proposed rules would have at least given them the opportunity to make informed decisions about their hunting plans. This failure to comply with those requirements caused them, and SCI/NRA, significant harm.

3. The Service Cannot Retroactively Apply the July 2014 Finding to Correct Errors in the April 2014 Finding

Federal Defendants defend both the April 2014 and the July 2014 findings with unsupported assumptions about the Service's ability to engage in retroactive decision-making in order to correct previous rulemaking errors. Based on the erroneous premise that enhancement findings are adjudications, Federal Defendants argue that such findings can be applied retroactively. Opp. at 28-30.[16]

[16] Federal Defendant's attempt to invoke the "foreign affairs" exception to notice and comment rulemaking provided in 5 U.S.C. §553(a) makes no sense. Opp. at 28 n. 9. The Service has not applied this exception when adopting other rules relevant to the importation of elephants. For example, the Service complied with rulemaking procedures by seeking public comment when proposing a rule to require permits for the importation of all African elephants listed on CITES Appendix II. *See* 80 Fed. Reg. 45165 (July 29, 2015). This rule has not been finalized.

As explained above, the enhancement findings do not qualify as adjudications. For this reason, Federal Defendants must demonstrate some other authority for the Service's attempt to retroactively apply the July 2014 Finding to remedy the legal errors of the April 2014 Finding.

Federal Defendants contend that, to give the July 2014 decisions retroactive impact, all the Service needed to do was to state that the July 2014 decision "superseded" the April 2014 decision. *Id.* at 29. Federal Defendants incorrectly suggest that SCI/NRA have taken the position that a superseding regulation can *never* apply retroactively. *Id*. at 28. Instead, SCI/NRA argue that labeling alone cannot authorize retroactive effect. An agency may retroactively apply a regulation if a statute or regulation gives the agency that authority:

> Retroactivity is not favored in the law. Thus, congressional enactments and administrative rules will not be construed to have retroactive effect unless their language requires this result. … By the same principle, a statutory grant of legislative rulemaking authority will not, as a general matter, be understood to encompass the power to promulgate retroactive rules unless that power is conveyed by Congress in express terms. … Even where some substantial justification for retroactive rulemaking is presented, courts should be reluctant to find such authority absent an express statutory grant.

Bowen v. Georgetown Univ. Hosp., 488 U.S. 204, 208-09 (1988) (citations omitted); *see also Arkema Inc. v. EPA*, 618 F.3d 1, 7 (D.C. Cir. 2010).

SCI/NRA previously explained that the enhancement findings should have been adopted through APA rulemaking and therefore cannot be applied retroactively. MSJ at 25-26. SCI/NRA explained that Section 4(d) of the ESA (16 U.S.C. § 1533(d)) and the elephant Special Rule do not expressly grant the Service the authority to promulgate retroactive regulations and that APA rulemaking authority (5 U.S.C. § 551(4)) only allows adoption of rules with "future effect." Federal Defendants have not cited any statutory or regulatory language to provide the Service with the authority to regulate with retroactive impact.

The three cases that Federal Defendants cite in support of the Service's ability to impose

retroactive importation further undermine their claim that the Service can retroactively ban the importation of elephants. These cases all demonstrate that statutory or regulatory authority to retroactively regulate is a prerequisite to such action. In two of the cases, the courts cited the express retroactive authority granted to the IRS by the Internal Revenue Code. *See Dixon v. U.S.*, 381 U.S. 68, 71 (1965); *see also U.S. v. Lavi,* 2004 WL 2482323 *5 (E.D. N.Y. Sept. 23, 2004). In the third case, a district court, in reviewing a request for retroactive application of a new criminal sentencing statute, explained, "[W]here a newly enacted statute is silent regarding its own retroactivity, the statute only applies prospectively to conduct occurring on or after the date of its enactment." *U.S. v. Jones,* 2010 WL 7697509 *1 (W.D. Pa. Oct. 18, 2010).

Because nothing in the ESA, its regulations, or the APA expressly affords the Service the authority to retroactively regulate the importation of elephants, the Service could not take action to affect past conduct and could not apply the July 2014 Finding retroactively, much less to cure the illegalities of the April 2014 Finding.

Even if this Court were to assume, as Federal Defendants appear to suggest, that in the absence of statutory or regulatory authority, past agency conduct influences whether the Service has the authority to regulate retroactively, nothing in the Service's previous actions supports a retroactive application of the July 2014 Finding. Each of the six decision documents that Federal Defendants cite are ***non-detriment findings***, applicable to species listed on CITES Appendix I. Opp. at 27, citing April 2014 ARs 49, 50, 51, 57, 62, and 67 (Tanzania non-detriment findings for years 2008-2013). The importation of Appendix I elephants cannot be carried out without individual import permits issued by the Service. As indicated above, the permit application process for CITES Appendix I species is quite different than the process for importing CITES Appendix II species for which no permit is required. The Service's process for deciding on

permit applications more closely resembles the criteria for adjudications, while importation decisions where no permits are required bear none of the characteristics of adjudications. As elephants in Zimbabwe are listed on CITES Appendix II, these examples offer nothing to inform this Court as to whether the Service had authority to make determinations concerning CITES Appendix II species retroactively.[17]

If it has any persuasive value for the Court's determination, the Service's own conduct immediately following the April 4, 2014 announcement of the importation ban demonstrates that the Service itself recognizes that enhancement findings should not be given retroactive effect. The April 2014 AR shows that the Service never intended for the Zimbabwe enhancement finding to be applied retroactively. E-mails to and from Service personnel in the weeks after the Service announced the April 4, 2014 importation ban show that the Service imposed the ban without first verifying the date upon which Zimbabwe's elephant hunting season commenced. These e-mails revealed that Service personnel had questions about whether Zimbabwe's hunting season did not begin until May 2014. April 2014 AR227 at 3144-3145. Upon confirming that Zimbabwe's hunting season started on January 1, 2014 and that, as a result, their decisions would prohibit the importation of elephants legally taken prior to announcement of the ban, the Service revised the April 2014 Finding to apply prospectively only – from April 4, 2014 into the future. AR102 at 3818. Presented with the opportunity to give the April 4, 2014 decision a retroactive effect, the Service purposely chose not to do so.

[17] In addition, although the Service may not announce their non-detriment findings for Tanzania until after January 1st of the applicable year, these decisions do not supersede any previous decisions as each non-detriment finding expires on December 31st of the year in which it is made. See, e.g. April 2014 AR67 at 1412. For this reason, when the Service makes its non-detriment decision for any particular year, there is no existing non-detriment finding in effect.

The Service lacked the authority and justification to use the July 2014 Finding to retroactively replace the April 2014 Finding. For these reasons, the Service should not be permitted to use the July 2014 Finding to remedy errors that it made in the April 2014 Finding.

E. The Service Illegally Failed to Comply with Rulemaking Requirements When It Modified the Special Rule's Enhancement Finding Requirements

SCI/NRA's Motion explained that the Service failed to conduct proper APA rulemaking when it modified the Elephant Special Rule by choosing to retain the enhancement requirement after the purpose behind imposing the requirement disappeared. Specifically, the Service failed to adequately explain its decision to maintain the enhancement requirement after it was eliminated from CITES in 1994, never gave proper notice of the rule modification, and failed to give the public an opportunity to comment on the change. MSJ at 51-55.

Federal Defendants offered little response to these arguments. They claimed that 1997 Federal Register Notice *did* adequately explain why the Service retained the enhancement requirement. Opp. at 34. But a review of the Federal Register notice reveals that Federal Defendants' account is inaccurate. The 1997 Federal Register notice explained ***what*** the Service intended to accomplish in making enhancement findings, but not ***why*** the Service found it necessary to retain an enhancement requirement in spite of the fact that CITES had withdrawn it:

> All these conditions will continue to apply after the Appendix II listing for the elephant populations of Botswana, Namibia, and Zimbabwe enters into effect on September 18, 1997. In making the required enhancement findings, the Service reviews the status of the population and the total management program for the elephant in each country to ensure the program is promoting the conservation of the species.

62 Fed. Reg. 44,627, 44,633 (Aug. 22, 1997).

As explained in SCI/NRA's Motion, the Service included the enhancement of survival requirement in the Special Rule for elephants on August 10, 1992, for the sole purpose of

matching a CITES resolution that imposed the same obligation. MSJ at 51, citing 57 Fed. Reg. 35473, 35485**Error! Bookmark not defined.**. In 1994, CITES withdrew the enhancement finding requirement, which eliminated the Service's rationale for imposing an enhancement requirement. The Service's 1997 affirmative decision to continue to impose the requirement constituted a change in the requirement and thereby a change in the rule. *Id.* at 51-52; *see also* 62 Fed. Reg. 44,627, 44,633 (Aug. 22, 1997). The Service had the obligation to explain that change but never did.

Even if the Court determines that the language in the 1997 Federal Register notice describing the Service's retention of the enhancement requirement qualifies as an "explanation," that language is not an "adequate" explanation. Courts routinely find that mere conclusory statements do not satisfy the APA's adequate explanation requirement. *Am. Min. Cong. v. E.P.A.*, 907 F.2d 1179, 1188-89 (D.C. Cir. 1990) (remanding rule because the conclusory statements provided by the EPA did not articulate a rational connection between the data it relied on and its final rule); *see also Milk Indus. Found. v. Glickman*, 949 F. Supp. 882, 894 (D.D.C. 1996) ("[A]n agency must articulate why it has exercised its discretion in a particular way and provide an adequate explanation for its action. Mere conclusory statements are not enough.") (citing *Motor Vehicle Mfrs. Ass'n. v. State Farm Mutual Auto Ins. Co.,* 463 U.S. 29, 48–49 (1983)). The Service's broad statement that enhancement findings ensure that the country of export "is promoting the conservation of the species" is conclusory, and therefore inadequate.

At the very least, the Service's explanation should satisfy the requirements for rulemaking included in Section 4(d) of the ESA. 16 U.S.C. § 1533(d). In accordance with this section, the Service may only promulgate rules for species listed as "threatened" that are necessary and advisable to the conservation of the species. *Id*. Nothing in the Service's 1997

alleged "explanation" demonstrated why the enhancement requirement is "necessary" or "advisable" for African elephants listed on CITES Appendix II.

Federal Defendants also claim that the enhancement requirement should be upheld because CITES allows countries to enact "measures that are more protective of wildlife than the specific provisions of CITES." Opp. at 35. Whether or not this permission would be relevant to elephant importation, the provisions of CITES do not relieve the Service of its obligations under the ESA and APA to provide an adequate, rational explanation of why maintaining the enhancement requirement is necessary and advisable for the conservation of the species.

Ignoring the obvious impact of the changes occasioned by the August 1997 Federal Register Notice, Federal Defendants claim that SCI/NRA failed to demonstrate how the Service passively modified the Special Rule. Opp. at 35. The Service imposed a requirement for those who seek to import elephants and then later purposely modified the rationale behind that requirement. If a regulation requires an adequate explanation for its requirements and the agency revises that explanation, the requirement – and therefore the rule – has been changed and that change must adhere to APA requirements.

In addition to failing to provide an adequate explanation for the change in the Special Rule, the Service deprived the public of proper notice and an opportunity to comment on the rule change. The notice that included the revision of the enhancement finding was in a Federal Register notice, but did not announce to the public that they could comment on changes to the importation requirements for elephants, nor did it solicit comments on those importation requirement changes. The notice's title "Changes in List of Species in Appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora" gave no

indication of changes in importation requirements. The request for comments in the notice very specifically focused only on the change to CITES Appendix listings for specific species:

> This document announces decisions by the Conference of the Parties to CITES on amendments to Appendices I and II, and repeats a previous request (62 FR 31054) for comment on whether the United States should enter reservations on any of the amendments.

62 Fed. Reg. 44627 (Aug. 22, 1997). The Federal Register notice did not fulfill the Service's notice and comment obligations for the change in enhancement requirements. Due to these errors, the Court should set aside the Special Rule and the three enhancement findings.

F. The Service Never Overcame the Section 9(c)(2) Presumption that Sport Hunting Enhances the Survival of Elephants in Zimbabwe

As explained in the Motion, SCI/NRA's argument that the Service failed to apply the Section 9(c)(2) presumption is straightforward. MSJ at 55-61. Section 9(c)(2) creates a presumption that the non-commercial import of a species that is on Appendix II of CITES and is not listed as endangered (such as Zimbabwe's elephants) satisfies any statutory and regulatory condition on that import. SCI/NRA is not arguing, as Federal Defendants seem to believe, that Section 9(c)(2) prevents the Service from imposing any conditions on the import of such wildlife. Instead, the argument is premised on the presumption, under the plain language of the statute, applying to "any regulation issued pursuant to this chapter [*i.e.,* the ESA]." As the elephant Special Rule is a regulation issued under the ESA (adopted after notice and comment rulemaking, codified in the Code of Federal Regulations, set out the public's rights and obligations, etc.), the presumption applies to the Special Rule. It follows that the same regulation that creates the condition and invokes the presumption cannot rebut the presumption. Federal Defendants' attempts to excuse their failure to rebut the presumption all fail.

Without explaining why the plain meaning of the statute should not apply, Federal Defendants first claim that they have "interpreted" Section 9(c)(2) to create a presumption that a regulation such as a special rule can overcome. Opp. at 36-37. This so-called "interpretation" ignores that the presumption applies to the statute and "any ***regulation*** issued pursuant to [the ESA]." 16 U.S.C. § 1538(c)(2) (emphasis added). *See* MSJ at 56. Federal Defendants' Opposition acknowledges that the Special Rule is a regulation, explaining that the Service can rebut the presumption through "the promulgation of a special protective ***regulation*** pursuant to § 4(d) of the Act, 16 U.S.C. § 1533(d)." Opp. at 36 (emphasis added).

The cases that Federal Defendants cite do not support this interpretation, except in unpersuasive dicta, and address claims different than those SCI/NRA raise here. See MSJ at 61 n.25. In one case, the plaintiff asserted a different legal argument than SCI/NRA assert here – that Section 9(c)(2) "*requires* argali trophies be allowed to be imported into the United States … [and that] the CITES rules governing trade in Appendix II species preempt the applicable [E]SA prohibitions and requirements with regard to threatened species …." *Safari Club Int'l v. Babbitt,* 1993 WL 13932673, *12 (W.D. Tx. 1993) ("*Babbitt*") (emphasis in original); *see id.* at *14 (plaintiff's argument was that Section 9(c)(2) "establishes a conclusive presumption"). This argument differs from SCI/NRA's position here. Consistent with SCI/NRA's claim here, the court in *Babbitt* noted that the "effect of this presumption is to shift the burden of producing evidence regarding the import to the [Service] …." *Id.* at *14.

Another district court, in a civil *in rem* action regarding the forfeiture of an etched elephant tusk, addressed in dictum arguments similar to the Service's flawed reasoning here. *U.S. v. One Etched Ivory Tusk of African Elephant*, 871 F.Supp.2d 128 (E.D.N.Y. 2012). The main issue in that case was whether the tusk constituted a legally importable "sports-hunted

trophy." *Id.* at 135; *see id.* at 139 (finding that the tusk was not a sport-hunted trophy). But the court also addressed the claimant's additional argument that the Service must allow the importation under Section 9(c)(2). The court rejected this argument because it had already determined that the tusk was not an Appendix II species because any part of an animal that is not a hunting trophy is treated under Appendix I of CITES. *Id.* at 139-140 ("the statutory presumption is simply inapplicable to the Tusk."). Thus, the court's discussion regarding rebutting the Section 9(c)(2) presumption is dictum. In any event, the court wrongly concluded that the mere adoption of the elephant Special Rule rebutted the presumption for all the same reasons Federal Defendants' arguments here are wrong.

Federal Defendants next argue that either (1) a special rule "is clearly not a 'regulation issued pursuant to this chapter' to which the presumption applies; or (2) "the statute is silent or ambiguous on the issue of whether a special rule is a 'regulation issued pursuant to this chapter' to which the 9(c)(2) presumption applies …." Opp. at 38. Federal Defendants have provided no reason to read the plain language of Section 9(c)(2) to support either of these theories. Section 9(c)(2) applies the presumption to regulations issued "pursuant to this Chapter." 16 U.S.C. §1538(c)(2). "This Chapter" encompasses Sections 1531-1544 and includes Section 1533(d), under which authority the Service promulgated the Special Rule. *See* 54 Fed. Reg. 19146, 19417 (May 5, 1989) (earlier amendment to the Special Rule).

The Service adopted the Special Rule after notice and comment rulemaking, published it in the Federal Register, and codified it in the Code of Federal Regulations. 57 Fed. Reg. 35473, 35475, 35486 (Aug. 10, 1992). These are all signs of a regulation. *See, e.g., The Wilderness Soc. v. Norton,* 434 F.3d 584, 596 (D.C. Cir. 2006) ("The real dividing point between regulations and general statements of policy is publication in the Code of Federal Regulations, which the

statute authorizes to contain only documents 'having general applicability *and legal effect,*' and which the governing regulations provide shall contain only 'each Federal *regulation* of general applicability and current or future effect.'") (quoting *Brock v. Cathedral Bluffs Shale Oil Co.,* 796 F.2d 533, 538–39 (D.C. Cir.1986)) (emphasis in original). Consistent with its actions, the Service itself classified the 1992 Special Rule regarding elephant importation as a "regulation" adopted under the ESA. 57 Fed. Reg. at 35485 (discussing why Service did not need to prepare an environmental assessment "in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act, as amended.").

Instead of following the plain meaning of the statute, Federal Defendants try to create ambiguity and accuse SCI/NRA of "fail[ing] to read Section 9(c)(2) in context." Opp. at 37. But Federal Defendants fail to provide any meaningful "context" that establishes that the plain meaning of the statute should not govern. SCI/NRA do not dispute the so-called "context" Federal Defendants provide – that a special rule can establish conditions for importation. *Id.* SCI/NRA do dispute, however, that Section 9(c)(2) allows the Service in the same regulation to simultaneously create a condition and rebut the presumption that the condition is met.

Further, as SCI/NRA previously explained, when the Service originally adopted and amended the Special Rule, the Service had no reason to overcome the presumption. MSJ at 57-58. The presumption did not apply at that time (all African elephants, including Zimbabwe's, were on Appendix I). Later, in 1997, when Zimbabwe's elephants were moved to Appendix II, the Service made, based on the facts at the time, a positive finding that sport hunting of elephants enhanced the survival of the species. *Id.* at 58-59. The Service never explains why it makes sense that in 1997 it could simultaneously (1) find as a matter of law that the mere adoption of the elephant Special Rule rebutted the factual presumption that the sport hunting of elephants in

Zimbabwe enhanced the survival of the species (*i.e.,* establish that sport hunting did ***not*** enhance the survival of the species), and (2) make a positive finding, based on the facts, that it did.

Federal Defendants also claim that SCI/NRA "fail to identify what other means the Service has at its disposal to rebut the presumption, if not a regulation." Opp. at 37. The answer is straightforward. The Service must make an affirmative finding to overcome the presumed fact that sport-hunting of elephants enhances the survival of the species. The Service could memorialize this finding in an official agency document. Despite claiming no other "means" could serve to rebut the presumption if a special rule cannot, Federal Defendants later argue that the three negative enhancement findings rebut the presumption. Opp. at 39-40.

Federal Defendants' brief and the findings themselves betray this fallback argument that the Service affirmatively rebutted the presumption in the three findings. Federal Defendants argue that "[i]n all three of its findings, the Service determined that ***it was unable to find*** that the killing of elephants from Zimbabwe whose trophies are intended for import would enhance the survival of the species." *Id.* at 39-40 (emphasis added); *see also id*. at 10 (in describing the three enhancement findings, Federal Defendants state that the Service was "unable to find" that sport-hunting enhances the survival of the species). Because the presumption establishes that sport-hunting does enhance the survival of Zimbabwe's elephants, the Service was required to affirmatively find, based on the information before it, that the sport-hunting of those elephants did not enhance the survival of the species (*i.e.,* overcome the presumption), and not simply announce that they are "unable" to make that finding. The Service did not make this type of affirmative determination in the April 2014, July 2014, and March 2015 findings.

Nor has the Service overcome the presumption at any other time. SCI/NRA has already explained that in the adoption and amendment of the Special Rule, the Service never rebutted the

presumption and never had occasion to do so. MSJ at 57. In response, Federal Defendants argue that in 1997, when Zimbabwe's elephants were transferred to Appendix II, the Service retained the enhancement requirement. Opp. at 38-39. This point misses the mark. SCI/NRA acknowledge that, although illegally maintained (*see supra.* Section E), the enhancement requirement and other conditions for importation apply, but SCI/NRA also have established that the Section 9(c)(2) presumption applies to fulfill those conditions unless the Service affirmatively overcomes the presumption, as explained above. In addition, from 1997 until April 4, 2014, the Service concluded that the sport hunting of elephants in Zimbabwe enhanced the survival of the species. In 2014-15, the Service had the burden to overcome this factual finding with an explicit factual finding to the contrary.

This decision-making requirement – applying the presumption – can be determinative, just as which party bears the burden of proof can determine the outcome of a case. *See, e.g., Bruner v. Off. of Personnel Mgt.,* 996 F.2d 290, 292 (Fed. Cir. 1993) ("Because the proper allocation of the burden of proof is an important procedural right that may have substantive consequences," court reviewed assignment of burden of proof in proceeding); *see Babbitt,* 1993 WL 13932673, *14 (Section 9(c)(2) has effect of shifting burden of persuasion). For example, as discussed above, in the April 2014 Finding, the Service never sought information from Zimbabwe that would inform the Service about whether the presumption could be overcome. This failure should have consequences on the Service, not the hunter/importer.

Similarly, Federal Defendants misconstrue SCI/NRA's 9(c)(2) claim when Federal Defendants argue that "where Congress wanted to provide a complete exemption from the prohibitions in Section 9(a)(1)[,] such as the prohibition on importation[,] it did so without providing for a rebuttable presumption." Opp. at 37-38. As made clear in their Motion,

SCI/NRA are not arguing for a "complete exemption." Instead, SCI/NRA acknowledge that Congress created a presumption that *can* be overcome. Nevertheless, the plain meaning of the statute establishes that the presumption cannot be overcome in a regulation to which the presumption applies and that, importantly, it has not been overcome in this case.

In a footnote, Federal Defendants assert that language in a 2016 proposed amendment to the elephant Special Rule reiterates that the Service has rebutted the presumption, so "any suggestion that the Service must explicitly rebut the presumption is harmless error." Opp. at 39 n.15. Referencing a 2016 proposed amendment to the special rule represents a post hoc rationalization involving non-finalized statements made by the Service one to two years after the challenged actions in this case. The Court cannot accept this tardy explanation for illegal behavior. *Motor Veh. Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.,* 463 U.S. 29, 50 (1983) ("the courts may not accept appellate counsel's *post hoc* rationalizations for agency action."). If anything, the attempt to rebut the presumption through reference to the 2016 proposed amendment to the Special Rule is an acknowledgement both that the Service should have attempted to rebut the presumption earlier and that the Service does have a vehicle other than the Special Rule itself to rebut the presumption (contrary to the Service's assertion earlier in its Opposition).

In addition, Federal Defendants' attempt to invoke the "rule of prejudicial error" or harmless error is misplaced. "Neither a showing of actual prejudice nor proof that the agency would have reached a different result is required to establish prejudicial error." *AFL-CIO v. Chao,* 496 F. Supp. 2d 76, 89 (D.D.C. 2007). In addition, the D.C. Circuit has explained that "the harmless error rule is 'not ... a particularly onerous requirement' .... If prejudice is obvious to the court, the party challenging agency action need not demonstrate anything further."

Jicarilla Apache Nation v. U.S. Dept. of Int., 613 F.3d 1112, 1121 (D.C. Cir. 2010) (citations omitted; first ellipsis in original). Federal Defendants cite in support a case in which a federal agency engaged in significant environmental analysis before reaching a decision but failed to comply precisely with NEPA procedures. *Nevada v. Dept. of Energy*, 457 F.3d 78, 90 (D.C. Cir. 2006). Here, in contrast, the Service did not merely fail to comply with procedures that had no bearing on the substantive decision; the Service committed a fundamental error in how it must assess the facts before it. As the Service admits it was "unable" to make the determination required of it based on the facts before it, disregarding a presumption that would work against the Service is prejudicial to SCI/NRA and its members.

Finally, as part of their claim, SCI/NRA challenged that (1) a Service regulation, 50 C.F.R. §17.8(b), "goes too far in claiming that the mere issuance of a special rule means that the statutory presumption does not apply"; (2) the regulation "must give way to the statute" it purports to implement; and (3) the Service's reading would render the presumption a disfavored nullity. MSJ at 58. In response, Federal Defendants claim that Section 17.8(b) embodies the Service's interpretation and SCI/NRA have not challenged it. Opp. at 38 n.14. In fact, SCI/NRA have done exactly what the case Federal Defendants cite requires: "A regulation is presumed to be valid unless ***it is shown by those attacking it to be contrary to law***." *Id.* (quoting *Forester v. Consumer Prod. Safety Comm.*, 559 F.2d 774, 783 (D.C. Cir. 1977)) (emphasis added). Like the Service's interpretation, this regulation is contrary to the plain meaning of the statute and cannot rescue the Service's failure to affirmatively overcome the presumption by means other than a regulation.[18]

[18] SCI/NRA explained that the Service's so-called interpretation that a special rule automatically rebuts the Section 9(c)(2) presumption creates a nonsensical situation in contrast to a more heavily regulated Appendix II, threatened species without a special rule (to which all the

G. SCI/NRA Properly Seek Vacatur of the Three Enhancement Findings

SCI/NRA are not asking the Court to do anything other than set aside the three findings, which would have the effect of reinstating the 1997 finding. The 1997 Finding governed until April 4, 2014 and included no internal expiration date. The Service's protestation that it is too stale is belied by this fact. In fact, the Service continue to apply findings made on the same date to elephant importation from Namibia and South Africa.

Vacating the three findings (and consequential reinstatement of the 1997 Finding) will have the effect of allowing U.S. hunters who harvested an elephant in Zimbabwe in 2014 or 2015 to import their elephant, much as hunters could through April 3, 2014. These hunters include some who were in Zimbabwe hunting when the Service abruptly announced the ban on importation. *See, e.g.,* Decl. of Rhyne, ¶7, Dkt. 87-8 (Feb. 18, 2016).

Defendant-Intervenors suggest what Federal Defendants have not asked for – a remand to the agency without vacatur of the three enhancement findings. D-I Opp. at 8-9. A remand in this case is not necessary at all, as the 1997 Finding will continue to apply until the Service adopts a new, legal enhancement finding, which would apply only prospectively. Nor are the errors alleged here of a kind that the Court should keep three illegal findings in place while the Service takes further action.

For the period following any Court order, if it chooses, the Service can follow proper APA procedures to amend the illegally adopted Special Rule, in any future enhancement finding correct the procedural errors identified by SCI/NRA, apply the correct standards based on the

prohibitions of Section 9 apply). MSJ at 59-60. The Service did not even to attempt to respond to this point. The Court should disregard any attempt by Federal Defendants to respond to this point for the first time in their final reply brief.

information available at that time, and issue properly adopted rules and legally supportable decisions. Defendant-Intervenors would be free at that time to participate in any rulemaking or otherwise submit to the Service the information they claim to have. The Court should vacate the Special Rule and the three enhancement findings and let the Service take action to address the future of importation of sport hunted elephants from Zimbabwe.

III. CONCLUSION

For all these reasons, SCI/NRA moves the Court to grant them summary judgment on their claims and deny the Federal Defendants' motion for summary judgment.

Dated: April 29, 2016.

Respectfully submitted,

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–HQ–IA–2017–N116; FXIA16710900000–XXX–FF09A30000]

Issuance of Import Permits for Zimbabwe Elephant Trophies Taken On or After January 21, 2016, and On or Before December 31, 2017

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice.

SUMMARY: The U.S. Fish and Wildlife Service (Service) finds that the killing of African elephant trophy animals in Zimbabwe, on or after January 21, 2016, and on or before December 31, 2017, will enhance the survival of the African elephant. Applications to import trophies hunted during this time period will be considered to have met the enhancement requirement, unless we issue a new finding based on available information. The Service may replace this finding, without any notification in the *Federal Register*, at any time that this finding no longer reflects the available information consistent with the regulatory requirements. In reviewing each application received for

import of such specimens, the Service evaluates the information provided in the application, as well as other information available to the Service on the status of the elephant population and the management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized. This determination does not affect previous determinations by the Service regarding trophy animals taken before January 21, 2016.

DATES: This finding is made [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER]*.

ADDRESSES: Timothy J. Van Norman, Chief, Branch of Permits, Division of Management Authority, U.S. Fish and Wildlife Service, MS: IA, 5275 Leesburg Pike, Falls Church, VA 22041–3803; fax (703) 358–2280; or e-mail DMAFR@fws.gov.

FOR FURTHER INFORMATION CONTACT: Timothy J. Van Norman, (703) 358–2104 (telephone); (703) 358–2280 (fax); or DMAFR@fws.gov (e-mail).

SUPPLEMENTARY INFORMATION:

Background

The African elephant (*Loxodonta africana*) is listed as threatened under the Endangered Species Act of 1973, as amended (ESA or Act; 16 U.S.C. 1531 *et seq.)*, on the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal

Regulations (50 CFR 17.11(h)). It is also regulated under the provisions of section 4(d) of the Act (known as a "section 4(d) rule") with a rule found at 50 CFR 17.40(e). The section 4(d) rule includes specific requirements for the import of sport-hunted trophies. Under § 17.40(e)(6)(i)(B), in order for the Service to authorize the import of a sport-hunted elephant trophy, the Service must find that the killing of the trophy animal will enhance the survival of the species in the wild (known as an "enhancement finding").

The Zimbabwe elephant population, along with elephant populations in Botswana, Namibia, and South Africa, are also included in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) for the exclusive purpose of allowing certain trade subject to annotation, including trade in hunting trophies for noncommercial purposes. All specimens not included in the annotation are deemed Appendix I specimens, and trade in them is regulated accordingly. On August 22, 1997, the U.S. Fish and Wildlife Service (Service) published a proposed rule announcing decisions by the Conference of the Parties to CITES and seeking comment on whether the United States should enter a reservation for any of the species that had been listed on CITES Appendices I and II (62 FR 44627). We discussed how the populations of African elephants in Zimbabwe, Botswana, and Namibia had been down-listed from CITES Appendix I to Appendix II and noted that, because African elephants are listed under the ESA as threatened, the African elephant section 4(d) rule found at 50 CFR 17.40(e) would continue to apply. This rule required that we find that the killing of the animal whose trophy was intended for import would enhance the survival of the species before a sport-hunted trophy could be imported. We also stated that, in making the required enhancement finding for the import of sport-

hunted trophies, the Service must review the status of the elephant population and the total management program for the elephant in each country to ensure the program is promoting the conservation of the species.

The preamble to the 1997 proposed rule noted that positive enhancement findings for the countries of Zimbabwe, Botswana, and Namibia had been made and would remain in effect until the Service found that the conditions of the section 4(d) rule are no longer met and published notice of a changed finding in the *Federal Register*. On May 18, 2001, we published a final rule again announcing decisions made at a meeting of the Conference of the Parties to CITES, including the decision to down-list the South African population of African elephants from CITES Appendix I to Appendix II (66 FR 27601). We again discussed the import requirements for African elephant sport-hunted trophies and stated that the enhancement finding for South African elephants would remain in effect until the Service found that conditions of the rule are no longer met and published notice of a changed finding in the *Federal Register*. The U.S. District Court for the District of Columbia, in *Safari Club International, et al. v. Jewell, et al.*, 213 F. Supp. 3d 48 (Sept. 30, 2016), held that the Service created a binding duty on itself when it stated in the preamble of the 1997 proposed rule that it would publish notice in the **Federal Register** before making a change in its 1997 enhancement finding for Zimbabwe, and that the Service then violated this commitment when it published the **Federal Register**notice on May 12, 2014, several weeks after making an interim negative enhancement finding for Zimbabwe on April 4, 2014. As remedy, the Court ordered that the effective date of the 2014 enhancement finding is the date of the **Federal Register** notice, May 12, 2014, meaning that trophies taken on or before May 11, 2014

were allowed to meet the enhancement requirement. We did not intend to create a legal duty to publish changed enhancement findings through these *Federal Register* preamble statements.

On June 6, 2016, the Service amended the African elephant section 4(d) rule (81 FR 36388). With this amendment, ESA permits are required to import all African elephant sport-hunted trophies, including those from the CITES Appendix II populations of Zimbabwe, Botswana, Namibia, and South Africa. Because all imports will be accompanied by a threatened species permit evaluated through the ESA permit application process found at 50 CFR 17.32(a), we will no longer publish notice of changed enhancement findings for African elephant sport-hunted trophies in the *Federal Register*. In the future, when there are subsequent changes to the determination, the individual applicant will be notified regarding whether his or her permit application was granted or denied, including a brief statement of the grounds for any denial. We may also post information on the import of African elephant hunting trophies on the Service's web page (*www.fws.gov/international*), as appropriate and consistent with applicable laws and regulations.

Import Suspension

On April 4, 2014, the Service announced an interim suspension of imports of sport-hunted elephant trophies taken in Zimbabwe during the 2014 season. We revised this finding on April 17, 2014, primarily to clarify that the suspension applied only to elephants hunted on or after April 4, 2014. This determination was announced in the *Federal Register* on May 12, 2014 (79 FR 26986). Our decision to establish an interim

suspension of imports of elephant trophies from Zimbabwe was due to having insufficient information on the status of elephants in Zimbabwe and on Zimbabwe's current elephant management program to make an enhancement finding. On July 17, 2014, the Service found that the import of elephant trophies taken in Zimbabwe in 2014 on or after April 4, 2014, would be suspended. We revised this finding on July 22, 2014, to make non-substantive corrections and announced this determination in the *Federal Register* on July 31, 2014 (79 FR 44459). The July 17, 2014, decision to uphold the April 4, 2014, suspension was due to the Service being unable to make an enhancement finding even after receiving additional materials from the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) and others. On March 26, 2015, the Service made another determination to continue the suspension (80 FR 42524, July 17, 2015). This decision was again due to the Service being unable to make an enhancement finding even after receiving additional materials from ZPWMA and others. The suspension that resulted from the negative enhancement findings did not prohibit U.S. hunters from traveling to Zimbabwe and participating in an elephant hunt. The Act does not prohibit take (e.g., hunting) within a foreign country; it prohibits import of trophies taken during such hunts without required authorization under the Act.

Following the Service's March 26, 2015, finding, the Service sent a letter on May 1, 2015, to the Honorable Saviour Kasukuwere, (formerly) Zimbabwe's Minister of Environment, Water and Climate, outlining the concerns the Service still had regarding elephant trophy imports from Zimbabwe. The letter identified six areas of concern: the lack of a current management plan; the current population status of elephants in Zimbabwe; poaching levels and prevention; regulations and enforcement concerns; the

sustainable utilization of elephants in Zimbabwe; and the utilization of hunting revenues.

On July 20, 2015, ZPWMA responded to each of the questions outlined in the Service's letter and included a draft version of the Action Plan for Elephant Conservation and Management in Zimbabwe (2015–2020). In January 2016, the Service received the final version of the action plan, the Zimbabwe National Elephant Management Plan (2015–2020), that had been approved and signed by the (then) Director-General of ZPWMA Edson Chidziya, on January 20, 2016, and the Honorable Oppah Muchinguri-Kashiri, Minister of Environment, Water and Climate, on January 21, 2016.

In September 2016, during the 17th Meeting of the Conference of the Parties to CITES, the Service met with representatives from Zimbabwe to further discuss the current status of the Service's evaluation of the importation of elephant trophies. As a result of those conversations, the Service received a letter dated November 8, 2016, with supplemental information regarding Zimbabwe's elephant management plan priorities. Further, on January 27, 2017, the Service received a letter from ZPWMA containing a report, "The Role of Trophy Hunting of Elephants in Support of the Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) Program: December 2016" that more fully discussed the source and amount of revenue generated between 2010 and 2015 through the CAMPFIRE program, the current role of CAMPFIRE, and how revenue generated by elephant hunting has been utilized within communal areas over this 6-year period and into the future.

Under 50 CFR 17.40(e)(6)(i)(B), the Service evaluates a number of factors to determine whether the killing of the trophy animal taken in a range country will enhance the survival of African elephants as well as taking into consideration the permit issuance

criteria outlined in 50 CFR 17.32(a)(2). In evaluating each of these criteria, the Service has considered the information currently available to the Service as of the date of this finding on elephant hunting in Zimbabwe in 2016 and 2017, including information provided by the Government of Zimbabwe, current applicants for permits to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service.

Zimbabwe's Conservation Efforts for Elephants

On January 21, 2016, Zimbabwe adopted the Zimbabwe National Elephant Management Plan (2015–2020) (EMP) that replaced The Policy and Plan for Elephant Management in Zimbabwe (1997) and Elephant Management in Zimbabwe, third edition (July 1996), the former management plans. The EMP incorporates an adaptive management framework with higher level targets, with key components, strategic objectives, and outputs. Each key component has management actions that can be measured and verified through "Key Performance Indicators." A set deadline for each action was identified. These measurable provisions allow ZPWMA to monitor the success of the new management plan and, through an adaptive management approach, address newly emerging concerns and long-term management needs. The EMP addresses the challenges identified by the 2014 workshop participants and concerns identified by the Service about the previous management plans. The EMP was developed as an outcome of several national and regional workshops that included government officials, nongovernmental organizations (NGOs), rural community leaders, and safari outfitters and landowners.

The 2014 Pan African Elephant Aerial Survey, also known as the Great Elephant Census (GEC), available in 2015, provided ZPWMA with a better elephant baseline population abundance estimate to assess future hunting quotas, management efforts, and anti-poaching activities. Confirmed results from the GEC reported an estimate for elephant abundance in Zimbabwe to be 82,304 individuals (73,715–90,893), with a total carcass ratio of 7.8 percent. The International Union for Conservation of Nature's African Elephant Specialist Group (IUCN AfESG) African Elephant Status Report–2016 estimated Zimbabwe's elephant population at 82,630 ± 8,589 across a range of 81,228 km^2. The results of the 2014 GEC, and subsequent survey data reported in the 2016 AfESG report, utilized in the EMP and quota setting, are more reliable and provide a better basis for establishing management priorities than previous surveys and guesses.

As identified in the 2015 finding, the Service finds that, if properly implemented, the ZPWMA regulatory mechanisms for managing elephants appear to be adequate. A key issue in the 2015 finding was whether an adequate mechanism is in place to reliably document the financial benefits that U.S. hunters provide for elephant conservation through participation in a hunting program that addresses management needs of the species and whether the funds were utilized in a meaningful manner. Since the 2015 finding, the Service has received information regarding the Tourism Receipts Accounting System (TRAS) and its web-based system (TRAS2) under which the Reserve Bank of Zimbabwe, in collaboration with relevant stakeholders, can now track all revenue generated through hunting activities. Under this system, all authorized hunts are now being registered, allowing for the capture of hunting data, such as the origin of clients, value of trophies and hunts, and area hunted, so that officials can monitor hunting quota

utilization and track hunted trophies. This system will provide data that was not previously easily obtained and greatly improve the ability to track hunting revenue.

One concern expressed by the Service in its previous findings was whether ZPWMA was responding to the apparent poaching crisis facing Zimbabwe. Based on communication from ZPWMA, as well as information received from other sources, ZPWMA has stepped up its anti-poaching efforts nationally by adopting a number of "Urgent Measures." As shown in their July 2015 response to Service questions, most of ZPWMA's budget (77 percent) is allocated to staff costs and patrol provisions. These expenditures reportedly fund anti-poaching efforts throughout the elephant range. ZPWMA reportedly has a staff of 1,504 active field rangers and has stated that there is intent to increase this number. According to "The Zimbabwe National Elephant Supplementary Management Plan (2015–2020)", provided to the Service in late 2016, over 80 percent of spending under the new EMP has been on law enforcement (anti-poaching) and training, with law enforcement identified as the top priority going forward.

With the adoption of the EMP on January 21, 2016, it appears that ZPWMA has the means to successfully implement these laws and regulations. Moreover, ZPWMA has a mechanism in place to monitor the effects of the EMP and adapt to changing environmental and social factors that would adversely affect elephant populations within Zimbabwe.

According to the information provided to the Service in late 2014 and 2015, Zimbabwe had established hunting quotas for all areas of the country. However, it was not until late 2015 and early 2016 that the Service received more specific information on how these quotas are established, including how other forms of take, such as poaching

and problem animal control, were taken into account. Further, it was not until the EMP was signed into effect on January 21, 2016, that the Service had confidence that ZWPMA had in place effective mechanisms to ensure long-term sustainability of its elephant population.

According to ZPWMA, quotas that were established before the EMP were set to maximize the sustainable production of high-quality trophies without detriment to the population. With the establishment of the EMP, there is a more systematic, scientific approach to establish national quotas. While ZPWMA still currently starts with an annual quota of 500 elephants, the quota is not immediately divided among all of the hunting areas. Instead, ZPWMA takes into consideration the results of the 2014 survey and subsequent surveys, results from research efforts, the size of the hunting area in relation to elephant habitat requirements, illegal harvest and other forms of take, how the hunting areas are managed in relation to land use or fencing, human–wildlife conflicts that have occurred previously, and recommended sustainable harvest levels developed based on ecological assessments of the hunting area. This information is then further evaluated in consideration of other species within the hunting area, past elephant trophy quality, and community benefits of proposed harvests.

Since our findings in 2014 and 2015, CAMPFIRE has provided more information on how their programs support the conservation of elephants and provide benefits to and promote greater tolerance of wildlife in rural communities, including new efforts to improve the effectiveness of CAMPFIRE and new revenue-sharing guidelines. An overarching analysis of CAMPFIRE, supported by a grant of 12 million Euros from the European Union, is currently being conducted and is scheduled to be completed by the

end of 2017. Although this review is still under way, more information has been provided to the Service regarding how funds are utilized and the basis for hunting quotas.

Since our 2014 and 2015 findings, there are strong indications that the efforts of private landowners and consortiums to manage elephants within their areas of control have received greater support from ZPWMA and the Zimbabwean Government. ZPWMA has devolved authority to manage and benefit from wildlife on communal and private lands to the landholders. There now appears to be a greater effort on the part of ZPWMA to work with NGOs, landowners, and safari area concessionaires to improve elephant management and anti-poaching efforts. According to their July 2015 response to the Service, and supported by the report on the implementation of the EMP, ZPWMA is engaging private players in co-management in some areas and entering into long-term lease agreements (10–25 years) to manage some protected areas. In certain areas, ZPWMA is reportedly collaborating with safari operators; in others, they collaborate with NGOs, such as the Tashinga Initiative in the Zambezi Valley and World Wildlife Fund in the Hwange-Sanyati Biological Corridor. There is increased support from the Central Government and Rural District Councils to expand and support local conservation efforts, and there is evidence that local conservation efforts are meeting management deficiencies that the Service identified previously.

Current Finding

Therefore, in accordance with the regulatory requirements, the Service is able to make a determination that the killing of trophy animals in Zimbabwe, on or after January 21, 2016, and on or before December 31, 2017, will enhance the survival of the African

elephant. With the information currently available, applications to import trophies hunted during this time period will be considered to have met this requirement unless we issue a new finding based on available information. In accordance with the section 4(d) rule for the African elephant at 50 CFR 17.40(e), the Service will review each application received for import of such specimens on a case-by-case basis and each application also needs to meet all other applicable permitting requirements before it may be authorized. On an ongoing basis and as it evaluates each application, the Service will continue to monitor the status of the elephant population, the management program for elephants in the country to ensure that the program is promoting the conservation of the species, and whether the participation of U.S. hunters in the program provides a clear benefit to the species. Accordingly, the Service may modify its determination based on available information consistent with the regulatory requirements. In addition, the Service will reevaluate the status of African elephants in Zimbabwe before the end of 2017 and make a new finding in the beginning of 2018 for, at least, the 2018 hunting season.

Today's enhancement finding has been posted at http://www.fws.gov/international/pdf/xxxxxx. In addition, the press release announcing the determination regarding the importation of sport-hunted elephant trophies from Zimbabwe and a list of frequently asked questions is available on the Service's web page (*www.fws.gov/international*).

Dated: _____.

_____

Timothy J. Van Norman,

Chief, Branch of Permits,

Division of Management Authority,

U.S. Fish and Wildlife Service.

Billing Code 4333-15

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–HQ–IA–2017–N116; FXIA16710900000–XXX–FF09A30000]

Issuance of Import Permits for Zimbabwe Elephant Trophies Taken On or After January 21, 2016, and On or Before December 31, 2017

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice.

SUMMARY: The U.S. Fish and Wildlife Service (Service) has made a finding that the killing of African elephant trophy animals in Zimbabwe, on or after January 21, 2016, and on or before December 31, 2017, will enhance the survival of the African elephant. Applications to import trophies hunted during this time period will be considered to have met the enhancement requirement, unless we issue a new finding based on available information. The Service may replace this finding, without any notification in the *Federal Register*, at any time that this finding no longer reflects the available information consistent with the regulatory requirements. In reviewing each application received for

import of such specimens, the Service evaluates the information provided in the application, as well as other information available to the Service on the status of the elephant population and the management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized. This determination does not affect previous determinations by the Service regarding trophy animals taken before January 21, 2016.

DATES: This finding is made [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER]*.

ADDRESSES: Timothy J. Van Norman, Chief, Branch of Permits, Division of Management Authority, U.S. Fish and Wildlife Service, MS: IA, 5275 Leesburg Pike, Falls Church, VA 22041–3803; fax (703) 358–2280; or e-mail DMAFR@fws.gov.

FOR FURTHER INFORMATION CONTACT: Timothy J. Van Norman, (703) 358–2104 (telephone); (703) 358–2280 (fax); or DMAFR@fws.gov (e-mail).

SUPPLEMENTARY INFORMATION:

Background

The African elephant (*Loxodonta africana*) is listed as threatened under the Endangered Species Act of 1973, as amended (ESA or Act; 16 U.S.C. 1531 *et seq.)*, on the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal

Regulations (50 CFR 17.11(h)). It is also regulated under the provisions of section 4(d) of the Act (known as a "section 4(d) rule") with a rule found at 50 CFR 17.40(e). The section 4(d) rule includes specific requirements for the import of sport-hunted trophies. Under § 17.40(e)(6)(i)(B), in order for the Service to authorize the import of a sport-hunted elephant trophy, the Service must find that the killing of the trophy animal will enhance the survival of the species in the wild (known as an "enhancement finding").

The Zimbabwe elephant population, along with elephant populations in Botswana, Namibia, and South Africa, are also included in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) for the exclusive purpose of allowing certain trade subject to annotation, including trade in hunting trophies for noncommercial purposes. All specimens not included in the annotation are deemed Appendix I specimens, and trade in them is regulated accordingly. On August 22, 1997, the U.S. Fish and Wildlife Service (Service) published a proposed rule announcing decisions by the Conference of the Parties to CITES and seeking comment on whether the United States should enter a reservation for any of the species that had been listed on CITES Appendices I and II (62 FR 44627). We discussed how the populations of African elephants in Zimbabwe, Botswana, and Namibia had been down-listed from CITES Appendix I to Appendix II and noted that, because African elephants are listed under the ESA as threatened, the African elephant section 4(d) rule found at 50 CFR 17.40(e) would continue to apply. This rule required that we find that the killing of the animal whose trophy was intended for import would enhance the survival of the species before a sport-hunted trophy could be imported. We also stated that, in making the required enhancement finding for the import of sport-

hunted trophies, the Service must review the status of the elephant population and the total management program for the elephant in each country to ensure the program is promoting the conservation of the species.

The preamble to the 1997 proposed rule noted that positive enhancement findings for the countries of Zimbabwe, Botswana, and Namibia had been made and would remain in effect until the Service found that the conditions of the section 4(d) rule are no longer met and published notice of a changed finding in the *Federal Register*. On May 18, 2001, we published a final rule again announcing decisions made at a meeting of the Conference of the Parties to CITES, including the decision to down-list the South African population of African elephants from CITES Appendix I to Appendix II (66 FR 27601). We again discussed the import requirements for African elephant sport-hunted trophies and stated that the enhancement finding for South African elephants would remain in effect until the Service found that conditions of the rule are no longer met and published notice of a changed finding in the *Federal Register*. The U.S. District Court for the District of Columbia, in *Safari Club International, et al. v. Jewell, et al.*, 213 F. Supp. 3d 48 (D.D.C. Sept. 30, 2016), has held that the Service created a binding duty on itself when it stated in the preamble of the 1997 proposed rule that it would publish notice in the **Federal Register** before making a change in its 1997 enhancement finding for Zimbabwe, and that the Service then violated this commitment when it published the **Federal Register** notice on May 12, 2014, several weeks after making an interim negative enhancement finding for Zimbabwe on April 4, 2014. As remedy, the Court ordered that the effective date of the 2014 enhancement finding is the date of the **Federal Register** notice, May 12, 2014, meaning that trophies taken on or before May 11, 2014

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criteria outlined in 50 CFR 17.32(a)(2). In evaluating each of these criteria, the Service has considered the information currently available to the Service as of the date of this finding on elephant hunting in Zimbabwe in 2016 and 2017, including information provided by the Government of Zimbabwe, current applicants for permits to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service.

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As identified in the 2015 finding, the Service explained that, if properly implemented, the ZPWMA regulatory mechanisms for managing elephants appear to be adequate. A key issue in the 2015 finding was whether an adequate mechanism is in place to reliably document the financial benefits that U.S. hunters provide for elephant conservation through participation in a hunting program that addresses management needs of the species and whether the funds were utilized in a meaningful manner. Since the 2015 finding, the Service has received information regarding the Tourism Receipts Accounting System (TRAS) and its web-based system (TRAS2) under which the Reserve Bank of Zimbabwe, in collaboration with relevant stakeholders, can now track all revenue generated through hunting activities. Under this system, all authorized hunts are now being registered, allowing for the capture of hunting data, such as the origin of

clients, value of trophies and hunts, and area hunted, so that officials can monitor hunting quota utilization and track hunted trophies. This system will provide data that was not previously easily obtained and greatly improve the ability to track hunting revenue.

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Current Finding

Therefore, in accordance with the regulatory requirements, the Service is able to make a determination that the killing of trophy animals in Zimbabwe, on or after January

21, 2016, and on or before December 31, 2017, will enhance the survival of the African elephant. With the information currently available, applications to import trophies hunted during this time period will be considered to have met this requirement unless we issue a new finding based on available information. In accordance with the section 4(d) rule for the African elephant at 50 CFR 17.40(e), the Service will review each application received for import of such specimens on a case-by-case basis and each application also needs to meet all other applicable permitting requirements before it may be authorized. On an ongoing basis and as it evaluates each application, the Service will continue to monitor the status of the elephant population, the management program for elephants in the country to ensure that the program is promoting the conservation of the species, and whether the participation of U.S. hunters in the program provides a clear benefit to the species. Accordingly, the Service may modify its determination based on available information consistent with the regulatory requirements. In addition, the Service will reevaluate the status of African elephants in Zimbabwe before the end of 2017 and make a new finding in the beginning of 2018 for, at least, the 2018 hunting season.

Today's enhancement finding has been posted at http://www.fws.gov/international/pdf/xxxxxx. In addition, the press release announcing the determination regarding the importation of sport-hunted elephant trophies from Zimbabwe and a list of frequently asked questions is available on the Service's web page (*www.fws.gov/international*).

Dated: _____.

Timothy J. Van Norman,

Chief, Branch of Permits,

Division of Management Authority,

U.S. Fish and Wildlife Service.

Billing Code 4333-15

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–HQ–IA–2017–N116; FXIA16710900000–XXX–FF09A30000]

Issuance of Import Permits for Zimbabwe Elephant Trophies Taken On or After January 21, 2016, and On or Before December 31, 2018

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice.

SUMMARY: The U.S. Fish and Wildlife Service (Service) has made a finding that the killing of African elephant trophy animals in Zimbabwe, on or after January 21, 2016, and on or before December 31, 2018, will enhance the survival of the African elephant. Applications to import trophies hunted during this time period will be considered to have met the enhancement requirement, unless we issue a new finding based on available information. The Service may replace this finding, without any notification in the *Federal Register*, at any time that this finding no longer reflects the available information consistent with the regulatory requirements. In reviewing each application received for

import of such specimens, the Service evaluates the information provided in the application, as well as other information available to the Service on the status of the elephant population and the management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized. This determination does not affect previous determinations by the Service regarding trophy animals taken before January 21, 2016.

DATES: This finding is made [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER]*.

ADDRESSES: Timothy J. Van Norman, Chief, Branch of Permits, Division of Management Authority, U.S. Fish and Wildlife Service, MS: IA, 5275 Leesburg Pike, Falls Church, VA 22041–3803; fax (703) 358–2280; or e-mail DMAFR@fws.gov.

FOR FURTHER INFORMATION CONTACT: Timothy J. Van Norman, (703) 358–2104 (telephone); (703) 358–2280 (fax); or DMAFR@fws.gov (e-mail).

SUPPLEMENTARY INFORMATION:

Background

The African elephant (*Loxodonta africana*) is listed as threatened under the Endangered Species Act of 1973, as amended (ESA or Act; 16 U.S.C. 1531 *et seq.)*, on the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal

Regulations (50 CFR 17.11(h)). It is also regulated under the provisions of section 4(d) of the Act (known as a "section 4(d) rule") with a rule found at 50 CFR 17.40(e). The section 4(d) rule includes specific requirements for the import of sport-hunted trophies. Under § 17.40(e)(6)(i)(B), in order for the Service to authorize the import of a sport-hunted elephant trophy, the Service must find that the killing of the trophy animal will enhance the survival of the species in the wild (known as an "enhancement finding").

The Zimbabwe elephant population, along with elephant populations in Botswana, Namibia, and South Africa, are also included in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) for the exclusive purpose of allowing certain trade subject to annotation, including trade in hunting trophies for noncommercial purposes. All specimens not included in the annotation are deemed Appendix I specimens, and trade in them is regulated accordingly. On August 22, 1997, the U.S. Fish and Wildlife Service (Service) published a proposed rule announcing decisions by the Conference of the Parties to CITES and seeking comment on whether the United States should enter a reservation for any of the species that had been listed on CITES Appendices I and II (62 FR 44627). We discussed how the populations of African elephants in Zimbabwe, Botswana, and Namibia had been down-listed from CITES Appendix I to Appendix II and noted that, because African elephants are listed under the ESA as threatened, the African elephant section 4(d) rule found at 50 CFR 17.40(e) would continue to apply. This rule required that we find that the killing of the animal whose trophy was intended for import would enhance the survival of the species before a sport-hunted trophy could be imported. We also stated that, in making the required enhancement finding for the import of sport-

hunted trophies, the Service must review the status of the elephant population and the total management program for the elephant in each country to ensure the program is promoting the conservation of the species.

The preamble to the 1997 proposed rule noted that positive enhancement findings for the countries of Zimbabwe, Botswana, and Namibia had been made and would remain in effect until the Service found that the conditions of the section 4(d) rule are no longer met and published notice of a changed finding in the *Federal Register*. On May 18, 2001, we published a final rule again announcing decisions made at a meeting of the Conference of the Parties to CITES, including the decision to down-list the South African population of African elephants from CITES Appendix I to Appendix II (66 FR 27601). We again discussed the import requirements for African elephant sport-hunted trophies and stated that the enhancement finding for South African elephants would remain in effect until the Service found that conditions of the rule are no longer met and published notice of a changed finding in the *Federal Register*. The U.S. District Court for the District of Columbia, in *Safari Club International, et al. v. Jewell, et al.*, 213 F. Supp. 3d 48 (D.D.C. Sept. 30, 2016), has held that the Service created a binding duty on itself when it stated in the preamble of the 1997 proposed rule that it would publish notice in the **Federal Register** before making a change in its 1997 enhancement finding for Zimbabwe, and that the Service then violated this commitment when it published the **Federal Register** notice on May 12, 2014, several weeks after making an interim negative enhancement finding for Zimbabwe on April 4, 2014. As remedy, the Court ordered that the effective date of the 2014 enhancement finding is the date of the **Federal Register** notice, May 12, 2014, meaning that trophies taken on or before May 11, 2014

were allowed to meet the enhancement requirement. We did not intend to create a legal duty to publish changed enhancement findings through these *Federal Register* preamble statements.

On June 6, 2016, the Service amended the African elephant section 4(d) rule (81 FR 36388). With this amendment, ESA permits are required to import all African elephant sport-hunted trophies, including those from the CITES Appendix II populations of Zimbabwe, Botswana, Namibia, and South Africa. Because all imports will be accompanied by a threatened species permit evaluated through the ESA permit application process found at 50 CFR 17.32(a), we will no longer publish notice of changed enhancement findings for African elephant sport-hunted trophies in the *Federal Register*. In the future, when there are subsequent changes to the determination, the individual applicant will be notified regarding whether his or her permit application was granted or denied, including a brief statement of the grounds for any denial. We may also post information on the import of African elephant hunting trophies on the Service's web page (*www.fws.gov/international*), as appropriate and consistent with applicable laws and regulations.

Import Suspension

On April 4, 2014, the Service announced an interim suspension of imports of sport-hunted elephant trophies taken in Zimbabwe during the 2014 season. We revised this finding on April 17, 2014, primarily to clarify that the suspension applied only to elephants hunted on or after April 4, 2014. This determination was announced in the *Federal Register* on May 12, 2014 (79 FR 26986). Our decision to establish an interim

suspension of imports of elephant trophies from Zimbabwe was due to having insufficient information on the status of elephants in Zimbabwe and on Zimbabwe's current elephant management program to make an enhancement finding. On July 17, 2014, the Service found that the import of elephant trophies taken in Zimbabwe in 2014 on or after April 4, 2014, would be suspended. We revised this finding on July 22, 2014, to make non-substantive corrections and announced this determination in the *Federal Register* on July 31, 2014 (79 FR 44459). The July 17, 2014, decision to uphold the April 4, 2014, suspension was due to the Service being unable to make an enhancement finding even after receiving additional materials from the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) and others. On March 26, 2015, the Service made another determination to continue the suspension (80 FR 42524, July 17, 2015). This decision was again due to the Service being unable to make an enhancement finding even after receiving additional materials from ZPWMA and others. The suspension that resulted from the negative enhancement findings did not prohibit U.S. hunters from traveling to Zimbabwe and participating in an elephant hunt. The Act does not prohibit take (e.g., hunting) within a foreign country; it prohibits import of trophies taken during such hunts without required authorization under the Act.

Following the Service's March 26, 2015, finding, the Service sent a letter on May 12, 2015, to the Honorable Saviour Kasukuwere, (formerly) Zimbabwe's Minister of Environment, Water and Climate, outlining the concerns the Service still had regarding elephant trophy imports from Zimbabwe. The letter identified six areas of concern: the lack of a current management plan; the current population status of elephants in Zimbabwe; poaching levels and prevention; regulations and enforcement concerns; the

sustainable utilization of elephants in Zimbabwe; and the utilization of hunting revenues.

On July 20, 2015, ZPWMA responded to each of the questions outlined in the Service's letter and included a draft version of the Action Plan for Elephant Conservation and Management in Zimbabwe (2015–2020). In January 2016, the Service received the final version of the action plan, the Zimbabwe National Elephant Management Plan (2015–2020), that had been approved and signed by the (then) Director-General of ZPWMA Edson Chidziya, on January 20, 2016, and the Honorable Oppah Muchinguri-Kashiri, Minister of Environment, Water and Climate, on January 21, 2016.

In September 2016, during the 17th Meeting of the Conference of the Parties to CITES, the Service met with representatives from Zimbabwe to further discuss the current status of the Service's evaluation of the importation of elephant trophies. As a result of those conversations, the Service received a letter dated November 8, 2016, with supplemental information regarding Zimbabwe's elephant management plan priorities. Further, on January 27, 2017, the Service received a letter from ZPWMA containing a report, "The Role of Trophy Hunting of Elephants in Support of the Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) Program: December 2016" that more fully discussed the source and amount of revenue generated between 2010 and 2015 through the CAMPFIRE program, the current role of CAMPFIRE, and how revenue generated by elephant hunting has been utilized within communal areas over this 6-year period and into the future.

Under 50 CFR 17.40(e)(6)(i)(B), the Service evaluates a number of factors to determine whether the killing of the trophy animal taken in a range country will enhance the survival of African elephants as well as taking into consideration the permit issuance

criteria outlined in 50 CFR 17.32(a)(2). In evaluating each of these criteria, the Service has considered the information currently available to the Service as of the date of this finding on elephant hunting in Zimbabwe in 2016, 2017, and 2018, including information provided by the Government of Zimbabwe, current applicants for permits to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service.

Zimbabwe's Conservation Efforts for Elephants

On January 21, 2016, Zimbabwe adopted the Zimbabwe National Elephant Management Plan (2015–2020) (EMP) that replaced The Policy and Plan for Elephant Management in Zimbabwe (1997) and Elephant Management in Zimbabwe, third edition (July 1996), the former management plans. The EMP incorporates an adaptive management framework with higher level targets, with key components, strategic objectives, and outputs. Each key component has management actions that can be measured and verified through "Key Performance Indicators." A set deadline for each action was identified. These measurable provisions allow ZPWMA to monitor the success of the new management plan and, through an adaptive management approach, address newly emerging concerns and long-term management needs. The EMP addresses the challenges identified by the 2014 workshop participants and concerns identified by the Service about the previous management plans. The EMP was developed as an outcome of several national and regional workshops that included government officials, nongovernmental organizations (NGOs), rural community leaders, and safari outfitters and landowners.

The 2014 Pan African Elephant Aerial Survey, also known as the Great Elephant Census (GEC), available in 2015, provided ZPWMA with a better elephant baseline population abundance estimate to assess future hunting quotas, management efforts, and anti-poaching activities. Confirmed results from the GEC reported an estimate for elephant abundance in Zimbabwe to be 82,304 individuals (73,715–90,893). The International Union for Conservation of Nature's African Elephant Specialist Group (IUCN AfESG) African Elephant Status Report–2016 estimated Zimbabwe's elephant population at 82,630 ± 8,589 across a range of 81,228 km^2. The results of the 2014 GEC, and subsequent survey data reported in the 2016 AfESG report, are more reliable and provide a better basis for establishing management priorities than previous surveys and guesses, and are now utilized in the EMP and quota setting.

As identified in the 2015 finding, the Service explained that, if properly implemented, the ZPWMA regulatory mechanisms for managing elephants appear to be adequate. A key issue in the 2015 finding was whether an adequate mechanism is in place to reliably document the financial benefits that U.S. hunters provide for elephant conservation through participation in a hunting program that addresses management needs of the species and whether the funds were utilized in a meaningful manner. Since the 2015 finding, the Service has received information regarding the Tourism Receipts Accounting System (TRAS) and its web-based system (TRAS2) under which the Reserve Bank of Zimbabwe, in collaboration with relevant stakeholders, can now track all revenue generated through hunting activities. Under this system, all authorized hunts are now being registered, allowing for the capture of hunting data, such as the origin of clients, value of trophies and hunts, and area hunted, so that officials can monitor hunting

quota utilization and track hunted trophies. This system will provide data that was not previously easily obtained and greatly improve the ability to track hunting revenue.

One concern expressed by the Service in its previous findings was whether ZPWMA was responding to the apparent poaching crisis facing Zimbabwe. Based on communication from ZPWMA, as well as information received from other sources, ZPWMA has stepped up its anti-poaching efforts nationally by adopting a number of "Urgent Measures." As shown in their July 2015 response to Service questions, most of ZPWMA's budget (77 percent) is allocated to staff costs and patrol provisions. These expenditures reportedly fund anti-poaching efforts throughout the elephant range. ZPWMA reportedly has a staff of 1,504 active field rangers and has stated that there is intent to increase this number. According to "The Zimbabwe National Elephant Supplementary Management Plan (2015–2020)", provided to the Service in late 2016, over 80 percent of spending under the new EMP has been on law enforcement (anti-poaching) and training, with law enforcement identified as the top priority going forward.

With the adoption of the EMP on January 21, 2016, it appears that ZPWMA has the means to successfully implement these laws and regulations. Moreover, ZPWMA has a mechanism in place to monitor the effects of the EMP and adapt to changing environmental and social factors that would adversely affect elephant populations within Zimbabwe.

According to the information provided to the Service in late 2014 and 2015, Zimbabwe had established hunting quotas for all areas of the country. However, it was not until late 2015 and early 2016 that the Service received more specific information on how these quotas are established, including how other forms of take, such as poaching

and problem animal control, were taken into account. Further, it was not until the EMP was signed into effect on January 21, 2016, that the Service had confidence that ZWPMA had in place effective mechanisms to ensure long-term sustainability of its elephant population.

According to ZPWMA, quotas that were established before the EMP were set to maximize the sustainable production of high-quality trophies without detriment to the population. With the establishment of the EMP, there is a more systematic, scientific approach to establish national quotas. While ZPWMA still currently starts with an annual quota of 500 elephants, the quota is not immediately divided among all of the hunting areas. Instead, ZPWMA takes into consideration the results of the 2014 survey and subsequent surveys, results from research efforts, the size of the hunting area in relation to elephant habitat requirements, illegal harvest and other forms of take, how the hunting areas are managed in relation to land use or fencing, human–wildlife conflicts that have occurred previously, and recommended sustainable harvest levels developed based on ecological assessments of the hunting area. This information is then further evaluated in consideration of other species within the hunting area, past elephant trophy quality, and community benefits of proposed harvests.

Since our findings in 2014 and 2015, CAMPFIRE has provided more information on how their programs support the conservation of elephants and provide benefits to and promote greater tolerance of wildlife in rural communities, including new efforts to improve the effectiveness of CAMPFIRE and new revenue-sharing guidelines. An overarching analysis of CAMPFIRE, supported by a grant of 12 million Euros from the European Union, is currently being conducted and is scheduled to be completed by the

end of 2017. Although this review is still under way, more information has been provided to the Service regarding how funds are utilized and the basis for hunting quotas.

Since our 2014 and 2015 findings, there are strong indications that the efforts of private landowners and consortiums to manage elephants within their areas of control have received greater support from ZPWMA and the Zimbabwean Government. ZPWMA has devolved authority to manage and benefit from wildlife on communal and private lands to the landholders. There now appears to be a greater effort on the part of ZPWMA to work with NGOs, landowners, and safari area concessionaires to improve elephant management and anti-poaching efforts. According to their July 2015 response to the Service, and supported by the report on the implementation of the EMP, ZPWMA is engaging private players in co-management in some areas and entering into long-term lease agreements (10–25 years) to manage some protected areas. In certain areas, ZPWMA is reportedly collaborating with safari operators; in others, they collaborate with NGOs, such as the Tashinga Initiative in the Zambezi Valley and World Wildlife Fund in the Hwange-Sanyati Biological Corridor. There is increased support from the Central Government and Rural District Councils to expand and support local conservation efforts, and there is evidence that local conservation efforts are meeting management deficiencies that the Service identified previously.

Current Finding

Therefore, in accordance with the regulatory requirements, the Service is able to make a determination that the killing of trophy animals in Zimbabwe, on or after January 21, 2016, and on or before December 31, 2018, will enhance the survival of the African

elephant. With the information currently available, applications to import trophies hunted during this time period will be considered to have met this requirement unless we issue a new finding based on available information. In accordance with the section 4(d) rule for the African elephant at 50 CFR 17.40(e), the Service will review each application received for import of such specimens on a case-by-case basis and each application also needs to meet all other applicable permitting requirements before it may be authorized. On an ongoing basis and as it evaluates each application, the Service will continue to monitor the status of the elephant population, the management program for elephants in the country to ensure that the program is promoting the conservation of the species, and whether the participation of U.S. hunters in the program provides a clear benefit to the species. Accordingly, the Service may modify its determination based on available information consistent with the regulatory requirements. In addition, the Service will reevaluate the status of African elephants in Zimbabwe before the end of 2018 and make a new finding in the beginning of 2019 for, at least, the 2019 hunting season.

Today's enhancement finding has been posted at http://www.fws.gov/international/pdf/xxxxxx. In addition, the press release announcing the determination regarding the importation of sport-hunted elephant trophies from Zimbabwe and a list of frequently asked questions is available on the Service's web page (*www.fws.gov/international*).

Dated: _____.

_____

Timothy J. Van Norman,

Chief, Branch of Permits,

Division of Management Authority,

U.S. Fish and Wildlife Service.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
International Affairs
5275 Leesburg Pike, MS-IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA

Memorandum

To: Principal Deputy Director, U.S. Fish and Wildlife Service

From: Chief, Branch of Permits

Date:

Subject: Supplemental Finding to November 16, 2017, Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe on or After January 21, 2016, and on or Before December 31, 2018.

On November 16, 2017, the U.S. Fish and Wildlife Service ("Service"), completed a finding and provided notice in the Federal Register of the Service's determination that the killing of trophy elephants (*Loxodonta africana*) in Zimbabwe on or after January 21, 2016, and on or before December 31, 2018, would enhance the survival of African elephants. As detailed in the finding, this determination was based on a careful review of the information available to the Service as of the date of the finding as to on elephant hunting in Zimbabwe in 2016, 2017 and 2018, specifically including information from the Government of Zimbabwe about elephant status and management in Zimbabwe.

The determination considered a number of factors and new information about elephant status and management in Zimbabwe received since our previous finding in March 2015. Significantly, since our 2015 findings, Zimbabwe adopted the National Elephant Management Plan (EMP), with regional components, to more effectively monitor and evaluate elephant populations and management. The EMP has clear objectives, action items, and defined goals to facilitate a more systematic management regime than was previously established in Zimbabwe. Further, the Government of Zimbabwe has demonstrated through recent reports that implementation the EMP, although somewhat constrained due to limited resources, is ongoing. As of the November 2017, Zimbabwe

appears to have established a strong mechanism for national elephant management and documented that specific targets and benchmarks are being achieved to enable elephant sport hunting that is already benefiting the survival of African elephants in Zimbabwe. Moreover, Zimbabwe is taking additional steps toward full implementation that provides further benefits for elephants as a result of regulated sport hunting going forward.

The Pan African Elephant Aerial Survey that was conducted in Zimbabwe in 2014 also provided the Government of Zimbabwe with a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. Utilizing this data, as well as data from subsequent elephant surveys, Zimbabwe established hunting quotas for all areas of the country and provided the Service with specific information as to how these quotas were established. The Service had confidence that the Government of Zimbabwe had effective mechanisms in place to establish scientifically-based hunting quotas that specifically considered other forms of off-take. These mechanisms ensured the sustainable utilization of Zimbabwe's elephant population and that the Government of Zimbabwe had the capacity to successfully manage their elephant program and the sport-hunting component of its EMP.

In our finding, we identified several areas that we would continue to closely monitor to ensure that our finding still reflect current elephant management and control in Zimbabwe, and that our determination that the killing of trophy elephants would enhance the survival of the species. These areas include: progress in implementing the elephant management plan, financial accounting related to sport hunting demonstrating how funds generated by elephant hunting in Zimbabwe from U.S. hunters are utilized to enhance the survival of the species, information on population status and trends, quota setting information, and engagement between the government and various stakeholder in Zimbabwe. These areas were identified in an effort to ensure that the conditions in Zimbabwe remain relatively unchanged or continue to improve as they relate to elephant management.

On the evening of November 14, 2017, the Zimbabwe military placed President Robert Mugabe under house arrest with a call for his resignation, creating substantial uncertainty with regard to governance in the country. Zimbabwe Defense Forces seized control of the Zimbabwe Broadcasting Corporation, several areas of the capital city of Harare, and the Presidential palace. On November 21, 2017, after negotiations between President Mugabe, the Ruling Party, and the Zimbabwe military, President Mugabe resigned. Although the action was largely peaceful, the situation has created uncertainty over the ability of the Zimbabwe government to continue to fulfill the wildlife management activities identified as the basis for our positive finding. At this time, we are simply unable to assess the extent to which the conditions that led to our positive finding may have changed. As we are able, we will seek further information from Zimbabwe and other credible sources.

Until such time as there is greater certainty regarding governance in Zimbabwe, particularly with regard to the stability of elephant management in Zimbabwe, so that we can reaffirm the conditions that led to our positive finding, the Service is suspending our current enhancement finding for any animal taken on or after November 14, 2017. The Service may reconsider this finding at any time and replace it by determining, through the permitting process, that this finding no longer reflects the available information consistent with the regulatory requirements. As part of the permitting process, he Service reviews each application received for import of such specimens and evaluates the information provided in the application as well as other information available to the Service as the status of the elephant population and the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

United States Department of the Interior

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International Affairs
5275 Leesburg Pike, MS-IA
Falls Church, VA 22041-3803

In Reply Refer To:
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The determination considered a number of factors and new information about elephant status and management in Zimbabwe received since our previous finding in March 2015. Significantly, since our 2015 findings, Zimbabwe adopted the National Elephant Management Plan (EMP), with regional components, to more effectively monitor and evaluate elephant populations and management. The EMP has clear objectives, action items, and defined goals to facilitate a more systematic management regime than was previously established in Zimbabwe. Further, the Government of Zimbabwe has demonstrated through recent reports that implementation the EMP, although somewhat constrained due to limited resources, is ongoing. As of the November 2017, Zimbabwe appears to have established a strong mechanism for national elephant management and documented that specific targets and benchmarks are being achieved to enable elephant

sport hunting that is already benefiting the survival of African elephants in Zimbabwe. Moreover, Zimbabwe is taking additional steps toward full implementation that provides further benefits for elephants as a result of regulated sport hunting going forward.

The Pan African Elephant Aerial Survey that was conducted in Zimbabwe in 2014 also provided the Government of Zimbabwe with a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. Utilizing this data, as well as data from subsequent elephant surveys, Zimbabwe established hunting quotas for all areas of the country and provided the Service with specific information as to how these quotas were established. The Service had confidence that the Government of Zimbabwe had effective mechanisms in place to establish scientifically-based hunting quotas that specifically considered other forms of off-take. These mechanisms ensured the sustainable utilization of Zimbabwe's elephant population and that the Government of Zimbabwe had the capacity to successfully manage their elephant program and the sport-hunting component of its EMP.

In our finding, we identified several areas that we would continue to closely monitor to ensure that our finding still reflect current elephant management and control in Zimbabwe, and that our determination that the killing of trophy elephants would enhance the survival of the species. These areas include: progress in implementing the elephant management plan, financial accounting related to sport hunting demonstrating how funds generated by elephant hunting in Zimbabwe from U.S. hunters are utilized to enhance the survival of the species, information on population status and trends, quota setting information, and engagement between the government and various stakeholder in Zimbabwe. These areas were identified in an effort to ensure that the conditions in Zimbabwe remain relatively unchanged or continue to improve as they relate to elephant management.

On the evening of November 14, 2017, the Zimbabwe military placed President Robert Mugabe under house arrest with a call for his resignation, creating substantial uncertainty with regard to governance in the country. Zimbabwe Defense Forces seized control of the Zimbabwe Broadcasting Corporation, several areas of the capital city of Harare, and the Presidential palace. On November 21, 2017, after negotiations between President Mugabe, the Ruling Party, and the Zimbabwe military, President Mugabe resigned. Although the action was largely peaceful, the situation has created uncertainty over the ability of the Zimbabwe government to continue to fulfill the wildlife management activities identified as the basis for our positive finding. At this time, we are simply unable to assess the extent to which the conditions that led to our positive finding may have changed. As we are able, we will seek further information from Zimbabwe and other credible sources.

Until such time as there is greater certainty regarding governance in Zimbabwe, particularly with regard to the stability of elephant management in Zimbabwe, so that we can reaffirm the conditions that led to our positive finding, the Service is suspending our current enhancement finding for any animal taken on or after November 14, 2017. The Service may reconsider this finding at any time and replace it by determining, through the permitting process, that this finding no longer reflects the available information consistent with the regulatory requirements. As part of the permitting process, he Service reviews each application received for import of such specimens and evaluates the

information provided in the application as well as other information available to the Service as the status of the elephant population and the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

United States Department of the Interior

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In Reply Refer To:
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Memorandum

To: The File

From: Chief, Branch of Permits

Date:

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The determination considered a number of factors and new information about elephant status and management in Zimbabwe received since our previous finding in March 2015, and that had been evaluated over several months in early 2017. Significantly, since our 2015 findings, Zimbabwe adopted the National Elephant Management Plan (EMP), with regional components, to more effectively monitor and evaluate elephant populations and management. The Plan has clear objectives, action items, and defined goals to facilitate a more systematic management regime than was previously established in Zimbabwe. Further, the Government of Zimbabwe has demonstrated through recent reports that the effort to implement the EMP, while somewhat constrained due to limited resources, is being implemented. At the time the November 2017 finding was made, Zimbabwe appears to have established a strong mechanism for national elephant management and

documented that specific targets and benchmarks are being achieved to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe now. Moreover, Zimbabwe is taking additional steps toward full implementation that provides further benefits for elephants from regulated sport hunting going forward.

The Pan African Elephant Aerial Survey that was conducted in Zimbabwe in 2014 also provided the Government of Zimbabwe with a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. Utilizing this data, as well as data from subsequent elephant surveys, Zimbabwe established hunting quotas for all areas of the country and provided the Service with specific information on how these quotas were established. The Service had confidence that the Government of Zimbabwe had effective mechanisms in place to establish scientifically-based hunting quotas that specifically considered other forms of off-take. These mechanisms ensure the sustainable utilization of Zimbabwe's elephant population and that the Government of Zimbabwe had the capacity to successfully manage their elephant program and the sport-hunting component of its management plan.

In our finding, we identified several areas that we would continue to closely monitor to ensure that our finding continued to reflect current elephant management and control in Zimbabwe, and that our determination that the killing of trophy elephants would enhance the survival of the species. These areas include: progress in implementing the elephant management plan, financial accounting related to sport hunting demonstrating how funds generated by elephant hunting in Zimbabwe from U.S. hunters are utilized to enhance the survival of the species, information on population status and trends, quota setting information, and engagement between the government and various stakeholder in Zimbabwe. These areas were identified in an effort to ensure that the conditions in Zimbabwe remain relatively unchanged or continue to improve as they relate to elephant management.

On the evening of November 14, 2017, the Zimbabwe military placed President Robert Mugabe under house arrest with a call for his resignation, creating substantial uncertainty with regard to governance in the country. Zimbabwe Defense Forces seized control of the Zimbabwe Broadcasting Corporation, several areas of the capital city of Harare, and the Presidential palace. On November 21, 2017, after negotiations between President Mugabe, the Ruling Party, and the Zimbabwe military, President Mugabe resigned. Although the action was largely peaceful, the situation has created uncertainty over the ability of the Zimbabwe government to continue to fulfill the wildlife management activities identified as the basis for our positive finding. At this time, we are simply unable to assess the extent to which the conditions that led to our positive finding may have changed. As we are able, we will seek further information from Zimbabwe and other credible sources.

Until such time that there is clarity and certainty regarding governance in Zimbabwe, particularly with regard to elephant management in Zimbabwe, and that we can assess the extent to which the conditions that led to our positive finding may have changed, the Service is suspending our current enhancement finding for any trophies taken on or after November 14, 2017. The Service may replace this finding at any time by determining that this finding no longer reflects the available information consistent with the regulatory

requirements. The Service reviews each application received for import of such specimens and evaluates the information provided in the application as well as other information available to the Service on the status of the elephant population and the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
International Affairs
5275 Leesburg Pike, MS-IA
Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA

Memorandum

To: The File

From: Chief, Branch of Permits

Date:

Subject: Supplemental Finding to November 16, 2017, Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe On or After January 21, 2016 and On or Before December 31, 2018.

On November 16, 2017, the U.S. Fish and Wildlife Service, after reviewing the information available to the Service as of the date of the finding on elephant hunting in Zimbabwe in 2016, 2017, and 2018, including information from the Government of Zimbabwe, completed a finding and provided notice in the Federal Register that the Service had made a determination that the killing of the trophy elephants in Zimbabwe on or after January 21, 2016 and on or before December 31, 2018, would enhance the survival of African elephants. As detailed in the finding, this determination was based on a number of factors and new information about elephant status and management in Zimbabwe received since our previous finding in March 2015, and that had been evaluated over several months in early 2017. Since our previous findings, Zimbabwe adopted the National Elephant Management Plan, with regional components, to more effectively monitor and evaluate elephant populations and management. The Plan has clear objectives, action items, and measurables to facilitate a more systematic management regime than was previously established in Zimbabwe. Further, the Government of Zimbabwe has demonstrated through recent reports that the effort to implement the EMP, while somewhat constrained due to limited resources, is being implemented. At the time the November 2017 finding was made, Zimbabwe appears to have established a strong mechanism for national elephant management and had documented that identified targets and measurables are being achieved in a manner to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe

now and is making an effort to make progress toward full implementation that achieves further benefits for elephants from sport hunting going forward.
The Pan African Elephant Aerial Survey that was conducted in Zimbabwe in 2014 provided the Government of Zimbabwe with a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. Utilizing this data, as well as data from subsequent elephant surveys, Zimbabwe had established hunting quotas for all areas of the country and provided the Service with specific information on how these quotas are established. The Service had confidence that the Government of Zimbabwe had in place effective mechanisms to establish scientifically based hunting quotas that took into consideration other forms of off-take to ensure the sustainable utilization of their elephant population and that the Government of Zimbabwe had the capacity to successfully manage their elephant program and the sport-hunting component of the management plan.
In our finding, we identified several areas that we would continue to closely monitor to ensure that our finding continued to reflect current elephant management and control in Zimbabwe and to ensure that our determination that the killing of the trophy elephants in Zimbabwe would enhance the survival of the species. These areas include: progress in implementing the elephant management plan, financial accounting related to sport hunting demonstrating how funds generated by elephant hunting in Zimbabwe from U.S. hunters are utilized to enhance the survival of the species, information on population status and trends, quota setting information, and engagement between the government and various stakeholder in Zimbabwe. These areas were identified in an effort to ensure that the conditions in Zimbabwe remain relatively unchanged or continue to improve as they relate to elephant management.

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Until such time that there is clarity and certainty regarding governance in Zimbabwe, particularly with regard to elephant management in Zimbabwe, and that we can assess the extent to which the conditions that led to our positive finding may have changed, the Service is suspending our current enhancement finding for any trophies taken on or after November 14, 2017. The Service may replace this finding at any time this finding no longer reflects the available information consistent with the regulatory requirements. The Service reviews each application received for import of such specimens and evaluates the information provided in the application as well as other information available to the Service on the status of the elephant population and the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all

other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

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Falls Church, VA 22041-3803

In Reply Refer To:
FWS/AIA/DMA

Memorandum

To: Principal Deputy Director, U.S. Fish and Wildlife Service

From: Chief, Branch of Permits

Date: 11/24/2017

Subject: Supplemental Finding to November 16, 2017, Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe on or After January 21, 2016, and on or Before December 31, 2018.

On November 16, 2017, the U.S. Fish and Wildlife Service ("Service"), completed a finding and provided notice in the Federal Register of the Service's determination that the killing of trophy elephants (*Loxodonta africana*) in Zimbabwe on or after January 21, 2016, and on or before December 31, 2018, would enhance the survival of African elephants. As detailed in the finding, this determination was based on a careful review of the information available to the Service as of the date of the finding as to on elephant hunting in Zimbabwe in 2016, 2017 and 2018, specifically including information from the Government of Zimbabwe about elephant status and management in Zimbabwe.

The determination considered a number of factors and new information about elephant status and management in Zimbabwe received since our previous finding in March 2015. Significantly, since our 2015 findings, Zimbabwe adopted the National Elephant Management Plan (EMP), with regional components, to more effectively monitor and evaluate elephant populations and management. The EMP has clear objectives, action items, and defined goals to facilitate a more systematic management regime than was previously established in Zimbabwe. Further, the Government of Zimbabwe has demonstrated through recent reports that implementation the EMP, although somewhat constrained due to limited resources, is ongoing. As of the November 2017, Zimbabwe

appears to have established a strong mechanism for national elephant management and documented that specific targets and benchmarks are being achieved to enable elephant sport hunting that is already benefiting the survival of African elephants in Zimbabwe. Moreover, Zimbabwe is taking additional steps toward full implementation that provides further benefits for elephants as a result of regulated sport hunting going forward.

The Pan African Elephant Aerial Survey that was conducted in Zimbabwe in 2014 also provided the Government of Zimbabwe with a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. Utilizing this data, as well as data from subsequent elephant surveys, Zimbabwe established hunting quotas for all areas of the country and provided the Service with specific information as to how these quotas were established. The Service had confidence that the Government of Zimbabwe had effective mechanisms in place to establish scientifically-based hunting quotas that specifically considered other forms of off-take. These mechanisms ensured the sustainable utilization of Zimbabwe's elephant population and that the Government of Zimbabwe had the capacity to successfully manage their elephant program and the sport-hunting component of its EMP.

In our finding, we identified several areas that we would continue to closely monitor to ensure that our finding still reflect current elephant management and control in Zimbabwe, and that our determination that the killing of trophy elephants would enhance the survival of the species. These areas include: progress in implementing the elephant management plan, financial accounting related to sport hunting demonstrating how funds generated by elephant hunting in Zimbabwe from U.S. hunters are utilized to enhance the survival of the species, information on population status and trends, quota setting information, and engagement between the government and various stakeholder in Zimbabwe. These areas were identified in an effort to ensure that the conditions in Zimbabwe remain relatively unchanged or continue to improve as they relate to elephant management.

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Until such time as there is greater certainty regarding governance in Zimbabwe, particularly with regard to the stability of elephant management in Zimbabwe, so that we can reaffirm the conditions that led to our positive finding, the Service is suspending our current enhancement finding for any animal taken on or after November 14, 2017. The Service may reconsider this finding at any time and replace it by determining, through the permitting process, that this finding no longer reflects the available information consistent with the regulatory requirements. As part of the permitting process, he Service reviews each application received for import of such specimens and evaluates the information provided in the application as well as other information available to the Service as the status of the elephant population and the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

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The determination considered a number of factors and new information about elephant status and management in Zimbabwe received since our previous finding in March 2015, and that had been evaluated over several months in early 2017. Significantly, since our 2015 findings, Zimbabwe adopted the National Elephant Management Plan (EMP), with regional components, to more effectively monitor and evaluate elephant populations and management. The Plan has clear objectives, action items, and defined goals to facilitate a more systematic management regime than was previously established in Zimbabwe. Further, the Government of Zimbabwe has demonstrated through recent reports that the effort to implement the EMP, while somewhat constrained due to limited resources, is being implemented. At the time the November 2017 finding was made, Zimbabwe appears to have established a strong mechanism for national elephant management and

documented that specific targets and benchmarks are being achieved to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe now. Moreover, Zimbabwe is taking additional steps toward full implementation that provides further benefits for elephants from regulated sport hunting going forward.

The Pan African Elephant Aerial Survey that was conducted in Zimbabwe in 2014 also provided the Government of Zimbabwe with a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. Utilizing this data, as well as data from subsequent elephant surveys, Zimbabwe established hunting quotas for all areas of the country and provided the Service with specific information on how these quotas were established. The Service had confidence that the Government of Zimbabwe had effective mechanisms in place to establish scientifically-based hunting quotas that specifically considered other forms of off-take. These mechanisms ensure the sustainable utilization of Zimbabwe's elephant population and that the Government of Zimbabwe had the capacity to successfully manage their elephant program and the sport-hunting component of its management plan.

In our finding, we identified several areas that we would continue to closely monitor to ensure that our finding continued to reflect current elephant management and control in Zimbabwe, and that our determination that the killing of trophy elephants would enhance the survival of the species. These areas include: progress in implementing the elephant management plan, financial accounting related to sport hunting demonstrating how funds generated by elephant hunting in Zimbabwe from U.S. hunters are utilized to enhance the survival of the species, information on population status and trends, quota setting information, and engagement between the government and various stakeholder in Zimbabwe. These areas were identified in an effort to ensure that the conditions in Zimbabwe remain relatively unchanged or continue to improve as they relate to elephant management.

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Until such time that there is clarity and certainty regarding governance in Zimbabwe, particularly with regard to elephant management in Zimbabwe, and that we can assess the extent to which the conditions that led to our positive finding may have changed, the Service is suspending our current enhancement finding for any trophies taken on or after November 14, 2017. The Service may replace this finding at any time by determining that this finding no longer reflects the available information consistent with the regulatory

requirements. The Service reviews each application received for import of such specimens and evaluates the information provided in the application as well as other information available to the Service on the status of the elephant population and the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

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Memorandum

To: The File

From: Chief, Branch of Permits

Date:

Subject: Enhancement Finding for African Elephants Taken as Sport-hunted Trophies in Zimbabwe On or After January 21, 2016 and On or Before December 31, 2018.

The African elephant (*Loxodonta africana*) is listed as threatened under the Endangered Species Act (ESA) and is regulated under an ESA section 4(d) special rule [50 CFR 17.40(e)]. The 4(d) special rule gives the requirements for the import of sport-hunted trophies. Under paragraph 17.40(e)(6)(i)(B), in order for the U.S. Fish and Wildlife Service (Service) to issue a threatened species permit under 50 CFR 17.32 authorizing the import of a sport-hunted elephant trophy, the Service must make a determination that the killing of the trophy animal will enhance the survival of the species. After evaluating the available data as of the date of this finding on elephant hunting in Zimbabwe in 2016, 2017, and 2018, including information provided by the Government of Zimbabwe, current applications to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service, under the regulatory requirements provided by 17.40(e)(6)(i)(B), the Service is able to make a determination that the killing of the trophy animal in Zimbabwe, on or after January 21, 2016 and on or before December 31, 2018, will enhance the survival of the African elephant. Applications to import trophies hunted during this time period will be considered to have met the enhancement requirement unless we issue a new finding based on available information. The Service may replace this finding at any time this finding no longer reflects the available information consistent with the regulatory requirements. The Service reviews each application received for import of such specimens and evaluates the information provided in the application as well as other information available to the Service on the status of the elephant population and

the total management program for elephants in the country to ensure that the program is promoting the conservation of the species. Each application to import sport-hunted elephant trophies must also meet all other applicable permitting requirements before it may be authorized, including the issuance criteria in 50 CFR 13.21.

General Considerations:

In evaluating whether the killing of the trophy animal will enhance the survival of African elephants in accordance with 50 CFR 17.40(e)(6)(i)(B), the Service considers the permit issuance criteria outlined in 50 CFR 17.32(a)(2). These include, in addition to the general permitting criteria in 50 CFR 13.21(b):

(i) Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit;

(ii) The probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit;

(iii) Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed;

(iv) Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit;

(v) The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application; and

(vi) Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application.

As with all permit applications submitted under 50 CFR 17.32(a), the individual requesting authorization to import a sport-hunted elephant trophy bears the burden of providing information in their application showing that the activity meets the requirements for issuance criteria under 50 CFR 17.32(a). In some cases, such as for import of sport-hunted trophies, it is not always possible for the applicant to provide all of the necessary information needed by the Service to make a positive determination under the ESA to authorize the activity. In such cases, the Service may consult with the range country and other interested parties to the extent practicable to obtain necessary information. The Service has the discretion to make the required findings on sport-hunted elephant trophy imports on a country-wide basis, although individual import permits will be evaluated and issued or denied for each applicant. While the Service may make enhancement findings for sport-hunted elephant trophy imports on a country-wide basis, the Service encourages the submission of information from individual applicants. We

rely on the information available to the Service and may rely on information from sources other than the applicant when making a permitting decision.

Neither the African elephant 4(d) rule nor 50 CFR 17.32(a)(2) specify what would constitute the enhancement of survival of a species regarding the authorization for the importation of an African elephant sport-hunted trophy. Therefore, when making a determination of whether the killing of the trophy animal will enhance the survival of African elephants, the Service examines the overall conservation and management of the species in the country where the specimen originated and whether that management addresses the threats to the species (*i.e.,* that it is based on sound scientific principles and that the management program is actively addressing the current and longer term threats to the species). In that review, we evaluate whether the import contributes to the overall conservation of the species by considering whether the biological, social, and economic aspects of a program from which the specimen was obtained provide a net benefit to the species and its ecosystem.

As stated in previous findings, in evaluating whether the killing of the trophy animal will enhance the survival of African elephants within a country, the Service looks at a number of factors. We evaluate whether a country has a valid national or regional management plan and if the country has the resources and political will to enact the plan. If there is a plan, what government entities implement the plan and how often is it reviewed and updated? Does the plan have clear, achievable objectives? Are the objectives measurable and are they being achieved? Is there an adaptive management approach within the plan so that enacting agencies can quickly respond to changing environmental or social issues?

The Service also evaluates the status of the elephant population within a country and trends over time. Particularly, we are interested in population numbers, sex and age-class distribution, and mortality rates (both natural and human-induced). Are standardized surveys being conducted and, if so, what are the timing, census methodology, and coverage? Since elephant populations can move across international borders, what level of cooperation is there between neighboring countries in management and surveying efforts for shared populations? How is poaching accounted for within survey efforts?

The Service takes into account all forms of offtake when evaluating population viability and sustainability, including human-elephant conflicts, problem animal control, poaching, and sport-hunting. While recognizing that there may be limited resources available for elephant management, the Service considers what national policies are in place to address human-elephant conflicts and problem elephant control. Is there a policy on culling surplus animals and removal of nuisance animals? Does domestic harvesting of elephants occur for local consumption or use? The amount of protected area either set aside for elephants or managed for elephant populations and the level of protection provided are also important in the Service's evaluation of whether imports of trophies could be authorized.

Finally, the Service considers the country's sport-hunting program and whether it contributes to the conservation and management of the species. Is the hunting program scientifically based and

has it been incorporated into national/regional management strategies, particularly in light of data on population numbers and trends and levels of utilization (both legal and illegal)? Are the funds generated by hunters going directly to in-situ conservation and management efforts or deposited into a general treasury fund? How are hunting quotas distributed? If there are concession areas, how are they managed and allocated? Do U.S. hunters, through their participation in the hunting program, contribute funds used to help address management needs of the species, and are those funds utilized in a meaningful manner?

In short, the Service is looking to determine if a country has sufficient numbers of elephants to support a hunting program, if the country has a management plan and adequate laws and regulations to effectively implement a hunting program, and if the participation of U.S. hunters in the program provides a clear benefit to the species to meet the requirements for the import of sport-hunted trophies under paragraph 17.40(e)(6)(i)(B).

The Service's approach to enhancement findings for the importation of sport-hunted trophies of African elephants is consistent with the purpose and intent of the ESA. Well-managed trophy hunting can benefit conservation by generating funds to be used for conservation, including for habitat protection, population monitoring, wildlife management programs, and law enforcement efforts. We are, of course, aware that not all trophy hunting is part of a well-managed, well-run program, and we evaluate import of sport-hunted trophies carefully to ensure that all legal requirements are met before allowing import.

We note that our approach is also consistent with the approach provided in the *IUCN Species Survival Commission (SSC) Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives, Ver. 1.0* (IUCN SSC 2012). The SSC document provides useful principles and sets out guidance from international experts in the field on the use of trophy hunting as a tool for "creating incentives for the conservation of species and their habitats and for the equitable sharing of the benefits of use of natural resources" (IUCN SSC 2012, p. 2) and recognizes that recreational hunting, particularly trophy hunting, can contribute to biodiversity conservation and more specifically, the conservation of the hunted species. The SSC document lays out the following five guiding principles:

(a) *Biological sustainability:* The hunting program cannot contribute to the long-term decline of the hunted species. It should not alter natural selection and ecological function of the hunted species or any other species that share the habitat. The program should not inadvertently facilitate poaching or illegal trade in wildlife by acting as a cover for such illegal activities. The hunting program should also not manipulate the ecosystem or its component elements in a way that alters the native biodiversity.

(b) *Net Conservation Benefit:* The biologically sustainable hunting program should be based on laws, regulations, and scientifically based quotas, established with local input, that are transparent and periodically reviewed. The program should produce income, employment, and other benefits to create incentives for reducing the pressure on the target species. The program should create benefits for local residents to co-exist with the target species and

other species. It is also imperative that the program is part of a legally recognized governance system that supports conservation.

(c) *Socio-Economic-Cultural Benefit:* A well-managed hunting program can serve as a conservation tool when it respects the local cultural values and practices. It should be accepted by most members of the community, involving and benefiting local residents in an equitable manner. The program should also adopt business practices that promote long-term economic sustainability.

(d) *Adaptive Management: Planning, Monitoring, and Reporting:* Hunting can enhance the species when it is based on appropriate resource assessments and monitoring (*e.g.,* population counts, trend data), upon which specific science-based quotas and hunting programs can be established. Resource assessments should be objective, well documented, and use the best science available. Adaptive management of quotas and programs based on the results of resource assessments and monitoring is essential. The program should monitor hunting activities to ensure that quotas and sex/age restrictions of harvested animals are met. The program should also generate reliable documentation of its biological sustainability and conservation benefits.

(e) *Accountable and Effective Governance:* A biologically sustainable trophy-hunting program should be subject to a governance structure that clearly allocates management responsibilities. The program should account for revenues in a transparent manner and distribute net revenues to conservation and community beneficiaries according to properly agreed decisions. All necessary steps to eliminate corruption should be taken and to ensure compliance with all relevant national and international requirements and regulations by relevant bodies such as administrators, regulators and hunters.

We explained in our final rule revising the 4(d) Rule for the African elephant, 81 FR 36388, 36394 (June 6, 2016) that, "[w]hen a trophy hunting program incorporates the following Guiding Principles, IUCN considers that trophy hunting can serve as a conservation tool: Biological sustainability; net conservation benefit; socio-economic-cultural benefit; adaptive management—planning, monitoring, and reporting; and accountable and effective governance. We support this approach."

Summary of 2014 and 2015 Findings for Zimbabwe:

On April 4, 2014, the Service announced an interim suspension of imports of sport-hunted elephant trophies taken in Zimbabwe during the 2014 season. This finding was revised on April 17, 2014, primarily to clarify that the suspension applied only to elephants hunted on or after April 4, 2014. The decision to establish an interim suspension of imports of elephant trophies from Zimbabwe was due to the Service having insufficient information on the status of elephants in Zimbabwe and on Zimbabwe's current elephant management program to make an enhancement finding. On July 17, 2014, the Service found that the import of elephant trophies

taken in Zimbabwe in 2014 on or after April 4, 2014, would be suspended; this finding was revised on July 22 to make non-substantive corrections. The decision to uphold the suspension on July 17, 2014, was due to the Service being unable to make an enhancement finding even after receiving additional materials from Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) and others. The Service decided on March 26, 2015, to continue the July 2014 suspension until such time as the Service can determine that the importation of sport-hunted elephant trophies from Zimbabwe meet the criteria under the regulations at 50 CFR 17.40(e)(3)(iii)(C). [The criteria are now found at 50 CFR 17.40(e)(6)(i)(B), following the Service's final rule revising the 4(d) Rule for the African elephant, 81 FR 36388, 36394 (June 6, 2016). The requirement for an enhancement finding has remained the same.] The Service's March 26, 2015, decision was again due to the Service being unable to make an enhancement finding even after receiving additional materials from Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) and others.

Prior to April 4, 2014, the Service had limited information regarding the elephant population in Zimbabwe, its management, and how U.S. hunters were contributing to the enhancement of the species within Zimbabwe. Due to this limited information, the Service determined that it did not have sufficient information to make the required determination under paragraph 17.40(e)(3)(iii)(C), and therefore announced an interim suspension on April 4, 2015 (revised on April 17), until such time as sufficient information was obtained that would allow the Service to make the required finding. On April 4, 2014, the Service also sent a letter to Zimbabwe requesting information regarding the status of elephants in Zimbabwe and the hunting program. On April 17, 2014, the Director-General of ZPWMA sent a response to the Service inquiry. Several weeks later, the Service received a number of documents, copies of Zimbabwean laws, and other supporting documentation that was referenced in the ZPWMA response. In addition, since that time, the Service has received additional supporting information from individuals and associations connected to the hunting industry in Zimbabwe or southern Africa and U.S.-based conservation and hunting nongovernmental organizations (NGOs). The Service also delivered a second letter, dated October 31, 2014, to ZPWMA while attending the 13th Annual African Wildlife Consultative Forum in Ethiopia. This letter requested clarification of information submitted to the Service, and also requested additional information to address questions that were raised from our review of available information. The Service received a response to this inquiry on December 10, 2014.

Based on the information provided, the Service determined in 2014 and 2015 Zimbabwe's national elephant management plan consisted primarily of two documents: *The Policy and Plan for Elephant Management in Zimbabwe* (1997) and *Elephant Management in Zimbabwe, third edition* (July 1996). Although the documents provided a well-developed list of goals and objectives, there was no information in these documents on how to achieve or fulfill these goals and objectives, nor did there appear to be any subsequent updates of the documents or reports that provided any indication of progress on fulfilling these management goals and objectives. Without management plans with specific goals and actions that are measurable and reports on the progress of meeting these goals, the Service could not determine if ZPWMA was implementing the general goals and objectives that appear in *Elephant Management in Zimbabwe* and *The*

Policy and Plan for Elephant Management in Zimbabwe. In December 2014, a workshop, hosted by ZPWMA, was held at the Hwange Safari Lodge, Zimbabwe, to discuss revisions to the management plans, particularly to establish clearer goals and measurable outcomes. It appeared that the participants of the workshop agreed on a framework for a revised management plan that maintained the original 1997 long-term vision and the three target goals (i.e., maintain at least four demographically and genetically viable populations; maintain or increase elephant range; maintain numbers/densities of elephants at levels that do not adversely impact biodiversity conservation goals while contributing to economically viable and sustainable wildlife-based land uses). The participants also began work on identifying strategic objectives and outputs, as well as recognizing some key activities, and starting to identify key performance indicators. Additional work was required to finalize the revised management plan. Once this work was completed, the Service explained that it would have an opportunity to evaluate the revised plan to determine if, in conjunction with other management actions, the criteria under 50 CFR 17.40(e)(3)(iii)(C) have been met. However, based on the information available to the Service in March 2015, there was not any information indicating that Zimbabwe was implementing, on a national scale, appropriate management measures for its elephant populations.

One concern expressed in the April 2014 and July 2014 findings was whether management of elephants in Zimbabwe was based on accurate population estimates. According to the *IUCN SSC African Elephant Database report 2013 Africa*, the elephant population in Zimbabwe in 2007 was estimated to be 99,107, and in 2012, it was estimated at 100,291. However, these estimates were primarily based on older surveys, some of which dated back to 2001. In 2014, a nationwide survey was conducted in Zimbabwe as part of the Pan African Elephant Aerial Survey. Preliminary results from the survey indicated that the overall estimated population of elephants in Zimbabwe was 82,000 to 83,000, approximately 20 percent lower than the 2012 estimate. There was an increase in two of the subpopulations within Zimbabwe (North West Matabeleland Region - 2001 estimate of 49,312 elephants, and 2014 estimate of 53,949; Gonarezhou National Park – 2013 estimate of 10,151 elephants, and 2014 estimate of 10,722), but a decline in the other two subpopulations (Mid Zambezi Valley – 2014 estimate of 12,211 elephants, down from 19,297 in 2001; Sebungwe Region – 2014 estimate of 3,634, compared to 13,988 in 2001). With the recent survey, we explained in 2015 that ZPWMA should have more accurate population estimates for each subpopulation to establish appropriate off-take levels to maintain a healthy population of elephants.

According to information provided to the Service for its 2015 finding, Zimbabwe had a methodology, including participation from a number of stakeholders, for establishing annual hunting quotas for all areas of the country. However, while the described methodology appeared to be based on sound wildlife management principles, the Service continued to have fundamental questions regarding how quotas were specifically established and how overall off-take, such as poaching and problem animal control, were taken into account, or to what degree biological factors were taken into consideration (as opposed to economic and societal considerations). As the Service explained, the quota setting process utilized by ZPWMA may take into consideration the issues raised in the Service's finding; however, without documentation of the system providing an explanation of the system used and describing the calculations, the Service was

unable to determine if sport-hunting quotas were reasonable or beneficial to elephant populations and, therefore, whether sport-hunting was enhancing the survival of the species.

The Zimbabwean Parks and Wild Life Act has established the regulatory mechanism for the ZPWMA and its programs, and also provides for substantial penalties for the unlawful possession of or trading in ivory. In addition, the General Laws Amendment Act (No. 5) of 2010 provides for mandatory imprisonment of not less than 9 years for poaching. If properly enforced, it appears these penalties would be a sufficient deterrent for poachers. However, based on the information available to the Service in 2015, we did not have a good understanding of the ZPWMA's annual operational budget, how much money is generated by elephant hunting, or how these funding levels impact the ability of ZPWMA to adequately implement the Parks and Wild Life Act or to carry out day-to-day management activities or anti-poaching efforts. In January 1996, the Government of Zimbabwe approved the establishment of the Parks and Wild Life Conservation Fund, a statutory fund responsible for financing operations directly from wildlife revenues. However, revenues generated through sport-hunting conducted on State and private lands are primarily used to finance ZPWMA, and only limited additional funding is available from appropriated funds from the Zimbabwe government or outside funding from NGOs. While the Service did receive additional information from ZPWMA and other sources on the revenue generated through hunting (in general) and other sources (in general), we still lacked sufficient information on revenue generated through elephant hunting, particularly from U.S. hunters. The Service explained that it was possible that additional documentation could be provided to substantiate claims that revenue from U.S. hunters generated through elephant hunting provides a significant benefit to elephants in the wild, but until such time, we were unable to determine if these claims are accurate.

In 1989, Zimbabwe established the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) to encourage reduction in human-elephant conflicts through conservation-based community development and to provide an economic incentive to improve community tolerance of wildlife, including elephants. At the time, the CAMPFIRE program was the model for community-based conservation efforts in several other African countries and was identified as an innovative program. Under a community-based conservation program, like CAMPFIRE, rural communities should benefit from revenue generated by sport-hunting. With increased human-elephant conflicts on Communal lands, sport-hunting may be an important tool that gives these communities a stake in sustainable management of the elephant as a natural and economic resource and provides the enhancement that would meet the U.S. criteria for authorizing imports of trophies. Much of the information provided to the Service in advance of our 2015 finding focused on the benefits U.S. hunters provided to CAMPFIRE activities and community-based wildlife management. However, the information did not provide a clear connection between hunting revenues coming from U.S. hunters (e.g., how much is generated for communities), and indicated that over time, the management of wildlife and benefits provided through CAMPFIRE may have declined. The Service noted that it appeared that these concerns were expressed during the November 2014 CAMPFIRE Stakeholder's Workshop held in Zimbabwe. The discussions and recommendations touched on the effectiveness of the CAMPFIRE concept and its relationship to tourist hunting. Participants at the workshop

appeared to have made a good start at addressing issues raised by representatives of Rural Development Councils (RDCs), as well as the need for CAMPFIRE to face challenges with limited resources and capacity. It was recognized that there needed to be strong involvement with ZPWMA and safari operators since CAMPFIRE is in areas where there have been both elephant population declines and increased poaching. While we noted that the Service's concerns expressed in our earlier 2014 findings regarding community-based wildlife management had not been sufficiently addressed in the information provided to the Service for our 2015 finding, there did appear to be movement in better defining the role that CAMPFIRE and community-based wildlife management can play in elephant management, particularly in association with U.S. hunters.

As was stated in the July 2014 and March 2015, findings, there are clearly "bright spots" of elephant conservation efforts being carried out by non-governmental entities and individuals in Zimbabwe that are providing a benefit to elephants. Individual safari outfitters and landowners have established their own management efforts, including anti-poaching activities, on areas under their control, either through ownership of the land or leases. These entities have made significant strides to ensure the long-term survival of elephants on their lands. These efforts, however, had been adversely affected by unilateral or seemingly arbitrary actions taken by the central government or RDCs, such as land redistribution activities, which minimize conservation efforts, and reduced lease durations. These "bright spots" were not numerous enough, in and of themselves, to overcome the problems facing Zimbabwe elephant populations or to support a finding that sport hunting throughout Zimbabwe would enhance the survival of the species. While additional information was provided since for our 2015 finding, much of this information only expanded on areas already identified in previous submissions. The Service noted, however, that two workshops involving multiple safari outfitters and leaseholders were scheduled for the beginning of 2015 to identify and address outstanding issues faced by the safari outfitters. It was the stated hope of the Service that these workshops would be successful and act as a springboard for similar workshops throughout Zimbabwe.

Based on the information available to the Service in 2015 on government efforts to manage elephant populations, efforts to address human-elephant conflicts and poaching, and the state of the hunting program within the country, and without current data on population numbers and trends being incorporated into a national management strategy or plan, the Service was unable to make a finding that sport-hunting in Zimbabwe is enhancing the survival of the species and that imports of trophies would meet the criteria established under the Act for African elephants.

Basis for 2016, 2017, and 2018 Finding for Zimbabwe:

Following the Service's March 26, 2015 finding, on May 12, 2015, Service Assistant Director for International Affairs Bryan Arroyo sent a letter to the Honorable Saviour Kasukuwere, (formerly) Zimbabwe's Minister of Environment, Water and Climate, outlining the concerns the Service still had regarding elephant trophy imports from Zimbabwe. The letter identified six areas of concern: the lack of a current management plan; the current population status of elephants in Zimbabwe; poaching levels and prevention; regulations and enforcement concerns;

the sustainable utilization of elephants in Zimbabwe; and the utilization of hunting revenues.

On July 20, 2015, the ZPWMA sent a letter responding to the May 12 letter. The letter addresses each of the questions outlined in the May 12 letter and included a draft version of the Action Plan for Elephant Conservation and Management in Zimbabwe (2015-2020). In January 2016, the Service received the final version of the Action Plan that had been approved and signed by the Director-General of ZPWMA Edson Chidziya, on January 20, 2016, and the Honorable Oppah Muchinguri-Kashiri, Minister of Environment, Water and Climate on January 21, 2016.

On April 4, 2016, the Service sent an e-mail to ZPWMA requesting clarification of the funding priorities for the 2015-2020 management plan. We received a response on May 9, 2016, but it did not clarify what ZPWMA's funding priorities were in 2016 or beyond. In September 2016, during the 17th Meeting of the Conference of the Parties to CITES, the Service met with representatives from Zimbabwe to further discuss the current status of the Service's evaluation of importation of elephant trophies. As a result of those conversations, the Service received a letter dated November 8, 2016, with supplemental information regarding Zimbabwe's elephant management plan priorities. Further, on January 27, 2017, the Service received a letter from ZPWMA containing a report, "The Role of Trophy Hunting of Elephants in Support of the Zimbabwe CAMPFIRE Program: December 2016" that more fully discussed the source and amount of revenue generated between 2010 and 2015 through the CAMPFIRE program, the current role of CAMPFIRE, and how revenue generated by elephant hunting has been utilized within communal areas over this 6 year period and into the future.

This finding is the result of an analysis of information available to the Service as of the date of this finding, having considered all of the information that has been obtained by the Service since 2014, including information on Zimbabwe's current management plan; the current population status of elephants in Zimbabwe, including poaching levels; regulations and enforcement concerns, such as anti-poaching efforts; the sustainable utilization of elephants in Zimbabwe; and the utilization of hunting revenues.

***Management Plans*:** In its April 4, 2014, letter, the Service asked whether Zimbabwe had a current national management plan for elephants. In the ZPWMA response, Zimbabwe responded that the "management plan" consisted primarily of The Policy and Plan for Elephant Management in Zimbabwe (1997) and Elephant Management in Zimbabwe, third edition (July 1996). In addition, ZPWMA stated that they also implement other plans: "The African Elephant Action Plan" (CoP15 Inf. 68), SADC Protocol on Wildlife, and Elephant and Rhino Security Plan. In the ZPWMA response, ZPWMA stated that all of the protected areas in Zimbabwe have "specific aspects of elephant monitoring programs that are implemented and reviewed on an annual basis." ZPWMA stated that information on the status of the elephant is derived from aerial surveys, water hole counts, walking transects, visitor observation, and ranger-based monitoring. In addition, ZPWMA stated that they are regularly monitoring the status of the elephant population, including poaching, at two sites through the CITES "Monitoring the Illegal Killing of Elephants" (MIKE) program.

While Elephant Management in Zimbabwe provides a historical review of elephant status in Zimbabwe prior to 1996, it primarily focuses on intentional reduction of elephant populations through culling rather than on maintenance or increase of populations under threat. Although the Service recognizes the potential role of culling as part of a management program, Elephant Management in Zimbabwe is largely irrelevant as a management plan given its age and because it does not establish specific measurables or management actions that need to be taken. The document does state that when managing elephant males for sport hunting, it is essential to account for all adult males removed from a population, including animals taken through problem animal control and poaching.

The Policy and Plan for Elephant Management in Zimbabwe was the outcome of a "Zimbabwe Elephant Management Framework" workshop held on January 13, 1997, in Harare. The document summarizes the issues that were affecting elephant populations in Zimbabwe at the time, and recommends policy statements on elephant management. While the document states a clear goal and establishes ten objectives with management actions identified, it does not provide a methodology to meet the objectives or complete management actions. Without a plan to take specific actions to meet the objectives, or at least a clear framework on how adaptive management efforts would be monitored to ensure that they are meeting the stated objectives, it is not clear to the Service how the document would serve as a "management plan." Other documents provided by ZPWMA in response to our inquiries, e.g. "The African Elephant Action Plan" (CoP15 Inf. 68), SADC Protocol on Wildlife, and Elephant and Rhino Security Plan also establish broad policy goals and objectives, but provide very little with regard to specific management actions or measurables.

Either as an outcome of our 2014 negative finding or internal discussions, ZPWMA recognized that The Policy and Plan for Elephant Management in Zimbabwe was out of date and did not address key elements that had changed since 1997. To address this, ZPWMA held a three-day workshop at Hwange Safari Lodge (December 2-4, 2014) to review Zimbabwe's elephant management regime. The workshop was attended by the ZPWMA Director General, the Permanent Secretary for Environment, Water and Climate, members of the Zimbabwe Parks and Wildlife Board, Executive Directors of Rural District Councils, and various NGOs. Both the Permanent Secretary and the Director General acknowledged at the workshop that the 1997 management plan was outdated and had been overtaken by events at the global, regional, and local levels and cannot address current challenges.

The workshop participants agreed on a framework for an upcoming management plan. The proposed revised management plan had the same long-term vision of the 1997 plan and basically the same target goals (i.e., maintain at least 4 demographically and genetically viable populations; maintain or increase elephant range; maintain numbers/densities of elephants at levels that do not adversely impact biodiversity conservation goals while contributing to economically viable and sustainable wildlife-based land uses). The workshop participants identified the beginnings of strategic objectives and outputs, as well as some key activities. The outcome of the workshop was the starting point for reevaluating Zimbabwe's management program. However, according to the Proceedings, there was insufficient time at the workshop to complete the section on means of verifying the key performance indicators. A schedule was agreed upon: by Dec. 15, 2014,

ZPWMA would appoint a drafting team to write up the management plan; the 1st draft of the plan would be ready by Jan. 30, 2015; the Elephant Management Plan Coordinating Committee would be convened by ZPWMA by Feb. 28, 2015; Final draft of management plan by April 30, 2015; and Operational annual management plans for 4 sub-regions by May 30, 2015.

While this schedule was not followed closely, since the December 2014 workshop, significant work has been done to develop a revised elephant management plan. As an outcome of this workshop, the participants identified that each of the four primary elephant ranges needed a regional plan to address specific challenges in each area. A workshop was held at the end of April 2015, to discuss an anti-poaching strategy for Mana Pools National Park, the results of which was later expanded to cover the mid-Zambezi Valley region. Likewise, in May and September 2015, workshops were held in Sebungwe and the South East Lowveld, respectively, to develop action plans for each region. An anti-poaching workshop for Hwange National Park was held in June 2015 and, according to ZPWMA, was combined with the management plan for the park to develop the basis for an action plan for Northwest Matabeleland.

As a result of these various workshops, and other efforts ZPWMA and their collaborators put into developing a revised national management plan, the Zimbabwe National Elephant Management Plan (2015-2020) (EMP) was approved for implementation by the Director-General of ZPWMA and the Minister, Ministry of Environment, Water and Climate, on January 20, 2016, and January 21, 2016, respectively. The revised elephant management plan addresses the challenges identified by the 2014 workshop participants and concerns identified by the Service about the failure of Zimbabwe's former management plan to identify specific action items, deliverables, and deadlines. The revised EMP incorporates an adaptive management framework with higher-level targets, with key components, strategic objectives, and outputs. Each key component has management actions that can be measured and verified through "Key Performance Indicators." A set deadline for each action was identified. These measurables allow ZPWMA to monitor the success of the new management plan and, through an adaptive management approach, address newly emerging concerns and long-term management needs.

The EMP focuses on five major components: Protection and Law Enforcement; Biological Monitoring and Management; Social, Economic, and Cultural Framework; Building Conservation Capacity; and Coordination, Collaboration, and Program Management. While addressing elephants on a national basis, the plan also contains annexes with regional management plans for each of the four main elephant populations in Zimbabwe. Differences in management requirements and regional challenges were addressed in the actions and indicators of each regional plan. The intent of the EMP, and its regional components, is to provide for accountability, transparency, and effective implementation. The EMP calls for the establishment of a national elephant manager position tasked with directing elephant management in Zimbabwe. The plan calls for the creation of a National Elephant Management Committee and four range-specific committees to review progress and oversee implementation.

The EMP (page 31) states that the plan "is an ambitious plan" and that the implementation would "require more human and financial resources than are currently available for the conservation and management of elephants in Zimbabwe." Recognizing that ZPWMA may not currently have

adequate resources to implement the Plan as drafted, and that well-prioritized implementation of the plan in a manner to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe could still help serve as the basis for a finding of enhancement, the Service requested on April 4, 2016, that ZPWMA identify its priorities for implementation and progress in implementation. On May 9, 2016, the Service received a response from (former) Director-General Chidziya. Unfortunately, Mr. Chidziya's response did not identify any priorities. It was not until the Service was able to meet with representatives of the Zimbabwe government and ZPWMA in South Africa in September 2016 that we were able to discuss the issue further. As a result, the Service received a letter dated November 8, 2016, that contained a document, apparently drafted between August 2016 and the end of October 2016, titled "The Zimbabwe National Elephant Supplementary Management Plan (2015-2020)" (the Supplement). This document identified four priority areas: Law Enforcement, Biological monitoring and management, Investigations/Intelligence, and the appointment of an Elephant Manager. The document identified that a national Elephant Manager has been hired (but did not identify how long the manager had been in place) and is currently working with ZPWMA personnel, regional intergovernmental agencies, private sector, and nongovernmental organizations to begin implementing the EMP. The Supplement also emphasized law enforcement and training to combat poaching and ivory trafficking. According to the document, as of August 2016, more than $1 million had been spent on priority activities. In addition, the document contained a summary on the status and progress, as of August 2016, of action items identified in the EMP for each of the four regions. While the summary does indicate that there are clearly areas where additional actions should be carried out, it does reflect a concerted effort on the part of ZPWMA and its partners since the EMP was signed into effect January 21, 2016, to implement the EMP in a manner to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe now and to make progress toward full implementation that achieves further benefits for elephants from sport hunting going forward.

***Population Status*:** To manage any population to ensure an appropriate population level and determine whether sport-hunting is having a positive effect on the survival of African elephants, it is vital to have sufficient data on population numbers and population trends to base management decisions. Without current population data, it is not clear how one can calculate the number to offtake. Without information on population demography and mortality, it is not possible to determine accurately what impact hunting, in conjunction with other offtakes, including problem animal control and poaching, is having on Zimbabwe's elephant population. At the time the Service made its April and July 2014 findings, there did not appear to be sufficient data on the population status of elephants within Zimbabwe. According to the IUCN SSC African Elephant Database report "2013 Africa", the elephant population in Zimbabwe in 2007 was estimated to be 99,107, of which 85% (84,416) was classified as "definite", although less than 1% of these animals were identified by aerial or direct counts, and only 0.3% (291) was classified as "speculative". While the total population in 2012 was estimated at 100,291, only 47% (47,366) was classified as "definite" and 45% (45,375) was classified as "speculative." Only 304 "definite" animals were counted by aerial or ground counts (less than 1% of the definite animals), while 41,840 of these animals were counted through sample counts or dung counts, a less accurate methodology than properly conducted aerial surveys, and the remaining 5,222 were estimated through "other guesses." In a November 3, 2014, letter to the Service, the IUCN/SSC African

Elephant Special Group (AfESG) stated that data had been inadvertently left out of the 2013 provisional report. Specifically, a 2007 survey of Hwange National Park which added an additional 30,000 elephants to the "definite" category (from the "speculative" category), while not changing the overall population estimate. In addition, according to information provided by ZPWMA, two surveys were conducted in 2012-2013 in Save Valley Conservancy and in Gonarezhou National Park (and surrounding areas). In Aerial Survey of the Larger Herbivores, Save Valley Conservancy, Zimbabwe, a report compiled in September 2013 by the Technical Advisory Committee of the Save Valley Conservancy, 1,538 elephants were counted. Based on nine years of aerial surveys (2004-2010 and 2012-2013), not all of which covered all of the Save Valley Conservancy, there appears to have been a short-term increase in elephant population density of 9.5%.

In 2014, the Pan African Aerial Elephant Survey (http://www.greatelephantcensus.com/), or the Great Elephant Census (GEC), was carried out over a significant portion of the savanna elephant's range in Africa. The GEC developed standardized survey methodology to establish a consistent continent-wide population basis line. However, it is important to emphasize that Zimbabwe did not modernize its elephant survey method nor did it conduct surveys comparable to the rest of the continent during the GEC. The surveys, approved by the organizers of the GEC, that were conducted used the same methodology, coverage, and transects that have been used since the 1960s in Zimbabwe. The results of this approach is that, while the surveys did not calculate a new baseline, or a more accurate population value, Zimbabwe was able to replicate past surveys that is comparable to past iterations to determine relative population trends over time. In 2015, confirmed results from the GEC reported an estimate for elephant abundance in Zimbabwe to be 82,304 individuals (73,715-90,893), with a total carcass ratio of 7.8%. This was a 6% decrease from the 2001 population estimate. It should be noted, however, that a carcass ratio of greater than 8% generally indicates a declining population.

In African Elephant Status Report – 2016, the AfESG estimated Zimbabwe's elephant population at 82,630 ± 8,589 across a range of 81,228 km^2. According to this report, Zimbabwe maintains the second-largest elephant population in Africa. The population is most concentrated in the North West Matabeleland and South East Lowveld ranges. There was an estimated increase in population for Northwest Matabeleland from 49,310 ±7,051 in 2001 to 53,991 ±7,711 in 2014. There were no significant differences in totals, but the carcass ratio in 2014 was 7% compared to 3% in 2001. According to the report, the 2014 estimate for Sebungwe (northern Zimbabwe) was 3,407 ±1,215 compared to 15,024 ± 2,133 in 2006. The observed carcass ratio of 30% indicated an unsustainably high offtake with almost no elephants left in the communal areas, with the main surviving sub-population in Matusadona and Chizarira National Parks and the Chirisa Safari Area. There was also a decrease in estimates for the Lower Zambezi Valley from 11,656 ± 2,259 in 2014, compared to 19,297 ±2,527 in 2003. However, the report stated that the observed carcass ratio of 6% is not as high as one would expect given the rate of population reduction and might suggest that the level of poaching has reduced in recent years.

Although Zimbabwe chooses not to use the same survey methodology that other countries used during the 2014 GEC, the results of the GEC, and subsequent survey data reported in the 2016 AfESG report, provided more reliable data and a better basis for establishing management

priorities than previous surveys and guesses. Prior to the GEC survey, ZPWMA had stated that the national elephant population was approximately 100,000 animals. This determination was based on guesses and old population estimates, many of which were over 10 years old, and was used to establish quotas or to facilitate management decisions. While establishing the EMP was paramount to improving Zimbabwe's elephant management regime, it was only by incorporating the current population estimates into the framework of the EMP that more effective management would be possible. The targets and goals of the EMP have taken these more reliable population estimates into consideration when establishing hunting offtakes to implement the EMP.

Regulations and Enforcement: The regulatory mechanisms for ZPWMA and its programs were established primarily under the Parks and Wild Life Act 1996 (amended), but also include a number of other laws and regulations. The Parks and Wild Life Act include sections on virtually every aspect of ZPWMA, including requirements for annual financial audits and reporting to the central government. The law also provides for substantial penalties for the unlawful possession of or trading in ivory. The first offense carries a minimum of 5 years and a maximum of 15 years in prison. The second offense carries a minimum prison term of 7 years and a maximum of 15 years. However, according to the response from ZPWMA to our April 4, 2014, inquiry, the General Laws Amendment Act (No. 5) of 2010 provides for a mandatory imprisonment of not less than nine years for poaching.

In January 1996, the Government of Zimbabwe approved the establishment of the Parks and Wild Life Conservation Fund that provides for financing wildlife operations directly from revenues generated through wildlife-related activities. The funding for ZPWMA is therefore coming from revenue generated through sport hunting conducted on state and private lands, concession leases, National Park visitor fees, and other wildlife related fees. While there have been requests by ZPWMA for funding from the central treasury in the past, to our knowledge, no other significant government funding has been provided, and only limited outside funding from NGOs or other governments appears to be available.

In response to the Service's May 12, 2015, letter, ZPWMA sent a letter on June 20, 2015, with additional information on their elephant hunting program. While the document did not specifically identify the amount of revenue generated from elephant hunting, it did state that in 2014, $5,072,493 was generated as hunting revenue. The document went on to state that historically 54% of the hunting market in Zimbabwe is made up of US hunters. Assuming the historical average provided by ZWPMA, US hunters may have contributed approximately $2.74 million of the total hunting revenue for 2014. The document estimated that 2015 revenues from hunting would increase to $6.2 million in 2015. While the document did not provide updated estimates on the role of U.S. hunters, it did assume the role of U.S. hunters would remain consistent with historical averages absent the fact that the Service was not approving the importation of elephant trophies at that time. ZPWMA stated that they had an operating budget of $25.7 million for 2014 and (budgeted) $34.1 million in 2015. According to this document, ZPWMA had revenue equaling $26.4 million in 2014 and estimated revenue of $35.5 million for 2015. While the Service did not receive information regarding ZWPMA's full 2016 or 2017 budget or the estimated revenue, we did receive information that as between January 2016 and August 2016, ZPWMA had spent $1.010 million on the implementation of the EMP. In addition,

we received more specific information regarding revenue generated in the communal areas that were managed by CAMPFIRE (see Revenue Utilization section below).

According to "The Role of Trophy Hunting of Elephant in Support of the Zimbabwe CAMPFIRE Program – December 2016", a report the Service received on December 17, 2016, the Reserve Bank of Zimbabwe, in collaboration with relevant stakeholders, has established the Tourism Receipts Accounting System (TRAS) that required all outfitters to submit returns listing the revenue generated for hunting activities. This system has been in place for several years, but required manual analysis of the data to extract information on hunting revenue. In January 2015, a web-based system (TRAS2) was introduced that links Safari Operators, ZPWMA Authority, Taxidermists, Shipping Agents, International Marketing Agents and Reserve Bank. Under this system all authorized hunts are registered allowing for the capture of hunting data, such as the origin of clients, value of trophies and hunts, and area hunted, to monitor hunting quota utilization and track hunted trophies. According to the December 2016 report, the Exchange Control Division of the Reserve Bank of Zimbabwe and the ZPWMA are now able to:

1. Assess regional price differentials of similar hunts and the reasons thereof;
2. Present TRAS2 system updates and reports to the users, including international marketing agents;
3. Engage with international marketing agents of sport hunting;
4. Obtain relevant insights on governing of the hunting sector; and
5. Come up with an effective mechanism to fully account for export proceeds from the hunting sector.

This system would be very beneficial in obtaining data in the future on how funds generated by elephant hunting in Zimbabwe, particularly from U.S. hunters, are utilized to enhance the survival of the species. .

One concern expressed by the Service in its previous findings was whether ZPWMA was responding to the apparent poaching crisis facing Zimbabwe. One particular concern was the poisoning event in Hwange. Based on communication from ZPWMA, as well as information received from NGOs, ZPWMA specifically responded to the threat of poaching in Hwange by improving radio communications, adding aerial surveillance, and holding 35 public awareness meetings in the area. ZPWMA has also stepped up its anti-poaching nationally by adopting a number of "Urgent Measures" (as identified in ZPWMA's July 2015 letter). ZPWMA has acted to increase poaching penalties, criminalize the use of cyanide in poaching, increase air surveillance of protected areas, collaborate with national law enforcement and military agencies to raise a national concern regarding elephant poaching, and improve intelligence-sharing across international borders. According to available information, ZPWMA has also held a judiciary awareness program to support better implementation of relevant poaching laws and penalties throughout prosecution and sentencing. As shown in the July 2015 Response, most of ZPWMA's budget (77%) is allocated for staff costs and patrol provisions. These expenditures reportedly fund anti-poaching efforts throughout the elephant range. ZPWMA reportedly has a staff of 1,504 active field rangers and has stated that there is an intent to increase this number. According to "The Zimbabwe National Elephant Supplementary Management Plan (2015-2020)", over 80% of spending under the new EMP has been on law enforcement (anti-poaching) and training, with law

enforcement identified as the top priority going forward.

The Parks and Wildlife Act Chapter 20:14 devolved authority to manage and benefit from wildlife on communal and private lands to the landholders. Although the Service raised questions on how successful this approach would be in previous findings, the Zimbabwe government has established dialogue and collaborated with NGOs, landowners, and safari area concessionaires to improve elephant management and anti-poaching efforts. According to their July 2015 response to the Service, and supported by the report on the implementation of the EMP provided in November 2016, ZPWMA is engaging private players in co-management in some areas and entering into long-term lease agreements (10-25 years) to manage some protected areas. In certain areas, ZPWMA is reportedly partnering with safari operators; in others, they partner with non-profits, such as the Tashinga Initiative in the Zambezi Valley and WWF in the Hwange-Sanyati Biological Corridor.

On November 12, 2015, a stakeholders conference was held in Harare. The meeting was called by Minister Mrs. Opah Muchinguri-Kashiri, Minister of Environment, Water and Climate, as the chairperson of a multi-ministerial cabinet committee established to look into the poaching crisis within Zimbabwe. In attendance were the Minister of Tourism and Hospitality, and the Minister of Rural Development, Preservation of Culture and Heritage. Other delegates included the Permanent Secretaries from the Ministries of Environment and Agriculture, representatives from the Zimbabwe National Army, the Air Force, the Zimbabwe Republic Police, Rural District Councils, NGO's, industry and civil society. The conference, partially funded by the African Wildlife Foundation, noted that Zimbabwe needed to reinstate a level of custodianship over wildlife to the local level and give communities and land owners broad user rights. It also noted the need to review the efficiencies of the private wildlife sector, community wildlife programs, and ZWPMA. A number of recommendations were made at the conference including addressing resource concerns of rangers in the field; evaluate how CAMPFIRE is interacting with local communities; and building greater trust between various ministries and agencies to address sport hunting issues. The Minister also called for establishing regular meetings of stakeholders to ensure that there is continual movement in addressing identified issues.

While no information was provided on whether these stakeholder meetings are proceeding as called for by the Minister, the Service was informed by AWF that they have established, and partially fund, the Environment and Wildlife Advisory Committee (EWAC) for the Minister. According to AWF, this committee will advise the Minister and provide technical assistance to ZWPMA. AWF stated that the November conference was the first of its kind to bring together such a wide array of ministries and agencies and, according to AWF, will greatly improve the wildlife industry in Zimbabwe.

At the 16th Meeting of the Conference of the Parties to CITES in 2013, the report on ETIS (CoP16 Doc. 53.2.2) expressed concerns about Zimbabwe in regard to illegal trade in ivory. The report stated that, as a group, Zimbabwe, Botswana, and Namibia, were in the middle range, when compared to 64 other consumer or producer countries of elephant ivory, in terms of the mean number of seizures identified, but ranked fifth in the measure of scale, indicating most of the seizures were in the 10-100 kg class (i.e., an average number of seizures that were predominately

smaller in size). The report noted that 65% of the ivory trade between 2006 and 2011 had occurred since 2009, indicating that illegal ivory trade is increasing. Governance indicators were mixed, with a much lower than average World Bank "rule of law" score, but the second highest law enforcement ratio of any group of countries evaluated.

At the 17th Meeting of the Conference of the Parties to CITES in 2016, the "Report on the Elephant Trade Information System (ETIS)" (CoP17 Doc. 57.6) reflected that there were some improvements in Zimbabwe. As in the previous report, the document grouped Botswana, Namibia, and Zimbabwe together in terms of their level of government oversight and capacity. These countries regularly report data to ETIS. In terms of all data that implicate these countries in an ivory seizure, this southern African grouping reflects middle range values in terms of mean number of seizures and the mean weight of ivory seized. The measure for assessing the presence of organized crime stands at zero which, according the document, is indisputably a good sign. Governance indicators are mixed, however, with the rule of law score problematic and suggesting the presence of corruption, but the relatively high law enforcement ratio partially mitigates that concern. As reported in earlier ETIS reports, Zimbabwe was the country that pulls the rule of law score down, indicating far greater governance challenges exist in that country. The domestic ivory market score is low, reflecting the complete absence of a market in Botswana and a very low level of trade in Namibia. Again, Zimbabwe is the exception with the tenth largest ivory market of any country in this analysis. While not directly addressed in the two ETIS reports, there is some evidence of corruption or collusion within the wildlife sector. It was revealed in 2016 that there was not adequate control of its rhino horn stockpile, and the former Director General Edson Chidziya was recently fired over the loss of a significant number of rhino horns. While this event raises concerns over ZPWMA's ability to maintain control over stockpiles and other resources, it should also be acknowledged that there are mechanisms in place, that were utilized, to address such governance issues.

***Sustainable Use*:** According to the AfESG 2016 report, poaching for ivory has escalated in the past 10 years and has become a major problem in Zimbabwe. Poaching impacts are highest in the north of the country, particularly in the Sebungwe Region. However, at the same time, concerns have been expressed about the impact of high numbers of elephants on vegetation and other biodiversity in protected areas, particularly in areas with elephant densities higher than 0.5 elephants per km^2 (some areas of Zimbabwe have densities higher than 1 elephant per km^2). These two apparently opposing factors (uncontrolled poaching that may adversely affect elephant populations in some areas of Zimbabwe and overutilization of habitat by high numbers of elephants in other parts of Zimbabwe) previously raised concerns by FWS on what would constitute a sustainable utilization of elephants in Zimbabwe.

In previous findings, the Service did not have sufficient information regarding offtake in Zimbabwe, including basic information like the number of elephants that have been sport-hunted annually. For both the 2014 and 2015 hunting seasons (January – December), Zimbabwe had established an annual export quota of 500 elephants (1000 tusks). This is the same quota that

Zimbabwe has reported to the CITES Secretariat since 2004. Likewise, for 2016 and 2017, Zimbabwe has reported the same annual export quota to the Secretariat. It is unclear, given the improved population data now available to Zimbabwe and the revised management plan that specifically recognizes the use of population data when establishing quotas, why Zimbabwe maintains the same CITES export quota year to year. While the Service will request additional insight into Zimbabwe decision not to amend the voluntary quota provided to the CITES Secretariat before making a 2018 finding, unlike what was available to the Service when it made its previous findings, there is now clear information that Zimbabwe has not reached this export quota in the past and is unlikely to do so in the future given the new management efforts under the EMP. In ZPWMA's July 20, 2015, response, a chart was provided that identified the level of offtake between 2010 and 2014, as well as approximately six months of 2015. Based in this response, the average of 215 sport-hunted elephant trophies was taken each year between 2010 and 2014, with the first half of 2015 (75 trophies) being consistent with this annual average (between 2011 and 2013, the average off-take was 260 annually (274, 247, and 258, respectively), so a lower offtake in 2010 (134 trophies) and 2014 (162 trophies) made a significant difference in average annual offtake). Over this period, there were 57 and 23 animals culled in 2010 and 2011, respectively. According to ZPWMA, the number of live exports were low, with a total of 11 live elephants exported in 2012 and 2014 (however, according to the WCMC trade database, Zimbabwe reported the export of 3 live elephants in 2011, 18 in 2012, and 27 in 2015).

Of the five years of data (2009-2013) ZPWMA provided in their April 17, 2014, response, an average of 190 elephants were identified as being poached annually. In 2009 and 2010, there was an average of 111 elephants poached; however, between 2011 and 2013, the average more than doubled to 243 elephants. According to the information received in July 2015, 293 elephants were poached in 2013, including the 105 elephants poisoned in Hwange National Park. However, according to more recent information, the number of elephants poached in 2014 declined to 194, with 70 being identified as poached in the first 6 months of 2015. This identified decline was also corroborated by data presented at CoP17 (CoP17 Doc. 57.6).

While the number of elephants taken as problem animals was not elucidated in material provided by ZPWMA in 2014, their July 20, 2015, response did provide more details. Over a 5-year period (2010 to 2014), an average of 76 elephants was taken annually. There was a spike in 2012 of 173 animals, but other years the annual offtake was reportedly between 44 and 61 animals annually. The July 20, 2015, document also provided more information regarding natural mortality rates. According to this information, between 2010 and 2014, there was a spike of natural mortality in 2011 (1,015 mortalities), 2012 (1,373), and 2014 (1,981), with a five-year average of 940 animals (although the reported natural mortality in 2010 and 2013 was substantially lower, which raises questions regarding the reliability of the 2010 and 2013 figures). The partial data for 2015 (455 reported mortalities) is consistent with average annual mortality rate of 940 animals.

Taking into consideration all of the reported offtake between 2010 and 2014, there was an average offtake of approximately 1,500 animals. Based on this average and the reported population estimates coming from the 2014 GEC, Zimbabwe appears to be experiencing approximately 2% offtake of their elephant population. Even if the annual export quota was 500 elephants, based on the most recent survey data, the hunting offtake would be less than 1% of the total population

(noting, of course, that hunting offtake is typically focused on a select group of larger, tusked elephants). With the reported average hunting offtake of 215 trophies, as reported in 2015, the hunting offtake would be approximately 0.2% of the total population.

In our previous findings, the Service raised concerns about how quotas were established and allocated among safari outfitters and landowners. According to information from ZPWMA, as well as information provided by many of the comments received by the Service from safari outfitters and professional hunters associations, the principal form of utilization of the elephant in Zimbabwe is sport hunting. According to ZPWMA, quotas established in previous years (before the EMP) were set to maximize the sustainable production of high-quality trophies without detriment to the population. It appeared that the national export quota of 500 elephants was the goal to reach when establishing quotas for each hunting area, as opposed to determining the best quota to facilitate management goals for those areas. According to the material provided to the Service in 2014 and 2015, it appears that the complete quota of 500 elephants was allocated proportionally to each area based on recommendations from ZPWMA ecologists, field staff, safari operators, other stakeholders, and technical specialists through "multiple stakeholders participatory quota setting." Then, on an annual basis, stakeholders use available population data to propose a particular quota for an area to a Quota Setting Workshop. At this workshop, it is determined if the proposed quota should be adopted or modified in relation to other proposed quotas. Factors that are apparently considered each year include population estimates, growth rates of populations, size of hunting areas, status of habitat, and target elephant population size.

With the establishment of the EMP, there is a more systematic, scientifically-based approach to establish national quotas. According to a presentation made by the Zimbabwe elephant coordinator at a workshop in South Africa at the end of November 2016, Zimbabwe looks at a number of factors. While they are still starting with the quota identified to the CITES Secretariat (500 elephants), they are not immediately dividing this quota between all of the hunting areas. Instead, they are taking into consideration the results of the 2014 survey and subsequent surveys, results from research efforts, the size of the hunting area in relation to elephant habitat requirements, illegal off-take and other forms of off-take, how the hunting areas are managed in relation to land use or fencing, human-wildlife conflicts that have occurred previously, and recommended sustainable off-take levels developed based on ecological assessments of the hunting area. This information is then further evaluated in light of other species within the hunting area, past elephant trophy quality, and community benefits of proposed harvests.

The proposed quota is then discussed at stakeholder workshops in each of the four elephant regions. This process is presented in the District Quota Setting Toolbox and the Quota Setting Manual, published in 2000 and 1997, respectively, that were discussed in previous Service findings. The significant difference between how the quotas were set previously and the methodology carried out now is the weighted input of elephant ecologists and managers. While stakeholder interests are considered, the final quota determination is made by ZPWMA ecologists to ensure the quotas are assessed at a sustainable level, having negligible impact on the population. According to their July 2015 response, ZPWMA reduced the starting number from 500 to 300. For 2016, they stated that they were raising the starting point for determining a national quota to 400. However, based on the 2014 census data, a quota of 400 elephants would

constitute 0.49% of the total population of over 82,000. It should be noted that to date, the annual trophy harvest of 215 elephants is well below this value and therefore would account for less than a 0.49% off-take (It should be noted, however, that the proportional off-take of trophy animals would be higher when considering that trophy hunting is targeting a specific sub-group of the total population).

Revenue Utilization: On communal lands in Zimbabwe, the protection of elephants falls primarily under the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE), which encourages reductions in human-elephant conflicts through conservation-based community development. The program was established in 1989 as a means of providing an economic incentive and return to rural communities while encouraging tolerance for the elephant and sustainable use of natural resources. This program has been the model for community-based conservation efforts in several other African countries and identified as an innovative program in the past. Under this program, there are currently 29 Rural District Councils (RDCs) that have been granted Appropriate Authority status under the Parks and Wild Life Act. Based on several CAMPFIRE documents presented to the Service, between 12 and 16 RDCs with exploitable wildlife resources make up the core of the CAMPFIRE program.

According to the Revised CAMPFIRE Revenue Sharing Guidelines, which were incorporated into the Constitution of the CAMPFIRE Association in 2007, at least 55% of generated revenue from hunting should be devolved to producer communities, no more than 26% and 15% for management and overhead at RDC level, respectively, and 4% as a levy to the CAMPFIRE Association. According to an undated document (but presumably produced in late 2014, since it references data from 2014 but does not include any references to 2015 data) produced by CAMPFIRE (CAMPFIRE report undated) at least 10 RDCs comply with the Revenue Guidelines. As reported in this document, data were presented in an October 2013 report stating an estimated US$2,496,349 was generated by 15 RDCs in 2012 from hunting revenue. While this report states that 5 out of 13 RDCs contributed 84% of the hunting revenue, the supporting table to this statement does not reflect this number. Further, the report states that an assessment of 18 main CAMPFIRE districts allocated hunting quotas for 2014 shows that 106 out of 167 bull elephant hunts were booked by U.S. hunters and that elephant hunting contributes more than 70% of the income to the CAMPFIRE program, and that 90% of all CAMPFIRE revenue comes from all hunting.

The CAMPFIRE report (undated) stated that in the Community Based Natural Resources Management Stocktaking Assessment Report by Mazambani and Dembetembe (2010) [Service does not have a copy of this report], between 1989 and 2006, US$88.9 million in gross revenue was realized by key stakeholders in the CAMPFIRE program. Of this revenue, 55% went to safari outfitters, 23.4% to producer communities, 19.8% to RDCs, and 1.8% to the CAMPFIRE Association. (The Service has no additional documentation or information to validate these figures.)

On 17-18 November 2014, a workshop titled “CAMPFIRE Stakeholder’s workshop: Towards the Development of a New Elephant Management Plan and Policy” was held in Zimbabwe. The

discussions and recommendations touched on the effectiveness of the CAMPFIRE concept and its relationship to tourist hunting. At the workshop, Charles McCallum Safari reported that they had contributed over $349,000 to CAMPFIRE wards and the RDC in 2013 – U.S. elephant hunters contributed 40% of this total ($132,870). In 2014, the total was up to $400,995 but contributions due to U.S. hunters dropped to 27% ($100,800) – all elephant hunting was only 32% of the total ($118,425). It appears that the workshop may have been a good starting point to address issues faced by RDCs and to improve the effectiveness of CAMPFIRE. However, according to Conservation Force, represented at the workshop, CAMPFIRE needed to find a balance between a large elephant population and human population pressures, as well as ensure that revenue from tourist hunting and other resource uses flows to local communities. The 2014 Pan African survey results confirmed that elephant populations in the Zambezi Valley and in Sebungwe have decreased significantly. These areas include communal land. The declines indicate that the persistence of elephants in these areas may be in question in future years if the trend is not halted or reversed.

In a November 11, 2015, presentation by CAMPFIRE to the 14th African Wildlife Consultative Forum in South Africa, it was reported that new CAMPFIRE Revenue Sharing Guidelines have been established where revenue are paid by Safari Operators within CAMPFIRE communities directly into community controlled bank accounts, not through RDCs. CAMPIRE areas would receive 100% of trophy fees for all animals hunted. The communities within the RDC would receive 55% of CAMPFIRE income for their projects, while 41% would be provided to the Rural District Councils for field patrols, monitoring of hunts, problem animal control, water, fire management, and district development. The remaining 4% would be given to the CAMPFIRE Association to coordinate the program and represent its interests at all levels. However, on average, 52% (below required 55%) went to communities, 44% (vs 41% required) went to councils, and 4% to the CAMPFIRE Association.

According to this presentation, the total income of all hunting in 2014, within CAMPFIRE areas that were surveyed, was $2,102,007, compared to $2,229,910 in 2013. It was stated that, on the average, elephant hunting contributed 54% ($1,138,375) of the total hunting income in 2014. Only one district, Matobo, did not generate any income from elephant hunting. Hwange district generated 100% of its income from elephant hunts. Average revenue was $82,475 per district, but one district, Matobo, generated $0 and Tsholotsho generated $381,500. Based on the actual division of the revenue, communities received $1,100,643, RDC received $917,283, and CAMPFIRE Association received $84,080 from all hunting related activities in 2014.

Reports received since 2014 indicate that funds have been invested in projects that benefit the communities overall, such as building classrooms or clinics; purchasing farm equipment; rehabilitating water supplies; purchasing vehicles used in wildlife monitoring and anti-poaching; installing solar power; and other infrastructure improvements. The purpose behind CAMPFIRE is to stimulate the long-term development and sustainable use of natural resources in Zimbabwe's communal areas. By linking these tangible benefits to the protection of wildlife within the communal areas, CAMPFIRE can provide a clear connection to rural residents for the

protection of wildlife, including elephants. Its infrastructure also creates jobs for conservation officers and in monitoring programs, as well as employing game scouts.

In September 2016, the Service received information regarding efforts to review the CAMPFIRE program, which is being supported by the EU through a 12 million Euros contribution. The review was to start in February 2016 and last for 18 months, with a report by the end of 2017. The review was stated to be an effort to develop an improved policy, regulatory, and institutional framework for CAMPFIRE. While this review is still under way and the Service has not received any information on the potential outcome of the review, this appears to be a significant move forward in addressing issues that have been raised about CAMPFIRE, such as their support to communities to better manage wildlife resources and equitably utilize their financial resources.

"The Role of Trophy Hunting of Elephant in Support of the Zimbabwe CAMPFIRE Program – December 2016," a report the Service received on December 17, 2016, contained a recent audit of nine CAMPFIRE districts that receive funds from elephant hunting. In these districts, approximately 60% of the allocated elephant quota (approximately 114 elephants/year of the annual average quota of 180 elephants) has historically been utilized and the majority of hunters (53%) originate from the United States. These U.S. hunters have contributed US$9 million toward the CAMPFIRE Program during 2010-2015, compared to US$8 million from hunters from 40 other nations. Based on this report, approximately 25% of Zimbabwe's people are receiving incentives to conserve wildlife and prevent anti-poaching through CAMPFIRE. Between 1994 and 2012, CAMPFIRE generated US$39 million of which US$21.5 million was allocated to communities and used for resource management (22%), household benefits (26%), and community projects (52%). According to this report, about 90% of CAMPFIRE revenue comes from hunting, with elephant hunting contributing up to 70% of annual revenue.

According to the report, a total of 1,087 elephants have been allocated on quotas to the nine CAMPFIRE areas since 2010. The distribution of this quota among the nine CAMPFIRE areas is dictated by the relative density of elephants in the neighboring protected areas and those residing in the CAMPFIRE areas. Tsholotsho, for example, which borders the southern boundary of Hwange National Park, was allocated 158 elephants (or approximately 26/year) while Hwange, Binga and Hurungwe CAMPFIRE Areas, which do not border onto areas of high elephant densities, received approximately 10 elephants/year. Over the six years, Tsholotsho (99%), Mbire (71%) and Chiredzi (68%) have successfully utilized their allocated quotas while areas such as Hurungwe (20%) and Binga (26%) have utilized a smaller percentage of their allocated quotas. Based on this information, and information in the "Supplement", approximately 53% of all sport-hunted elephant trophies taken annually in Zimbabwe were hunted CAMPFIRE areas.

As stated earlier, to fully account for earnings in the hunting sector, the Reserve Bank of Zimbabwe established the Tourism Receipts Accounting System (TRAS) and its web-based system, TRAS2 to links Safari Operators, ZPWMA, Taxidermists, Shipping Agents, International Marketing Agents and Reserve Bank. Under this system all authorized hunts are registered allowing for the capture of hunting data (origin of clients, value of trophies and hunts,

area hunted etc.), monitoring hunting quota utilization and tracking hunted trophies. Outfitters that operate hunting concessions in CAMPFIRE Areas are required to deposit copies of the TRAS2 form with the CAMPFIRE Office in their respective RDCs/Wards. Each Office is therefore able to extract data on daily rates, trophy fees and other incidental revenues. These data confirm the major role of American hunters to the CAMPFIRE program who contribute 52% of the overall income, but do not break down this contribution to species hunted, such as elephants.

Local conservation efforts: As was identified in our previous findings, Conservation Force and other commenters emphasized the economic impact of the suspension to local conservation efforts being carried out by individual landowners and leaseholders, safari outfitters, and conservancies. In our previous findings, we acknowledged that there were "pockets" of conservation work being carried out. It is now evident that after our 2014 and 2015 findings, due to greater efforts by ZWPMA and NGOs, there has been an increased effort by land owners and leaseholders to take a greater effort in addressing conservation needs of elephants and the habitat that they rely on. As stated previously, a number of regional and national workshops were held in 2014 and 2015 that promote a greater public-private partnership. While ZWPMA stated in 2014 that legislation was in place to decentralize management of wildlife within Zimbabwe, it does not appear that efforts were actually initiated until the workshops that were held after our original 2014 finding and the completion of the EMP in January 2016. In addition to the regional and national workshops that have been convened between ZWPMA and safari operators throughout Zimbabwe, there have been meetings targeting specific conservation needs with operators in the Lower Zambezi Valley and South East Lowveld. In addition, there appears to be a greater effort on the part of ZWPMA to put mechanisms into place to support these efforts. This has been reflected in collaboration between ZWPMA, WWF, Friends of Hwange, and other stakeholders on law enforcement efforts and funding conservation efforts in Northwest Matabeleland. In the Lower Zambezi Valley, ZWPMA has established joint ventures with WWF, Zambezi Society, the Tashinga Initiative, and other organizations to carry out anti-poaching efforts. Awareness campaigns to education local communities on wildlife conservation have been expanded in the South East Lowveld Northwest Matabeleland.

The Parks and Wildlife Act Chapter 20:14 devolved authority to manage and benefit from wildlife on communal and private lands to the landholders. Although the Service raised concerns about this approach in previous findings, there appears to have been an increase in working with NGOs, landowners, and safari area concessionaires to improve elephant management and anti-poaching efforts. According to their July 2015 response to the Service, and supported by the report on the implementation of the EMP provided in November 2016, ZPWMA is engaging private players in co-management in some areas and entering into long-term lease agreements (10-25 years) to manage some protected areas. In certain areas, ZPWMA is reportedly partnering with safari operators; in others, they partner with non-profits, such as the Tashinga Initiative in the Zambezi Valley and WWF in the Hwange-Sanyati Biological Corridor.

Evaluation:

As explained earlier in General Considerations, the Service evaluates a number of factors to

determine whether the killing of the trophy animal taken in a range country will enhance the survival of African elephants under 50 CFR 17.40(e)(6)(i)(B). The Service evaluates applications in accordance with the African elephant 4(d) rule and the permit issuance criteria outlined in 50 CFR 17.32(a)(2). In evaluating each of these criteria the Service has considered the information currently available to the Service as of the date of this finding on elephant hunting in Zimbabwe in 2016, 2017, and 2018, including information provided by the Government of Zimbabwe, current applicants to import sport-hunted elephant trophies, interested individuals and organizations, and other information available to the Service. In accordance with the regulatory requirements, the Service is able to make a determination that the killing of the trophy animal in Zimbabwe, on or after January 21, 2016 and on or before December 31, 2018, will enhance the survival of the African elephant. Therefore, with the information currently available, applications to import trophies hunted during this time period will be considered to have met this requirement unless we issue a new finding based on available information. In accordance with the 4(d) rule for the African elephant, 50 CFR 17.40(e), the Service will review each application received for import of such specimens on a case-by-case basis and each application also needs to meet all other applicable permitting requirements before it may be authorized. On an ongoing basis and as it evaluates each application, the Service will continue to monitor the status of the elephant population, the total management program for elephants in the country to ensure that the program is promoting the conservation of the species, and whether the participation of U.S. hunters in the program provides a clear benefit to the species. Accordingly, the Service may modify its determination based on available information consistent with the regulatory requirements. Further discussion for each of the criteria follows:

17.32(a)(2)(i): Whether the purpose for which the permit is required is adequate to justify removing from the wild or otherwise changing the status of the wildlife sought to be covered by the permit:

Zimbabwe has adequate legislation in place and on January 21, 2016, adopted the Zimbabwe Elephant Management Plan 2015-2020 (EMP), with regional components, which has clear objectives, action items, and measurables to more effectively monitor and evaluate elephant populations and management and facilitate a more systematic management regime. Further, ZWPMA has demonstrated through recent reports that the EMP, while somewhat constrained due to limited resources, is being implemented. Overall beginning January 21, 2016, while there are still concerns over the ability to fully implement the EMP, ZPWMA has provided a well-designed elephant management plan to incorporate an adaptive approach to management that considers regional variation in elephant management requirements. There is no doubt that efforts must continue in implementing the EMP to ensure adequate management of elephants in each of the four regions within Zimbabwe, but to date ZPWMA appears to have established a strong mechanism for national elephant management and has documented that identified targets and measurables are being achieved in a manner to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe now and is making an effort to make progress toward full implementation that achieves further benefits for elephants from sport hunting going forward.

The Pan African Elephant Aerial Survey, or Great Elephant Census (GEC), that was conducted in Zimbabwe in 2014, and became available in 2015, has provided ZPWMA a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. Although Zimbabwe did not conform to the new methods that GEC hoped to establish as the new standard, they opted to conduct surveys using other methods which were not necessarily more accurate but were directly comparable to previous surveys. While the revised population data was available in 2015, as well as other survey data obtained after the 2014 GEC it was not until implementation of the EMP in January 2016 that the data was fully incorporated into a systematic management regime. From information provided by ZPWMA in late 2016, it is clear that this population data has been incorporated into the implementation of the EMP and establishing scientifically defensible hunting quotas.

ZWPMA stated that U.S. hunters historically contribute approximately $3 million annually through all hunting activities. ZWPMA, as well as other commenters, has stated that elephant hunting is the key component of the hunting industry since the species is the primary draw for U.S. hunters to Zimbabwe. For the most part, the central Zimbabwean Government does not directly allocate treasury funds to ZPWMA. Therefore, the vast majority of funding for ZPWMA must come from hunting revenues. The same is true for CAMPFIRE. With the implementation of TRAC2, ZPWMA and CAMPFIRE can now better document and track revenue generated through sport hunting and how it is utilized. For the 2014 and 2015 hunting seasons, the Service received limited evidence to support a positive enhancement finding. With information provided by ZPWMA in 2016 in response to additional inquiries from the Service, as well as meetings with ZPMWA officials in late 2016, there are now accounting mechanisms in place that document hunting revenue.

According to the information provided to the Service in late 2014 and 2015, Zimbabwe has established hunting quotas for all areas of the country. However, it was not until late 2015 and 2016 that the Service received more specific information on how these quotas are established, including how other forms of offtake, such as poaching and problem animal control, were taken into account. Further, it was not until the EMP was signed into effect January 21, 2016 that the Service could have confidence that ZWPMA had in place effective mechanisms to establish scientifically based hunting quotas that took into consideration other forms of off-take to ensure the sustainable utilization of their elephant population.

Since our findings in 2014 and 2015, CAMPFIRE has provided significantly more information on how their programs support the conservation of elephants and provide benefits to and promote greater tolerance of wildlife in rural communities. While the program has come under criticism in recent years relating to excessive retention of generated funds by district councils and diminished benefits to communities and elephants, strides are being taken to address these concerns. An overarching analysis of CAMPFIRE, supported by a grant of 12 million Euros from the EU, is currently being conducted and is scheduled to be completed by the end of 2017. While this review is still under way and the Service has not received any information on the potential outcome of the review, significantly more information has been provided to the Service in regard to how funds are utilized and the basis for hunting off-takes.

As stated in the previous findings, there have been "bright spots" regarding elephant conservation efforts, particularly those carried out by non-governmental entities that are providing a benefit to elephants. Since our 2014 and 2015 findings, there appear to be strong indications that the efforts of private landowners and consortiums to management elephants within their areas of control have received greater support from ZWPMA and the Zimbabwe government. There is increased support from the Central Government and Rural District Councils to expand and support local conservation efforts and evidence that local conservation efforts are meeting management deficiencies that were identified previously by the Service.

Based on the information currently available to the Service, we believe that these efforts will continue through the remainder of 2017 and 2018 to address Zimbabwe's national and regional management issues, including monitoring the current population status of elephants, addressing poaching levels and prevention, and the appropriate utilization of hunting revenues that the Service identified in its previous Zimbabwe findings. Therefore, based on the information available to the Service and provided that elephants harvested in the 2016, 2017, and 2018 season were properly permitted and in compliance with international, national and provincial regulations, we find that the requirements of 17.32(a)(2)(i) is met.

17.32(a)(2)(ii): <u>The probable direct and indirect effect that issuing the permit would have on the wild populations of the wildlife sought to be covered by the permit</u>:

As a national management plan with regional management components, the EMP is extensive and addresses many aspects of elephant conservation and management. As reviewed above, the EMP provides a history of the relevant legislation in regard to elephant conservation and puts the current efforts into context. Objectives for elephant conservation are articulated in the EMP with clear goals identified. The monitoring plans have scientifically sound methodologies. While it is recognized that Zimbabwe does not currently have sufficient resources to fully implement the EMP, it has identified priority areas that have been established and are being implemented. To date ZPWMA appears to have established a strong mechanism for national elephant management and have documented that identified targets and measurables are being achieved in a manner to enable elephant sport-hunting that benefits the survival of African elephants in Zimbabwe from January 21, 2016, to present and is making an effort to make progress toward full implementation that achieves further benefits for elephants from sport-hunting going forward. Based on the information currently available to the Service, we have confidence that these efforts will continue in 2017 and 2018.

Evaluating the information provided by the Zimbabwe government and other sources, it appears that the elephant hunting program in Zimbabwe will address the concerns that were identified by the Service in our previous findings. Therefore, the management of elephants in Zimbabwe contributes to the on-going survival of the species.

Provided that the off-take of elephants continues to be monitored and the actions identified in the EMP be implemented, and that effective measures are taken to limit the illegal offtake of

elephants from poaching and offtake due to conflict with people, the participation of U.S. hunters in elephant hunts would provide an indirect benefit to wild populations by helping to support the ongoing management of the species. Therefore, based on the information available to the Service, the probable direct and indirect effect that issuing an import permit for a legally hunted elephants would have on the species would be a net positive.

17.32(a)(2)(iii): Whether the permit, if issued, would in any way, directly or indirectly, conflict with any known program intended to enhance the survival probabilities of the population from which the wildlife sought to be covered by the permit was or would be removed:

As stated above, Zimbabwe is monitoring and controlling the harvest of elephants through the EMP. The issuance of import permits for elephants legally hunted in Zimbabwe would not conflict with any programs intended to enhance the survival probability of the species in Zimbabwe. As with all aspects of an adaptive management approach to managing a species, the Service will continue to monitor the effectiveness of the hunting program to ensure that it continues to provide the stated benefits to elephants.

Therefore, based on the information available to the Service, the issuance of import permits for legally hunted elephants would not conflict with any known conservation programs.

17.32(a)(2)(iv): Whether the purpose for which the permit is required would be likely to reduce the threat of extinction facing the species of wildlife sought to be covered by the permit:

In some parts of Zimbabwe, elephant populations remain robust. In three of the four primary areas where elephants are found, population numbers exceed the desired density established by stakeholders in the EMP and resulting in significant modification of plant communities. A major component of the EMP is to manage elephant populations at a level that supports the biodiversity of the habitat and associated wildlife, as well as address poaching issues that have been a significant issue in the recent past. As identified in the EMP, with increased monitoring and oversight of elephant management efforts at both the national and regional level, the legal hunting activities that U.S. hunters would be involved in would contribute to reducing the threat of extinction of elephants by supporting ongoing management efforts. This legal hunting off-take must be evaluated in light of other off-takes, including poaching, to ensure that populations of elephants, particularly in the Sebungwe, are adequately maintained.

Therefore, based on the information available to the Service, the purposes for which import permits would be issued would likely reduce the threat of extinction facing elephants in Zimbabwe.

17.32(a)(2)(v): The opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application:

Based on our review of comments provided to the Service since our 2014 finding, as well as information obtained through personal conversations and literature, there is a general agreement

that hunting, done properly and well managed, would not have an adverse effect on elephant populations. Researchers and others with substantial knowledge of elephant management have stated that, whether or not they support hunting in general, they see that benefits can be had through a scientifically based hunting program for elephants.

The IUCN Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives (Ver.1.0, August 2012) state that well-managed trophy hunting can "assist in furthering conservation objectives by creating the revenue and economic incentives for the management and conservation of the target species and its habitat, as well as supporting local livelihoods" and, further, that well-managed trophy hunting is "often a higher value, lower impact land use than alternatives such as agriculture or tourism." Lindsey et al. (2007), in their paper on the economic and conservation significance of the trophy hunting industry in sub-Saharan Africa, state their belief that, from a conservation perspective, "the provision of incentives which promote wildlife as a land use is the single most important contribution of the trophy hunting industry." In addition, they note that trophy hunting generates revenues in areas where alternatives, such as ecotourism, may not be viable. More recently, Di Minin et al. (2016) assert that trophy hunting "strongly contributes" to conservation in sub-Saharan Africa, where large areas currently allocated to use for trophy hunting support important biodiversity. They also note that, if revenue cannot be generated from trophy hunting, these natural habitats will be converted to other forms of land use. While recognizing that the degree to which trophy hunting contributes to conservation is a subject of debate, Mallon (2013), in his report on trophy hunting of CITES-listed species in Central Asia, states that "well-run hunting concessions have an economic interest in maintaining the resource (*i.e.,* conserving the species) so will also aim to manage the area to conserve high-quality habitat that supports high numbers of the hunting species, and also to prevent unregulated use by others (poaching, overgrazing)." Naidoo et al. (2015) describe the complementary benefits of tourism and hunting to communal conservancies in Namibia.

We have reviewed a number of comments from NGOs and the public opposing hunting any elephants. This opposition, however, is primarily based on the perceived ethics of hunting. While these comments are an indication of concerns from some members of the public over hunting, they are not germane to our review process.

Therefore, based on the information available to the Service, there is sufficient support by scientists and other persons or organizations having expertise that the well-managed, legal harvest of elephants, and the subsequent import of these trophies, would not have an adverse effect on the species, but can further efforts to conserve the species in the wild.

17.32(a)(2)(vi): <u>Whether the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application</u>:

Based on our understanding of the hunting program within Zimbabwe, U.S. hunters must be accompanied by a professional hunter on land that is being managed either by the landowner, concessionaire or representatives of the communal land where the hunt occurs. Although the U.S. may not have the expertise to ensure adequate and proper management of elephants on that

land, the professionals associated with the hunt have the expertise and resources to successfully accomplish the management goals of the EMP. Along with oversight established by the ZWPMA, there are expertise and facilities available to U.S. hunters to accomplish the stated objective of their application that the killing of an elephant in Zimbabwe whose trophy is intended for import into the United States would enhance the survival of the species in the wild. Therefore, based on the information available to the Service, that applicants that are hunting on properly permitted reserves that carry out their management practices in accordance with national and provincial regulations, have the expertise, facilities, or other resources available to them to successfully accomplish the objective their application; i.e., the long-term survival of elephants in Zimbabwe. In its evaluation of each application, the Service will further ensure that this criterion, along with the other criteria, is met by each applicant before issuing an import permit.

Given the significant amount of information that has been presented to the Service over the last three years, it can be difficult to clearly see how efforts in Zimbabwe since the 2015 finding have resulted in a clear improvement in the overall management of elephants to the point that the importation of elephant trophies by U.S. hunters would enhance the propagation or survival of the species. Therefore, the following comparison table is being provided to summarize the improvements and where we hope to see additional progress, as discussed more fully above.

Issue	2015 Finding	Present Finding
Management Plan	Zimbabwe's elephant management plan consisted of two primary documents drafted in 1996 and 1997. Although the documents provided a well-developed list of goals and objectives, there was no information on whether these goals and objectives had been met or could be met. Statements from ZPWMA that the plans were outdated and needed to be revised supported this view. In December 2014, ZPWMA hosted a workshop to review Zimbabwe's Elephant Conservation Policy and Management Plan. The workshop participants agreed on a framework for the revised management plan with the same long-term vision of the 1997 plan, similar target goals, and the beginnings of strategic objectives and outputs, as well as some key activities. However, there was insufficient time at the workshop to complete the revised plan. At the	On January 21, 2016, Zimbabwe adopted the Zimbabwe National Elephant Management Plan (EMP) that replaced The Policy and Plan for Elephant Management in Zimbabwe (1997) and Elephant Management in Zimbabwe, third edition (July 1996). The EMP incorporates an adaptive management framework with higher-level targets, with key components, strategic objectives, and outputs. Each key component has management actions that can be measured and verified through "Key Performance Indicators." A set deadline for each action was identified. These measurables allow ZPWMA to monitor the success of the new management plan and, through an adaptive management approach, address newly emerging concerns and long-term management needs. The EMP addresses the challenges identified by the 2014 workshop participants and concerns identified by the Service about the

	time of the 2015 finding, the work had not been completed and the plan had not been adopted by the Zimbabwe government.	previous management plans. The EMP was developed as an outcome of several national and regional workshops that included government officials, NGOs, Rural community leaders, and safari outfitters and landowners.
Population Status	In the 2014 findings, the Service found that Zimbabwe did not have adequate data to determine the elephant population levels in the four primary elephant areas. In 2014, the Pan African Elephant Aerial Survey was conducted in Zimbabwe and preliminary findings reported a preliminary estimate of between 82,000 and 83,000 elephants. This represented a 6% decline since 2001 surveys. The 2015 finding concluded that if a better elephant baseline population abundance estimate were to be used as part of a revised national management plan to assess future off-take quotas, management efforts, and anti-poaching activities, that Zimbabwe could establish scientifically defensible hunting quotas. If this were done, the Service would have a better basis to re-evaluate our determination not to authorize elephant trophy imports.	The 2014 Pan African Elephant Aerial Survey, available in 2015, provided ZPWMA with a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. Confirmed results from the GEC reported an estimate for elephant abundance in Zimbabwe to be 82,304 individuals (73,715-90,893), with a total carcass ratio of 7.8%. While this represented a 6% decline in the 2001 population estimate, the estimate is based on more accurate and more recent survey data then was available to Zimbabwe previously. The IUCN AfESG African Elephant Status Report – 2016 estimated Zimbabwe's elephant population at 82,630 ± 8,589 across a range of 81,228 km^2. The results of the 2014 GEC, and subsequent survey data reported in the 2016 AfESG report, being utilized in the EMP and quota setting, is more reliable and provide a better basis for establishing management priorities than previous surveys and guesses.
Regulation and Enforcement	The 2015 finding confirmed that the Zimbabwe laws and regulations in place to address elephant	As identified in the 2015 finding, the Service still finds that if properly implemented, the ZPWMA regulatory

	management are sufficient provided they were appropriately implemented, but it was not clear if or to what extent ZPWMA was able to successfully implement them. While the Parks and Wild Life Conservation Fund provides for financing wildlife operations directly from revenues generated through wildlife related activities, no other government funding was provided, and only limited outside funding from NGOs or other governments appeared to be available. Therefore, appropriate utilization of funds was necessary. The Service concluded that proper accounting mechanisms need to be in place to document hunting revenue and how it was being used to support elephant conservation efforts. While ZPWMA stated that elephant hunting contributes in excess of US$14 million annually and that approximately 30% of ZPWMA's revenue was from hunting, we did not have adequate information about how much money is generated by elephant hunting, particularly from U.S. hunters, how these funds are distributed, or how these funds impact the ability of ZPWMA. Both of the Elephant Trade Information System (ETIS) reports at the 15th and 16th Meetings of the Conference of the Parties to CITES expressed concerns about Zimbabwe, specifically regarding illicit ivory trade. The reports noted the existence of organized criminal activities within Zimbabwe, including reports of the involvement	mechanisms for managing elephants appears to be adequate. The key issue in the 2015 finding was whether there is an adequate mechanism in place to reliably document the financial benefits US hunters are providing for elephant conservation to demonstrate that U.S. hunters, through their participation in the hunting program, contribute funds to address management needs of the species, and that the funds were utilized in a meaningful manner. Since the 2015 finding, the Service has received information regarding the Tourism Receipts Accounting System (TRAS) and its web-based system (TRAS2) under which the Reserve Bank of Zimbabwe, in collaboration with relevant stakeholders, can now track all revenue generated through hunting activities. Under this system, all authorized hunts are now being registered allowing for the capture of hunting data, such as the origin of clients, value of trophies and hunts, and area hunted, to monitor hunting quota utilization and track hunted trophies. This system will provide data that was not previously easily obtained and, presumably, greatly improve the tracking of hunting revenue. One concern expressed by the Service in its previous findings was whether ZPWMA was responding to the apparent poaching crisis facing Zimbabwe. Based on communication from ZPWMA, as well as information received from other sources, ZPWMA has also stepped up its anti-poaching nationally by adopting a number of "Urgent Measures". As shown in the July 2015 Response, most of ZPWMA's budget (77%) is allocated for staff costs and patrol provisions.

	of politicians, military personnel, and Chinese nationals in illicit wildlife trade. The CoP15 report stated that the law enforcement effort ratio within the three countries grouped for the analysis had dropped to 40%, a decline of 4% from the CoP14 analysis, and was attributed to the situation in Zimbabwe. The CoP16 report indicated that Governance indicators were mixed, with a much lower than average World Bank "rule of law" score, again contributed to Zimbabwe. The Service received several statements from Zimbabwean safari outfitters that stated that the large number of US hunters in Zimbabwe were a major deterrent to poaching. However, the Service was not provided any evidence to support this statement. The 2015 finding did recognize, however, that it was possible the various meetings and workshops that occurred in December 2014 and in 2015 might lead to a clearer understanding of funding levels and the utilization of ZPWMA revenue or result in improved mechanisms for demonstrating that U.S. hunters, through their participation in the hunting program, contribute funds to address management needs of the species, and that the funds were utilized in a meaningful manner.	These expenditures reportedly fund anti-poaching efforts throughout the elephant range. ZPWMA reportedly has a staff of 1,504 active field rangers and has stated that there is an intent to increase this number. According to "The Zimbabwe National Elephant Supplementary Management Plan (2015-2020)", over 80% of spending under the new EMP has been on law enforcement (anti-poaching) and training, with law enforcement identified as the top priority going forward. With the adoption of the EMP in January 2016, it appears that ZPWMA has the mechanism to successfully implement these laws and regulations. Moreover, ZPWMA has a mechanism in place to monitor the effects of the EMP and adapt to changing environmental and social factors that would adversely affect elephant populations within Zimbabwe. The "Report on the Elephant Trade Information System (ETIS)" (CoP17 Doc. 57.6) reflected that there were some improvements in Zimbabwe. As in the previous report, the document grouped Botswana, Namibia, and Zimbabwe together in terms of their level of government oversight and capacity. These countries regularly report data to ETIS. In terms of all data that implicate these countries in an ivory seizure, this southern African grouping reflects middle range values in terms of mean number of seizures and the mean weight of ivory seized. The measure for assessing the presence of organized crime stands at zero which, according to the document, is indisputably a good sign. Governance indicators are mixed, however, with the rule of law score

		problematic and suggesting the presence of corruption, but the relatively high law enforcement ratio partially mitigates that concern. As reported in earlier ETIS reports, Zimbabwe was the country that pulls the rule of law score down, indicating far greater governance challenges exist in that country than others in the group.
Sustainable Utilization	According to the information provided for the 2015 finding, Zimbabwe had established hunting quotas for all areas of the country. However, the Service did not receive adequate information regarding offtake, including how hunting quotas were established and whether other forms of offtake, such as poaching and problem animal control, were taken into account in establishing these quotas. Further, the Service had limited information to what extent biological factors are taken into consideration (as opposed to economic and societal considerations). While there was information that supported ZPWMA statements that the full quota is not actually met each year, we did not get complete information on how many trophies were taken annually. At the time the Service made its finding in 2015, we determined that without more definitive population data, it was difficult to determine whether these numbers, combined with other offtake, was sustainable. We had fundamental questions regarding how the number of elephants to be hunted in an area is decided. In addition to questions about how the overall offtake is	According to the information provided to the Service in late 2014 and 2015, Zimbabwe had established hunting quotas for all areas of the country. However, it was not until late 2015 and 2016 that the Service received more specific information on how these quotas are established, including how other forms of offtake, such as poaching and problem animal control, were taken into account. Further, it was not until the EMP was signed into on January 21, 2016, that the Service had confidence that ZWPMA had in place effective mechanisms to ensure long-term sustainability of its elephant population. For 2016 and 2017, Zimbabwe established the same annual export quota of 500 elephants and reported that quota to the CITES Secretariat. While the Service will request clarification before making a finding for the 2019 hunting season as to why Zimbabwe maintains the same voluntary export quota as it has since 2004, given the improved population data now available to Zimbabwe and the revised management plan that specifically recognizes the use of population data when establishing quotas, there is now clear information that Zimbabwe has not reached this export quota in the past and is unlikely to do so in the future given the current

	determined, we also had not received an adequate explanation on how the quota is allocated geographically.	management efforts. According to ZPWMA, quotas established before the EMP were set to maximize the sustainable production of high-quality trophies without detriment to the population. With the establishment of the EMP, there is a more systematic, scientific approach to establish national quotas. While ZPWMA still currently starts with the quota of 500 elephants, they are not immediately dividing this quota between all of the hunting areas. Instead, they are taking into consideration the results of the 2014 survey and subsequent surveys, results from research efforts, the size of the hunting area in relation to elephant habitat requirements, illegal off-take and other forms of off-take, how the hunting areas are managed in relation to land use or fencing, human-wildlife conflicts that have occurred previously, and recommended sustainable off-take levels developed based on ecological assessments of the hunting area. This information is then further evaluated in light of other species within the hunting area, past elephant trophy quality, and community benefits of proposed harvests.
Revenue Utilization by rural communities	Based on information the Service had when making its previous findings, CAMPFIRE has provided conservation benefits in the past and improved tolerance of wildlife in rural communities. However, the program has come under criticism relating to excessive retention of generated funds by district councils, resulting in diminished benefits to communities and elephants. While sport hunting may be an important tool that gives these communities a stake in sustainable management of	Since our findings in 2014 and 2015, CAMPFIRE has provided more information on how their programs support the conservation of elephants and provide benefits to and promote greater tolerance of wildlife in rural communities, including new efforts to improve the effectiveness of CAMPFIRE and new revenue sharing guidelines. An overarching analysis of CAMPFIRE, supported by a grant of 12 million Euros from the EU, is currently being conducted and is scheduled to be completed by the end of 2017. While

	the elephant as a natural and economic resource and offsets the costs of conflict with wildlife, without current information on how funds are utilized and the basis for hunting off-takes, the Service was unable to confirm whether revenue generated through sport hunting actually provided an incentive to local communities to conserve elephants.	this review is still under way and the Service has not received any information on the potential outcome of the review, more information has been provided to the Service regarding how funds are utilized and the basis for hunting off-takes.
Local conservation efforts	As was stated in the 2014 finding, the Service acknowledged that there were "bright spots" regarding elephant conservation efforts, particularly those carried out by non-governmental entities that are providing a benefit to elephants in some areas. We had received statements from several sources that emphasized the economic impact of the suspension to local conservation efforts being carried out by individual landowners and leaseholders, safari outfitters, and conservancies. In our 2015 finding, the Service recognized that effective conservation work is being carried out in some independently managed areas; however, it was unknown whether and to what extent these individuals would reduce their conservation efforts based on the inability of U.S. hunters to import a sport-hunted trophy. In addition, the information available to the Service on the conservation work being carried out by non-governmental entities was limited, and is not the norm for Zimbabwe as a whole. The Service recognized that without support from the Central Government and Rural District Councils, these efforts were not likely to be successful or to	Since our 2014 and 2015 findings, there are strong indications that the efforts of private landowners and consortiums to manage elephants within their areas of control have received greater support from ZWPMA and the Zimbabwe government. The Parks and Wildlife Act Chapter 20:14 devolved authority to manage and benefit from wildlife on communal and private lands to the landholders. There now appears to be a greater effort on the part of ZPWMA to work with NGOs, landowners, and safari area concessionaires to improve elephant management and anti-poaching efforts. According to their July 2015 response to the Service, and supported by the report on the implementation of the EMP, ZPWMA is engaging private players in co-management in some areas and entering into long-term lease agreements (10-25 years) to manage some protected areas. In certain areas, ZPWMA is reportedly collaborating with safari operators; in others, they collaborate with non-profits, such as the Tashinga Initiative in the Zambezi Valley and WWF in the Hwange-Sanyati Biological Corridor. There is increased support from the Central Government and Rural District Councils to expand and support local conservation efforts and there is evidence that local conservation efforts

	compensate for the management deficiencies described above.	are meeting management deficiencies that were identified previously by the Service.

Conclusion:

The issue before us, in accordance with the 4(d) rule for African elephants, is whether the killing of a trophy animal in Zimbabwe would enhance the survival of the species. In short, as previously explained, the Service is assessing whether Zimbabwe has sufficient numbers of elephants to support a hunting program, if the country has a management plan and adequate laws and regulations to effectively implement a hunting program, and if the participation of U.S. hunters in the program provides a clear benefit to the species to meet the requirements for the import of sport-hunted trophies under paragraph 17.40(e)(6)(i)(B).

Since our 2014 and 2015 findings, Zimbabwe has carried out a number of actions at the national level and in collaboration with regional and local communities and interested partners on the ground that together demonstrate a clear interest in and concrete efforts toward establishing a better management regime and providing greater support for conservation efforts to enable elephant sport hunting that provides a clear benefit to the survival of African elephants in Zimbabwe.

Importantly, on January 21, 2016, Zimbabwe adopted the National Elephant Management Plan, with regional components, to more effectively monitor and evaluate elephant populations and management. The National Elephant Management Plan has clear objectives, action items, and measurables to facilitate a more systematic management regime than was previously established in Zimbabwe. Further, ZWPMA has demonstrated through recent reports that the effort to implement the EMP, while somewhat constrained due to limited resources, is being implemented. There is no doubt that efforts must continue in implementing the EMP to ensure adequate management of elephants in each of the four regions within Zimbabwe, but to date ZPWMA appears to have established a strong mechanism for national elephant management and has documented that identified targets and measurables are being achieved in a manner to enable elephant sport hunting that benefits the survival of African elephants in Zimbabwe now and is making an effort to make progress toward full implementation that achieves further benefits for elephants from sport hunting going forward.

The Pan African Elephant Aerial Survey that was conducted in Zimbabwe in 2014, although it utilized the same methodology used by Zimbabwe since the 1960s, did provide ZPWMA with a better elephant baseline population abundance estimate to assess future off-take quotas, management efforts, and anti-poaching activities. ZPWMA has demonstrated it is incorporating these data for these purposes through the EMP. Having up to date information and population estimates was a critical first step in the process of establishing scientifically defensible hunting

quotas.

While ZPWMA had established hunting quotas for all areas of the country in the past, it was not until late 2015 and 2016 with the implementation of the EMP, that the Service received more specific information on how these quotas are established, including how other forms of offtake, such as poaching and problem animal control, were taken into account. Further, it was not until the EMP that the Service could have confidence that ZWPMA had in place effective mechanisms to establish scientifically based hunting quotas that took into consideration other forms of off-take to ensure the sustainable utilization of their elephant population.

Since our findings in 2014 and 2015, CAMPFIRE has provided significantly more information on how their programs support the conservation of elephants and provide benefits to and promote greater tolerance of wildlife in rural communities. While the program has come under criticism in recent years relating to excessive retention of generated funds by district councils and diminished benefits to communities and elephants, strides are being taken to address these concerns. An overarching analysis of CAMPFIRE, supported by a grant of 12 million Euros from the EU, is currently being conducted and is scheduled to be completed by the end of 2017. While the Service has not received any information on the potential outcome of the review, significantly more information has been provided to the Service in regard to how funds are utilized and the basis for hunting off-takes.

As stated in the previous findings, there have been "bright spots" regarding elephant conservation efforts, particularly those carried out by non-governmental entities that are providing a benefit to elephants. Since our 2014 and 2015 findings, there appear to be strong indications that the efforts of private landowners and consortiums to management elephants within their areas of control have received greater support from ZWPMA and the Zimbabwe government. There is increased support from the Central Government and Rural District Councils to expand and support local conservation efforts and evidence that local conservation efforts are meeting management deficiencies that were identified previously by the Service.

Further Actions:

The Service currently has a number of applications pending for the import of elephant trophies taken in Zimbabwe in 2016 and for import of elephant trophies taken or to be taken in 2017 and 2018. Based on the Service's determination, applications for permits currently pending before the Service for import of trophies taken in Zimbabwe on or after January 21, 2016 and on or before December 31, 2018, will be considered to have met the enhancement requirement. The Service will complete its review of each application to determine whether they meet all other applicable permitting requirements, and if so, issue the required import permit. In order to assist the Service in its ongoing efforts to assess whether imports of elephant trophies may meet the enhancement requirement in 2019 and beyond, the Service will send a letter to ZPWMA requesting the following information:

- An up-to-date report on the progress that has been made implementing the Zimbabwe

Elephant Management Plan (2015-2020), including the status of each action item identified in the plan and progress on meeting the goals of that action.

- A report generated through the TRAS2 system identifying hunting revenue for 2016 and 2017, and to the extent available, 2018. In addition, an accounting of the funds generated by each of the US hunters who hunted elephants in 2016 and 2017, and up to date in 2018 that a letter is sent requesting the report. This accounting should be broken down by hunter (hunter's name would be redacted) and should include money provided to ZPWMA, CAMPFIRE, or other agencies. (A similar report will be requested from each hunter for comparison).

- Annual reports on implementation of the elephant plan, including budgets allocated for elephant management and specific activities undertaken for anti-poaching and reduction of human-elephant conflict.

- Additional information on elephant distribution and population trends with respect to land custodianship/land use.

- An explanation of how Zimbabwe sets its voluntary CITES export quota each year and why is has been consistently 500 elephants between 2004 and 2017. Further, if this export quota remains the same for 2018, an explanation for this continuation in 2018.

- Specific information on the 2017 quota set for each of the four major elephant populations and how the quota was distributed between communal areas, concession, and safari companies. In addition, information on the quota set for the 2018 hunting season and any explanation on why it was maintained/decreased/ increased.

- Information on the continued cooperation and coordination between ZWPMA, CAMPFIRE, landowners, safari outfitters, and NGOs to implement continued conservation benefits for elephants in Zimbabwe.

Further, the Service will be requesting a copy of the EU funding review of CAMPFIRE that will reportedly be finalized by the end of 2017.

Republic of Zimbabwe

Enhancement and Non-Detrimental Findings for

Panthera leo in Zimbabwe

Zimbabwe Parks and Wildlife Management Authority

October 2016

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1 INTRODUCTION

The United States Fish and Wildlife Service (USFWLS) made a ruling in terms of its Endangered Species Act of 1973 (ESA) that the status of the southern and eastern African lion subspecies (*Panthera leo melanochaita*) is threatened (see http://www.regulations.gov). This ruling, which came into effect on January 22, 2016, now requires that the importation of all trophy lion from Zimbabwe will require an import permit. The decision whether to issue an import permit will in future be based on a Non-Detrimental Finding (NDF) that takes into consideration four main factors outlined under 50 CFR 17.22 and 17.32. These are:

- What direct and indirect impacts would occur on the wild population?
- Would issuing a permit conflict with any known programs intended to conserve the species?
- Would the purposes of the permit reduce the threat of extinction facing the species?
- What are the opinions of experts?

In addition to these factors USFWLS will also take into consideration the IUCN Species Survival Commission (SSC) *Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives, Ver. 1.0* (IUCN/SSC 2012). This document identifies five guiding principles of a hunting program that creates "*incentives for the conservation of species and their habitats and for the equitable sharing of the benefits of use of natural resources*" and recognizes that trophy hunting can contribute to biodiversity conservation and the conservation of the hunted species.

These are:

- **Biological sustainability** i.e. the hunting program:
    - Cannot contribute to the long-term decline of the hunted species
    - It should not alter natural selection and ecological function of the hunted species or any other species that share the habitat
    - It should not inadvertently facilitate poaching or illegal trade in wildlife by acting as a cover for such illegal activities
    - It should also not manipulate the ecosystem or its component elements in a way that alters the native biodiversity.

- **Net Conservation Benefit** i.e. the biologically sustainable hunting program should be:
    - Based on laws, regulations, and scientifically based quotas, established with local input, that are transparent and periodically reviewed
    - It should produce income, employment, and other benefits to create incentives for reducing the pressure on the target species
    - It should create benefits for local residents to co-exist with the target species and other species

- **Socio-Economic-Cultural Benefit** i.e. a well-managed hunting program can serve as a conservation tool when:
    - It respects the local cultural values and practices
    - It involves and benefits residents in an equitable manner
    - It adopts business practices that promote long-term economic sustainability

- **Adaptive Management: Planning, Monitoring, and Reporting** i.e. can the hunting programme enhance the species when it is based on appropriate resource assessments and monitoring (e.g., population counts, trend data), upon which specific science-based quotas can be established. Resource assessments should be objective, well documented, and use

the best science available. Adaptive management of quotas, based on the results of resource assessments and monitoring, is essential

- **Accountable and Effective Governance** i.e. a biologically sustainable trophy-hunting program should be subject to a governance structure that clearly allocates management responsibilities. The program should account for revenues in a transparent manner and distribute net revenues to conservation and community beneficiaries, and take steps when needed to eliminate corruption and ensure compliance with national and international requirements and regulations.

To address the points raised above, a systematic review of the status of lion in Zimbabwe has been undertaken with the full cooperation of stakeholders from the Government, Private Hunting Sector, Community NGOs and research organisations to demonstrate that the lion populations in Zimbabwe are being managed sustainably for benefit of both the conservation of the species and that the management programme is also providing economic incentives for local communities to protect and expand lion habitats. In doing so this assessment addresses the following issues:

- That the Zimbabwe hunting industry is based on sound scientific information and identifies mechanisms that would arrest the loss of habitat or increase available habitat (where feasible) and ensuring adequate protection from human encroachment.
- Demonstrate that there are government incentives in place to encourage habitat protection by private landowners and communities and incentives to local communities to reduce human-wildlife conflicts.
- Demonstrate that hunting concessions are managed to ensure the long-term survival of the listed species and its habitat.
- That trophy hunting provides financial assistance to the Zimbabwe Parks and Wildlife Management Authority, including the communal CAMPFIRE programme and private sector, to carry out various wildlife management programmes. It will also highlight how local communities directly and indirectly benefit from the presence of lion in their areas.
- Finally, this document will demonstrate how the participation of U.S. hunters in the Zimbabwe hunting industry contribute to the overall management of lion within the country.

2 Status and Distribution of Lion in Zimbabwe

Bauer et al (2015) summarise time series data for 47 lion populations across West, Central, East and Southern Africa where regular survey data are available. Using a Bayesian state space model to estimate growth rate-λ for each population, this study concludes that lion populations are declining everywhere across Africa, except in four southern countries (Botswana, Namibia, South Africa, and Zimbabwe). The population models indicate a 67% chance that lions in West and Central Africa will decline by one half, while estimating a 37% chance that lions in East Africa will also decline by one-half over two decades. It is concluded that almost all lion populations that historically exceeded ~500 individuals are declining, *but lion conservation is successful in southern Africa, in part because of the proliferation of reintroduced lions in small, fenced, intensively managed, and funded reserves.* This statement reflects the situation in Zimbabwe where lion populations in the conservancies have flourished under sound management regimes. They have also recovered rapidly in instances where appropriate actions have been taken to arrest unsustainable practices (i.e. Hwange) and where protected areas are receiving adequate funding (i.e. Gonarezhou).

2.1 The extent of lion distribution in Zimbabwe

The Zimbabwe Parks and Wildlife Management Authority (ZPWMA) is responsible for managing one of the largest estates in the country which constitutes approximately 5 million hectares of land or 13%

of the Zimbabwe's total land area (see Table 1 below). The bulk of Zimbabwe's wildlife occurs within the Parks Estate which includes 11 national parks, 16 safari areas, 16 recreational parks, 6 sanctuaries, 12 botanical reserves and 3 botanical gardens, all spread across the country, among other wildlife tourism related activities (Parks and Wildlife Act 2001 Chapter 20:14).

Wildlife populations also occur on the state Forest Areas, Communal CAMPFIRE areas and private conservancies dedicated to wildlife-based land use (Figure 1). Table 1 below provides a summary of these different categories, and whether they support lion populations (see Annex 1 for the details of each area).

Table 1. Summary of the National Parks Estate, CAMPFIRE, Forestry and Conservancies where lion populations are resident

Land Category		**Presence of Lion**				**Total (ha)**	**Total (km^2)**
		Yes (ha)	**%**	**No (Ha)**	**Migratory (Ha)**		
Parks Estate	National Parks	2,608,710	96	61,850	47,150	2,717,710	27,177
	Safari Area	1,745,300	92	146,600	-	1,891,900	18,919
	Botanical gardens	-	-	2,069	-	2,069	21
	Sanctuary	-	-	18,980	-	18,980	190
	Recreational	-	-	357,161	-	357,161	3,572
Forestry		436,165	47	491,701	-	927,866	9,279
CAMPFIRE		8,953,700	36	5,435,100	10,319,000	24,707,800	247,078
Private Conservancies		758,200	66	243,500	150,897	1,152,597	11,526
Matetsi Farms		-	-	-	155,627	155,627	1,556
Total Ha		**14,502,075**		**6,756,961**	**10,672,674**	**31,931,710**	**319,317**
Total km^2		**145,021**		**67,570**	**106,727**	**319,317**	
Percentage		**45%**		**21%**	**33%**		

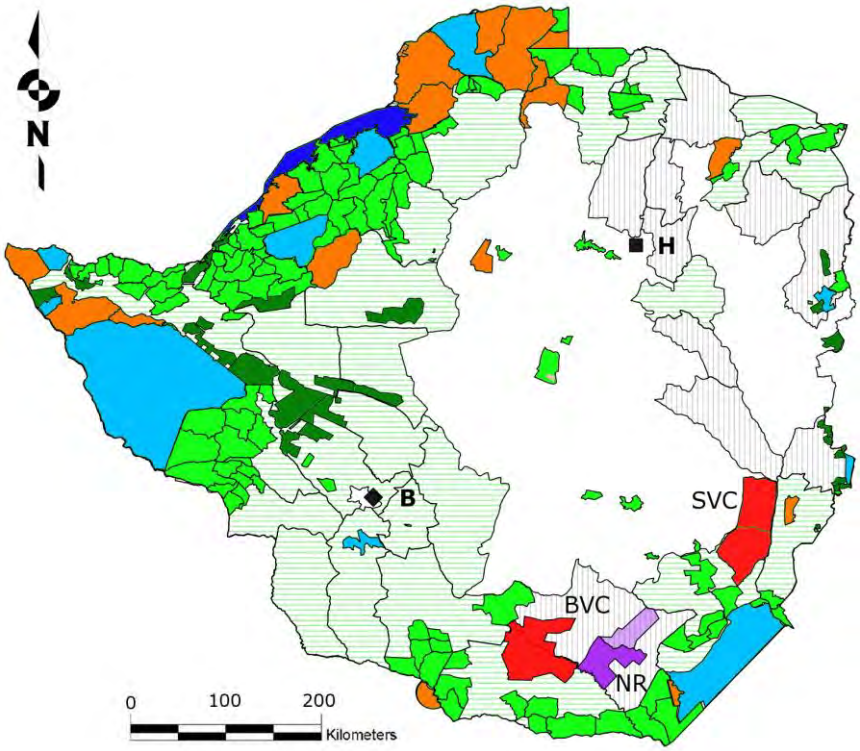


Figure 1: Map of Zimbabwe's main wildlife areas: [i] National Parks are represented in light blue; [ii] Safari areas are represented in orange; [iii] Forestry areas are represented in dark green; [iv] Community and Private wildlife areas are represented in light green; [v] Communal Land (CAMPFIRE Areas) in which sport-hunting may occur is represented by light green horizontal stripes; [vi] Communal Land in which sport-hunting does not occur is represented by grey vertical stripes. [vii] The Bubye Valley [BVC] and Savé Valley [SVC] Conservancies are represented in red. [viii] The Nuanetsi Ranch [NR] on which sport-hunting takes place is represented in dark purple (light purple represents the Nuanetsi Ranch cattle area); [ix] Lake Kariba is represented in dark blue. Harare (the capital city) is represented by a black square and letter '**H**'. Bulawayo is represented by a black diamond and letter '**B**'. Sport-hunting may occur in areas: ii, iii, iv, v, vii & viii (from du Preez, B. Groom, R., Mufute, O., Mandisodza-Chikerema, R. and Booth, V. (2016).

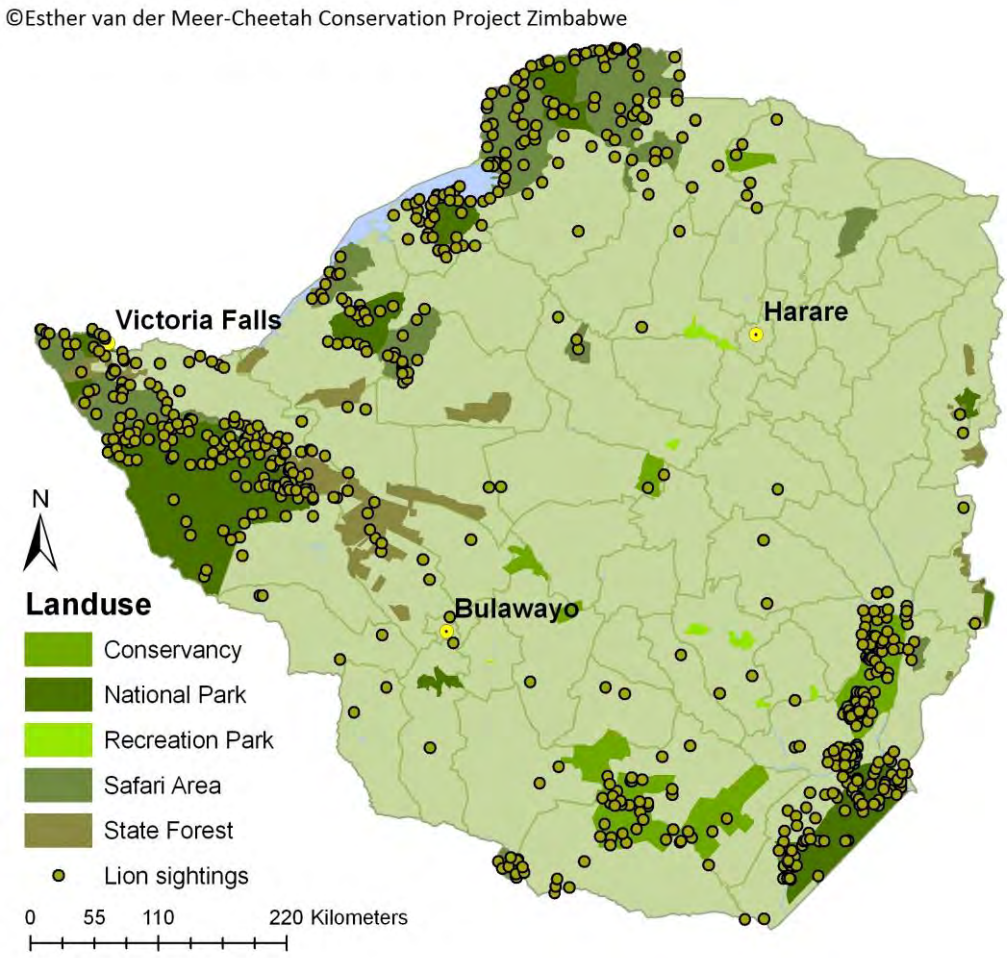


Figure 2: Range of African Lion Distribution in Zimbabwe

There are approximately 319,317 km^2 of land where some form of wildlife based land use is practiced in Zimbabwe. Lion occur permanently in 45% of this available range (c. 145,00km^2), with the majority occurring in State protected national parks (96%) and safari areas (92%). Lion also occur permanently in 47% of the State forest areas and 66% of privately owned Conservancies. The CAMPFIRE areas comprise approximately 247,000km^2 and lion occur in 36% of these areas. Lion are transient in CAMPFIRE, Conservancy and resettled areas adjacent to the major protected areas, and move across the border into Zambia, Mozambique, South Africa and Botswana (Figure 2).

There are two established Transfrontier Conservation Areas (TFCAs), the Great Limpopo Transfrontier Park (GLTP) which includes Gonarezhou National Park, and the Limpopo/Shashe TFCA. Other TFCAs that are at various stages of development are the Kavango-Zambezi (KAZA), Lower Zambezi-Mana Pools, Zimbabwe-Mozambique-Zambia (ZiMoZa) and Chimanimani.

2.2 Minimum population of lion in Zimbabwe

The minimum number lion that occur in approximately 51,642km^2 of land where reliable survey data are available is estimated to be c.1,917 (range 1,800 – 2,000) and is summarised in Table 2. The Western sector of the country dominated by Hwange National Park and the surrounding safari areas, forest areas, communal areas and private conservancies supports c.737 lion (or 38% of the overall population). The Southern sector dominated by the two major conservancies (Save and Bubye) and

Gonarezhou National Park supports c. 896 lions (48%) while the Central and Northern sectors of the country support c.284 lions (15%).

Table 2: Estimated minimum population of Wild Lion populations in Zimbabwe – September 2016 (Data compiled from a variety of reports)

REGION	AREA	AREA (km^2)	Estimated Number of Lions	Percentage
Western	Hwange NP	14,900	559	38%
	Matetsi Units 1-5	1,934	59	
	Matetsi Units 6-7 and Zambezi NP	1,585	67	
	Kazuma Pan NP	313	20	
	Kazuma Forest	240		
	Panda Masuie Forest	355		
	Matetsi ECA	1,556	15	
	Ngamo and Sikumi Forest	1,386	6	
	Gwaai Conservancy	927	22	
	Hwange Communal Land	392	2	
	Tsholotsho buffer adjacent HNP	1,275	7	
Subtotal		**24,863**	**737**	
Central	Chizarira NP	1,948	31	4%
	Chirisa SA	1,713		
	Omay	1,865	10	
	Matusadona NP	1,427	31	
Subtotal		**6,953**	**72**	
Northern	Chewore North and South	1,648	45	11%
	Dande	1,155	21	
	Hurungwe (Nyakasanga and Rifa)	1,709	32	
	Charara/Mukuti	1,692	20	
	Mana Pools	1,287	94	
Subtotal		**7,491**	**212**	
Southern	Gonarezhou National Park	5,053	125	48%
	Malilangwe	400	37	
	Bubye Valley Conservancy	3,440	450	
	Save	3,442	284	
Subtotal		**12,335**	**896**	
Overall Total		**51,642**	**1,917**	

2.2.1 Captive Breeding Facilities

Currently there are only two properties registered as captive lion breeders (Lion and Cheetah Park, and Antelope Park) and < 10 non-registered captive lion breeding operations (Table 3). Most of these centres keep lions for non-consumptive tourism and environmental education purposes with only a few keeping lions as pets. Altogether there are 345 lions held in captivity.

Table 3: Record of lions held in captivity – September 2016

Property	TOTAL
Doddieburn	13
Lion & Cheetah Park	40
Sentinel	2
Vhuka	5
Antelope Park	114
Safari Par, Masuwi Lodge (Lion Encounter)	4
Mhondoro Game Park	2
Chedgelow Farm	9
Chengeta	5
Turk Mine	6
Bally Vaughan	8
Mwanga Lodge	8
Masvingo	17
Karoi	2
Oscro	10
Simply Wild	19
Sondelani	9
Ruwazi	7
Imire	2
Makado Ranch	2
Chipangali	32
Crocodile Farm, Victoria Falls	1
Kuimba Shiri	2
Pamuzinda	6
Shearwater	10
Inyathi Ecogame Park	10
Total	**345**

3 Conservation and Management

3.1 Policy And Legislation

The Ministry of Environment, Water and Climate has a comprehensive suite of policies and legislation that provides the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) with a mandate to conserve and protect all fauna and flora in the country.

The legal framework is enshrined in the National Legislation and associated Regulations that are informed by the Wildlife Policy (1992) that seeks to maintain a protected area network for the conservation of the nation's wild resources and biological diversity. Amongst others it seeks to create

economic activity to enhance rural development and encourages the conservation of wild animals and their habitats outside the protected areas.

The ZPWMA is established by the Parks and Wildlife Act of 1996 (Chapter 20:14) as amended by Act Number 19 of 2001 which came into operation on the 1st of June 2002 through a Statutory Instrument 144C of 2002. The Act provides for the:

- Establishment of a Parks and Wildlife Board;
- Confers functions and imposes duties on the Board;
- Establishment of national parks, botanical reserves, botanical gardens, sanctuaries, safari areas and recreational parks;
- The preservation, conservation, propagation or control of wildlife, fish, and plants of Zimbabwe and the protection of her natural landscape and scenery;
- Conferment of privileges on owners and occupiers of alienated land as custodians of wildlife, fish and plants;
- Giving of certain powers to environment committees (formerly intensive conservation area committees); and matters incidental to or connected with the foregoing.

The Act that was originally passed by Parliament in 1975 was unique in that it provided a legal basis for the devolution of Authority to private landowners over all wildlife on their land which resulted in in the rapid development of the country's wild life industry. It also paved the way for the partial extension of this principle to the Communal Lands through the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in the 1980s that granted Appropriate Authority Status to the communal areas to manage the wildlife resources for their own benefit.

The Act was subsequently revised in 1996 and 2001 with the latest revision paving the way for the establishment of the current Parks and Wild Life Management Authority to replace the former Department of National Parks and Wild Life Management.

The legal and regulation framework applicable to the conservation and protection of lion and all other species includes:

- Parks and Wildlife Act; Chapter 20:14 (1996) as amended in 2001.
- Environmental Management Act; Chapter 20:27.
- Forest Act; Chapter 19:05.
- Statutory Instrument 362 of 1990: Parks and Wildlife (General) Regulations, 1990.
- Statutory Instrument 76 of 1998: Import and Export of Wildlife Products.
- Statutory Instrument 40 of 1994: Parks and Wildlife Act (General) Amendments.
- Statutory Instrument 26 of 1998: Parks & Wildlife Act (General) Amendment.
- Statutory Instrument 92 of 2009: Compensation Values for Wildlife.
- Statutory Instrument 93 of 2009: Compensation Values for Trapping of Animals.
- Trapping of Animals Control Act 20.16.

A summary overview of these instruments is provided in Annex II.

3.2 The Zimbabwe Parks and Wildlife Management Authority

The Parks and Wildlife Management Authority is mandated by the Parks and Wildlife Act [Chapter 20:14] with the responsibility of conserving Zimbabwe's wildlife heritage through effective, efficient and sustainable protection and utilisation of natural resources for the benefit of present and future generations. The Authority was established to allow it to retain the revenue that it generates for

funding its operations and thereby reducing its dependence on Treasury. This entailed introducing a commercial dispensation and putting in place effective revenue generation and financial management systems.

The ZPWMA has the mandate to manage the entire wildlife population of Zimbabwe, whether on state, private and communal land. Vision, mission and core values of ZPWMA are as follows:

Vision: *To be the world leader in sustainable conservation*.

Mission: *To conserve Zimbabwe's wildlife heritage through effective, efficient and sustainable utilisation of natural resources for the benefit of present and future generations and stakeholders*

Core Values: Teamwork, Commitment, Transparency, Professionalism, Integrity, Accountability, Fairness, in harmony with nature.

While private landowners may utilise the wildlife on their land, they are still accountable to the ZPWMA for the welfare of the wildlife in terms of Statutory Instrument 26 of 1998, which, among other things, states that "*No person shall permit any person who is not ordinarily resident in Zimbabwe to hunt on any land for which he is the appropriate authority any animals other than those entered on the authority to hunt…*'

3.3 Conservation Strategy and Action Plan for Lion

A *Conservation Strategy and Action Plan for the Lion (Panthera leo) in Zimbabwe* was prepared in 2006 by the ZPWMA, local and international NGOs. This was in response to the proposal submitted by Kenya at the 13th Conference of the Parties to the Convention on International Trade in Endangered Species of Flora and Fauna (CITES) calling for the transfer of the lion population from Appendix II to Appendix I. The Parties recommended a detailed examination of the issues surrounding the conservation of the African lion, through a series of regional workshops.

IUCN responded to this and together with other key stakeholders, organised the first workshop in 2005 which involved the 14 West and Central African lion range states. The second workshop brought together 15 lion range states from Eastern and Southern African in January 2006 (Bauer, Chardonnet and Nowell, 2005). Each workshop included the Directors of Wildlife Conservation Departments and their technical advisors, safari operators, community leaders, non-governmental organisations involved in conservation, as well as researchers on the African lion.

The workshops came up with several recommendations which included:

- The need for African lion range States to follow up the workshops by developing and implementing national lion management plans.
- The need for a Pan African Conservation strategy to form the basis of a region wide collaboration in the conservation of the lion and which would also form the basis for the management of other wildlife species on regional scale.

Responding to the first recommendation, the ZPWMA, together with IUCN, convened a workshop in November 2006 to develop a national lion conservation strategy and action plan for Zimbabwe attended by conservation NGOs, the private sector, and Rural District Councils (RDCs), as well as ZPWMA and IUCN (Conservation Strategy and Action plan for the Lion (*Panthera leo*) In Zimbabwe, 2006).

The deliberations of this workshop identified the following issues related to lion conservation in Zimbabwe:

- Management and research including technical advice, policy formulation and management interventions
- Capacity needs as reflected by adequate human, financial and material resources
- Mitigation of human-wildlife conflict
- Socio-economic costs and benefits of long-term lion conservation
- Communication and information dissemination for key decision makers at different levels
- Framework for captive breeding of lions
- Trade and regulations to ensure non-detriment findings related to trade in all lion related products
- Regional collaboration to strengthen bilateral and regional lion conservation strategies

The analysis of these issues led to the formulation of the conservation strategy whose vision is that *Lions (*are*) conserved and managed sustainably for their aesthetic, cultural and ecological values, and the socio-economic development of Zimbabwe*. The immediate objective of this strategy is *to secure and where possible, restore as many viable lion populations as possible in Zimbabwe whilst mitigating their negative impacts and enhancing their value for the benefit of people through sustainable use*.

Three broad targets were identified to achieve this objective:

1. Ensure the persistence of key lion populations and other important populations including those of doubtful viability;
2. Human and livestock loss reduced, and
3. Optimize wildlife conservation-related net benefits to local communities

Table 4 summaries the progress with achieving the results identified in the strategy:

Table 4: Summary of implementation progress of the 2006 lion conservation strategy.

Output 1. Lion Management - Lion populations, their habitats and wild prey effectively conserved and managed in collaboration with local stakeholders	
Target 1.1 Establish a baseline survey and monitoring programme for identified lion populations and their range inside and outside the Parks & Wildlife Estate	Baseline surveys have been completed for the Parks Estate using monitoring protocols for key variables (populations, habitats, prey). Selected surveys undertaken of areas outside National Parks in conservancies and some communal land and forest areas.
Target 1.2 Maintain and strengthen capacity for lion conservation, management, monitoring and research within PWMA and amongst other key stakeholders	Carnivore research programmes undertaken by NGOs (Mana, Matusadona, Gonarezhou, Zambezi and Hwange NPs, Matetsi, Chirisa SA) and research institutions (Bubye and Save Conservancies) in various parts of the country. Personnel trained in data collection and capture, management, lion aging and analysis.
Target 1.3 Identify and implement best management standards and practice for all trophy hunted lion populations, ensuring their viability and sustainable, equitable and adaptively managed trophy quotas	Quota setting methodology reviewed and annual quotas and offtakes analysed considering population changes, trophy quality and levels of PAC over time. Trophy hunting database in place and in process of being refined to provide cost-effective system for collation, entry, analysis, reporting and feedback to key stakeholders in the wildlife industry (ZPWMA, RDCs, SOAZ, ZPHGA, conservation NGOs, Researchers etc.). System of fixed and optional quotas reviewed and age-based criteria for male trophy animals in place and functioning.
Target 1.4 Develop and implement a national lion captive breeding management policy	Policy in place (see discussion below).
Target 1.5 Develop and implement co-management frameworks for wildlife management	Collaborative national lion action plans to co-management lion populations in place for NW Matabeleland and SE Lowveld, including three conservancies (Bubye Valley, Save and Malilangwe).
Target 1.6 The geographic distribution range of the lion population expanded	Conservancies and neighbouring communities are working together to maintain existing geographic distribution of lion populations. Zimbabwe proactive in the KAZA and GLTFCA programmes.
Output 2. Lion Research - Information for effective and adaptive lion conservation management generated	
Target 2.1 Initiate targeted research on lion ecology, management and mitigation of conflict	Extensive research programmes focussing on lion ecology and biology undertaken in Hwange, Bubye, Save, Malilangwe, Matusadona, Chizarira and Chirisa. ZPWMA have cooperated with NGOs, such as Panthera, to develop cost-effective age determination methods for lions. Key threats to lion populations, with focus on human-lion conflict, snaring and poisoning, undertaken and continually monitored.
Output 3. Mitigation - Human-lion related conflicts minimized and, where possible, eliminated	

Target 3.1 Develop and establish databases on lion/human conflict	Data on Problem Animal Control (PAC) reports on lion related problems collated.
Target 3.2 Identify and implement methods to reduce and mitigate livestock losses and lion attacks on humans	Approaches to mitigate livestock losses and lion attacks on humans being tested and implemented in Hwange. Methods to mitigate lion attacks on livestock being implemented as appropriate at selected sites (e.g. Tsholotsho).
Target 3.3 Trained and properly staffed PAC Units established to conduct rapid response, restrained and precisely targeted problem animal control	PAC Units at ZPWMA field station and/or RDC levels partially established.
Target 3.4 Incidents of human-lion conflict reduced by at least 30% in 5 years while also reducing retaliatory killing	Specific awareness and education package on lion conservation and management developed and implemented in Matusadona, Hwange and Gonarezhou regions.
Output 4. Socio- Economic - The costs and benefits of long-term lion management equitably distributed	
Target 4.1 Complete an inventory of stakeholders directly affected by lion conservation	Stakeholder groups (e.g. local communities, CAMPFIRE RDC representatives, commercial safari hunting operators (SOAZ, ZPHGA), tourism operators (ZATSO) identified. Financial impacts of lion conservation and extent and magnitude of socio-economic impacts on each stakeholder group completed.
Target 4.2 Deliver appropriate training and capacity building to prioritised stakeholders	Representative stakeholder groups in some regions identified (Hwange, Matusadona, Gonarezhou). Limited training undertaken. Implement adaptive programme across four wildlife regions
Target 4.3 Agree and implement collaboratively developed area-specific lion management plans with identified stakeholder groups in each wildlife region within 5 years	In progress. Hwange NP Management Plan approved.
Target 4.4 Implement transparent mechanisms to equitably distribute lion-related/generated income to identified stakeholders (groups and/or communities)	Scale of income generated from lion conservation reviewed and use of funds to encourage protection of lion populations reach local stakeholders undertaken (see CAMPFIRE generated revenues)
Output 5. Regulations - Effective regulation of consumptive lion utilisation ensured	
Target 5.1 Implement approved policy and practice at national and local levels regarding problem animal control (PAC) of lions within 2 years	Current policy and practice regarding problem animal control of lion reviewed, at national and local levels. PAC offtakes reconciled with trophy hunting quota offtake to ensure that the overall offtake (i.e. total quota) is sustainable.
Output 6. Communication, Awareness and Information Dissemination	

Target 6.1 To carry out awareness programmes in 50% of the districts in Zimbabwe within the next three 3 years	Awareness programmes initiated at a national level, with professional hunters, communities and NGO community. Awareness campaigns being carried out by the Extension and Interpretation Unit in all the regions.
Target 6.2 Create lion conservation and management information units within one year	Databases established at some key research centres using dedicated external research programmes (e.g. WILDCRU).
Output 7. Regional and Trans-Boundary Collaboration	
Target 7.1 Undertake an inventory of national strategies for lion management	Done.
Target 7.2 Encourage the development of national lion conservation strategies where these are missing &/ or incomplete	National lion conservation strategies discussed at AWCF (meeting held under auspices of KAZA).
Target 7.3 Develop an integrated and harmonised lion management strategy for Transfrontier Conservation Areas (TFCAs)	Lion conservation strategies for SADC discussed at AWCF meeting held under auspices of KAZA.
Target 7.4 Implement lion conservation strategy and management plan	Strategy under review.

3.3.1 National Lion Captive Breeding Policy

A target of the Conservation Strategy and Action Plan for the Lion in Zimbabwe was to develop and implement a National Lion Captive Breeding Management Policy. This was achieved in 2011 when the ZPWMA met with lion breeders, keepers and animal welfare organizations to define the purpose of breeding and keeping lions; identify and discuss issues related to breeding and keeping of lions in captivity and to chart the way forward on the breeding and keeping of lions in captivity.

The objectives of the policy are to provide a national approach and minimum standards to all aspects relating to the management of captive bred lions including the role of captive bred lions upon reaching maturity and regulate the import and export of captive bred lions. The policy also defines the measures to protect the genetic integrity of indigenous lion populations. The use and welfare of captive bred lions is monitored by a captive lion inspection team.

In terms of this policy, lions that are kept in captivity for species conservation and commercial purposes are subject to the following conditions:

1. No permit for the keeping of lions in captivity will be issued before the facility has been inspected and approved by ZPWMA as a Captive Lion Holding Facility.
2. Lions may not be allowed to breed in captivity unless the holding facility is registered as a Captive Lion Breeding Centre. If a breeding permit is not issued, it is the responsibility of the owner to ensure that the animals do not breed. If breeding occurs without a permit the owner will be fined and the animals are subject to confiscation and possible destruction by ZPWMA.
3. Lions may not be captured from the wild population and kept in captivity unless the animal is orphaned or injured and is captured with the purpose of rehabilitating the animal and returning it to the wild within as short a time as possible.
4. Captive bred lions may not be released into the wild or transferred from the facility without prior permission from ZPWMA, and are subject to an approved release plan.

No lion can be transported without the necessary internal and national permits and without being micro-chipped, and all transportation of live animals must comply with CITES Resolution Conf. 10.21(Rev. CoP 14). To safeguard the integrity of the indigenous gene pool, no import permits will be issued for non-indigenous lions. Any lion that are to be transported must be issued a certificate of health by a competent veterinarian confirming that the premises of origin has been free from anthrax, panleukopenia and canine distemper for six months, and that each predator is free from diseases such as FIV, BTB or any other disease which may threaten local populations. The animal should also have been vaccinated for rabies and treated with a broad spectrum de-wormer and acaricide.

It is an offence to export lions from Zimbabwe without a ZPWMA export permit, and all export permit will only be considered if the exporting facility holds a current permit to keep captive lions. Moreover, an export permit will only be issued if the importing facility, in the country of import, conforms to regulations laid out in this policy document.

4 Population Trend Data For Key Lion Populations In Zimbabwe

Zimbabwe has in recent years taken proactive actions to enhance the conservation of lion populations both inside and outside the protected areas. These have included implementing moratoriums on hunting, reducing quotas, implementing an age-based hunting regulation and undertaking independent monitoring programmes conducted by international research institutions. Emerging from this is evidence that by implementing appropriate regulatory, management and monitoring actions, coupled with raising awareness, the lion populations respond rapidly and recover to near

former levels. The section below summarises the data from key range areas both inside and outside the National Parks Estate to substantiate this.

4.1 LION SURVEY TECHNIQUES

The population estimates of lions in Zimbabwe are determined through carnivore spoor surveys, systematic lion collaring and call-up surveys. With the strategy to maintain the wilderness values of most protected areas, there is low road penetration in the parks estates, however all suitable roads are used as transects, and in areas of suitable substrate, spoor surveys have shown to be an effective and efficient means to assess wildlife densities (Stander 1998, Fuston et al. 2001, Davidson and Romanach 2007). Patrol reports, field observations by ZPWMA rangers and other sightings by tour operators and tourists also contribute to the knowledge of the status of lions in Zimbabwe's protected areas. Similarly, the occurrence of lion in Safari Areas is recorded by resident safari operators, including those operating in CAMPFIRE areas.

4.2 RESULTS OF REGIONAL LION SURVEYS

Lion population surveys provide indices of abundance that can be used to determine spatial distribution, as well as temporal trends in population numbers. The results of the different survey methods are used to generate information for setting sustainable lion trophy hunting quotas and for population management.

4.2.1 Gonarezhou National Park

Spoor count surveys of the Gonarezhou National Park have been conducted since 2009 using the same methodology to obtain direct estimates of lion populations to compared actual lion densities with potential density estimates (Groom, 2009, Groom et. al. 2014). Table 5 below illustrates the growth of the lion population in the Park (Groom and Watermeyer, 2015).

Table 5: Population estimates of lion in the whole of Gonarezhou National Park (extrapolated from survey area) from 2009 – 2015 (Groom and Watermeyer, 2015).

2009	2010	2011	2012	2013	2014	2015
31	45	72	64	77	116	125

As with many lion populations anthropogenic factors can be key drivers of lion population dynamics, and in areas with high human impact lion numbers may be significantly lower than those predicted by prey biomass models. This was found to be the case in the Gonarezhou National Park. Groom et. al. (2014) concluded that high hunting quotas either within or around the protected area were the most likely cause of the low lion numbers, with quotas in some areas being as high as seven lions per 1,000km^2 in some years. Other factors included persecution, poisoning and problem animal control, as well as disease and competition with spotted hyaenas (*Crocuta crocuta*).

Following decisions to halt lion hunting, and reducing human-lion conflict, the lion population responded and steadily increased, reaching a density of 2.5 lions / 100km^2 in 2014 (as compared with 0.6 / 100km^2 in 2009). Relative to other populations (average over Kruger NP, Hwange NP, Selous GR and Serengeti NP = 9.6 lions / 100km^2) this is still low, suggesting the population could continue to increase further. Groom et. al. (2015) conclude that the lack of artificial water in Gonarezhou means that natural carrying capacity will be lower but based on prey biomass availability predictions of lion carrying capacity could support between 200 and 300 lions (Groom 2010). It is therefore still possible that the lion population in the park could at least double before reaching carrying capacity (especially because prey biomass is now greater than it was in 2010 – see Section 8.5 below).

4.2.2 Save Valley Conservancy

The African Wildlife Conservation Fund carries out an annual large carnivore spoor survey to assess population trends of the carnivores in the Savé Valley Conservancy (SVC) to aid management decisions. A standardised methodology is used to ensure consistency through time and comparability with other studies. Since 2008, the spoor surveys have been done using the same roads and the same observer. The results of these surveys are provided in Table 6 showing that the lion population has increased from 40 in 2005 to 284 in 2015 (Groom and Watermeyer, 2015, du Preez et al, 2016).

Table 6: Population estimates of lion in the whole of Savé Valley Conservancy from 2005 – 2015

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
40	50	52	76	114	143	105	130	115	182	284

The lion population has increased substantially in the last two years, and there are now an estimated 284 lions in the whole of the conservancy. This is a notable increase since the 2013 estimate of 115 lions and 2014 estimate of 182, and is perhaps a latent effect of no hunting for over several years. Of the 149 lion tracks encountered, 28% were big adult males with 53% identified as females/juveniles and 15% as young cubs (3% of tracks were unidentified). The number of lions in SVC equates to a density of 11.7 lions/100km². This is slightly higher than other population estimates of 9.6 lions/100km² (average over Kruger, Hwange, Selous and Serengeti).

4.2.3 Bubiana Valley Conservancy

After originally being eradicated by cattle ranchers in the area, 13 lions were reintroduced to the Bubye Valley Conservancy in 1999, and four young males broke into the Conservancy that same year. From the original 17 animals present in 1999, the Bubye Valley Conservancy lion population was estimated at approximately 280 individuals in 2009 when robust population surveys were initiated by a team from the University of Oxford Wildlife Conservation Research Unit (WildCRU), and this population has continued to grow. Today it is estimated that there are over 500 lions on the Bubye Valley Conservancy (Figure 3, du Preez et. al., 2016).

The exponentially increasing Bubye Valley Conservancy lion population currently exists at one of the highest densities in Africa (~0.190 lions/km^2: du Preez et al. 2015, du Preez et al. 2016), greater than that of the Serengeti, Tanzania (0.10 lions/km^2), Selous, Tanzania (0.080 – 0.130 lions/km^2: Creel and Creel 1997), Kruger National Park, South Africa (0.096 – 0.112 lions/km^2: Mills et. al. 1995), and Hwange National Park, Zimbabwe (0.027 lions/km^2: Loveridge et. al. 2007). This equates to the largest contiguous lion population in Zimbabwe.

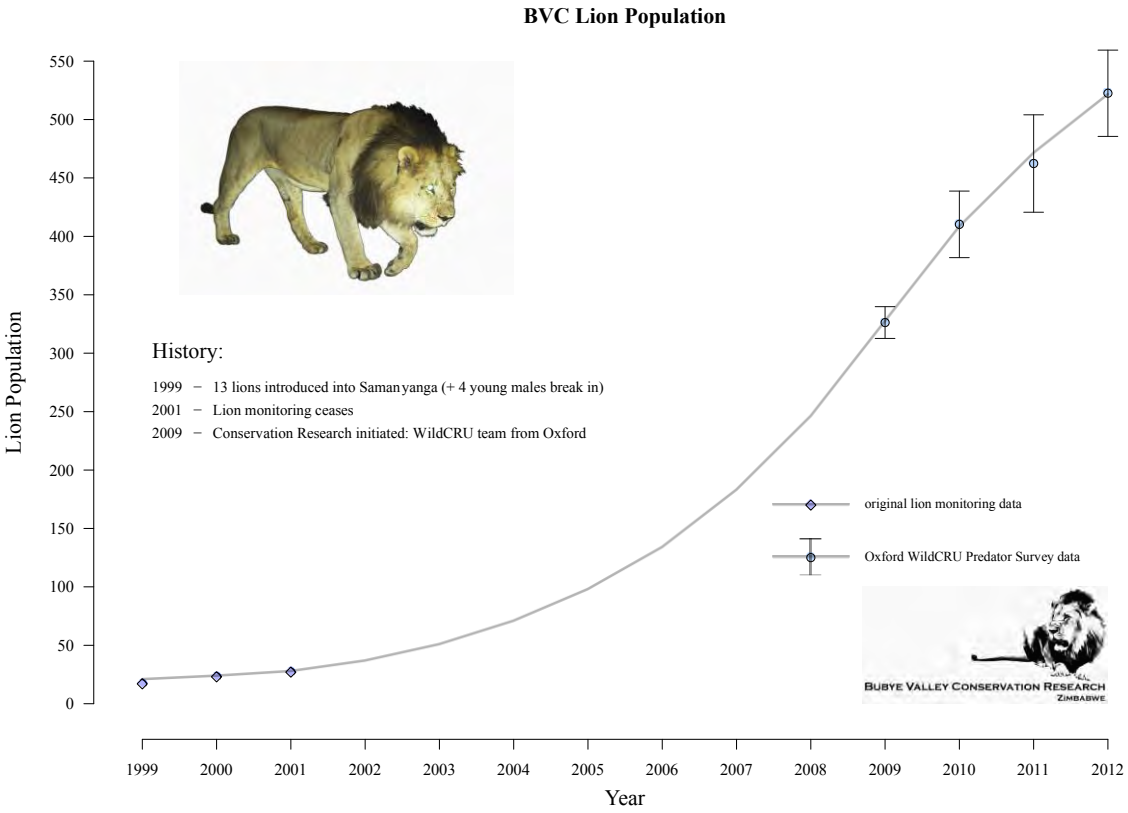


Figure 3: The Bubye Valley Conservancy lion population has increased exponentially since the original reintroduction of the species to the conservancy in 1999.

4.2.4 Mana Pools National Park

In conjunction with ZPWMA, Zambezi Society and the Cheetah Conservation Project, the Wildlife Conservation Research Unit (WILDCRU) based in Oxford (U.K.) conducted a camera trap and spoor count survey of Mana Pools National Park with the objective of:

- To undertake park wide surveys to estimate population density, distribution and habitat occupancy of common predator species in Mana Pools National Park.
- To contribute to Cheetah Conservation Project Zimbabwe's (CCPZ) cheetah monitoring protocol.
- To provide presence/absence data on all the larger mammal species.

A Facebook page was also created for the survey that was regularly updated on the progress of the survey (Facebook.com/Mana Pools Survey 2015).

The preliminary results of this survey identified 67 individual lions from the 267 images captured. When combined with the spoor count surveys, the population was estimated at 94 lions at a density of 4.5 lion/km^2 (Seymour-Smith and Loveridge, 2015),

4.2.5 Hwange National Park

The Hwange Lion Research Project undertaken by the Wildlife Conservation Research Unit (WILDCRU, Oxford University) works in association with the Zimbabwe Parks and Wildlife Management Authority. Since 1999 this project has identified over 600 lions and currently monitors approximately 15 prides and 12 male coalitions in a 5,000km^2 study area. This is one of the most intensive and long-term lion

projects in Africa. A key finding of this research programme has been to demonstrate that the way lion trophy hunting is managed can rapidly improve the status of lion populations by implementing a biologically sustainable system of allocating quotas. This project has also increase the understanding of human related impacts on lion populations (and vice-versa) along the park boundary. More recent research is focussed on understanding connectivity between Hwange NP and other areas such as parks in Botswana and in Zimbabwe.

This project was initiated because there was a perception that levels of sport hunting of male lions' in the hunting concessions surrounding the Hwange National Park were having a negative impact on the conservation of the population (Loveridge, et. al. 2007). Data collected between 1999 and 2004 suggest that this was indeed the case and this contributed to a suspension of sport hunting of lions in the area surrounding the Park between 2005 and 2009. This was a crucial shift in management policy for this species and an important step towards sustainable management and conservation of lions. Following the imposition of the hunting moratorium, lion densities increased (Figure 4).

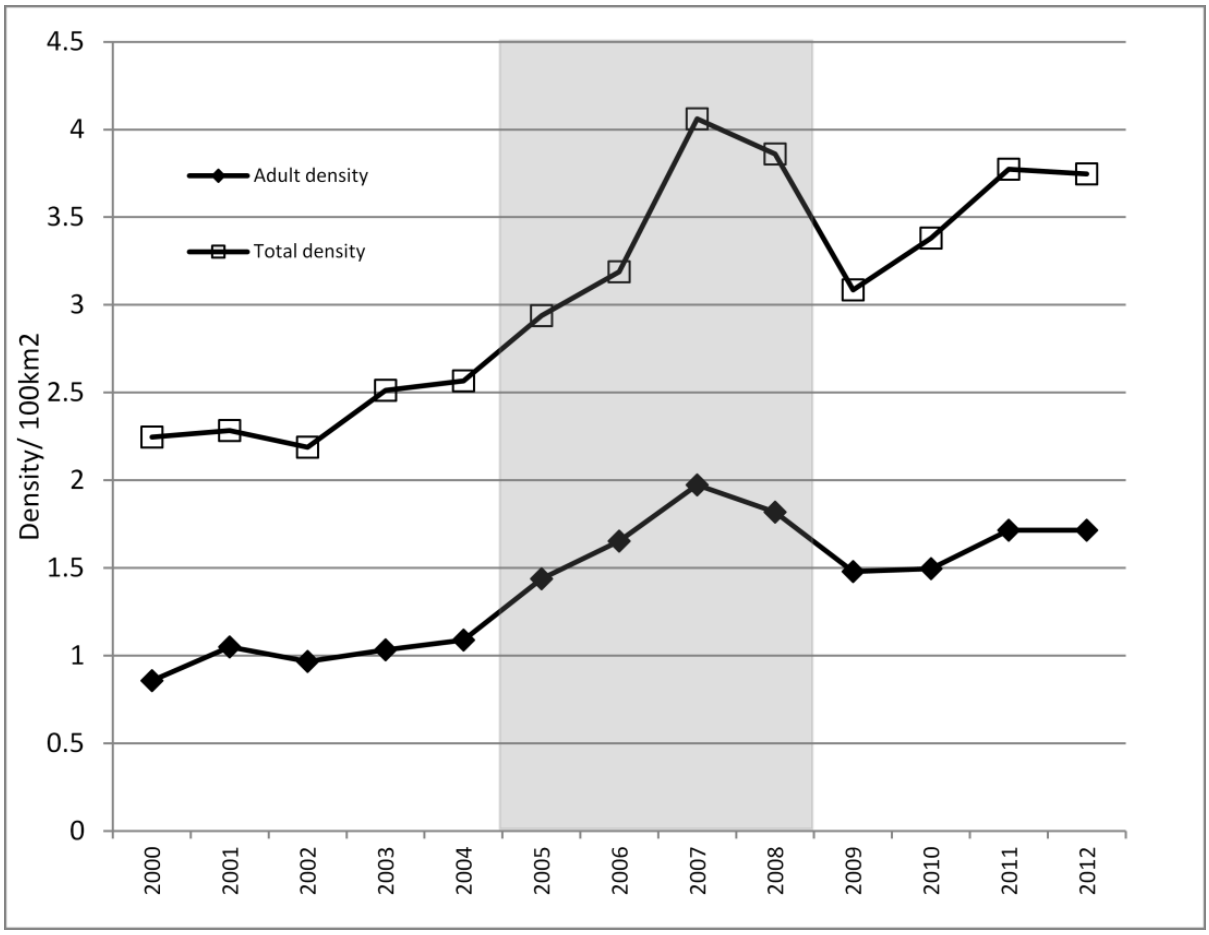


Figure 4: Lion densities in the Hwange area between 2000 and 2012

Following the lifting of the moratorium, and by implementing strict monitoring and hunting guidelines, the overall Hwange lion population has continued to show a positive trend, and is now estimated at over 550 animals.

4.2.6 Zambezi National Park and Units 6 and 7

Victoria Falls Wildlife Trust (VFWT) in collaboration with ZPWMA and the Hwange Lion Research Project has recently completed both spoor count transects and a camera trap surveys in Zambezi National Park, and Units 6 and 7 of the Matetsi Safari Area. The preliminary results of these surveys show that the lion population has increased since 2013 to approximately 67 (Rodger Parry, pers comm.).

Coalition males, Zambezi National Park, June 2016 (*Photo credit: Jessica Dawson, Victoria Falls Wildlife Trust)*

4.2.7 Chizarira National Park and Chirisa/Sengwa Safari Area

A survey was undertaken jointly by the Zimbabwe Parks and Wildlife Management Authority and the African Lion and Environmental Research Trust in September 2015 (Dr Norman Monks pers comm.). The survey area consisted of the 1,910 km^2 Chizarira National Park (a non-hunting area) and the adjoining 1,713 km^2 Chirisa/Sengwa Safari Area (a hunting area). No large carnivore counts using the call-up method had previously been conducted in these contiguous protected areas.

The survey method used the standardized protocol of audio broadcasts of a buffalo calf in distress. Spoor counts were not used for these surveys since previous research had shown that the call-up method was more precise, took less time, and was less costly to complete to achieve accurate results. Up to three stations were sampled nightly commencing just after sunset.

Twelve call-up sites were sampled. Response to the call-up stations by lions was low with only 2 of the 12 stations visited. The population abundance was estimated to be 31.6 (0.872 lion 100/km^2), suggesting a decline of 68.4% since 2004 when estimates of lion numbers were provided to Bauer and van der Merwe, (2004).

5 CONSERVATION IN ZIMBABWE

Zimbabwe Parks and Wildlife Management Authority (ZPWMA) falls under the Ministry of Environment, Water and Climate and it was established under the Parks and Wildlife Act of 1996 (Chapter 20:14) as amended by Act Number 19 of 2001. The rationale behind the establishment of the Authority was to allow it to retain all the revenue it generates to be ploughed back into conservation. The functions of the Authority are provided for in detail in section 4 of the Parks and Wildlife Amendment Act Number 19 of 2001. The Act gives the Authority power to control, manage and maintain Zimbabwe's wildlife resources.

Its **vision** is "*To be a World Leader in sustainable conservation*" and its **mission** is "*To conserve Zimbabwe's wildlife heritage through protection and sustainable utilisation of natural resources for the benefit of present and future generations*."

5.1 Staff Establishment

The staff strength at the beginning of January 2015 was 2,043 and ended at 2,044 on 31, December 2015 (2015 Annual Report (unpublished). Fifty (50) rangers were recruited in 2015. The following is the staff status report as at 31st December, 2015 (Table 7).

Table 7: Summary Staff Establishment by Region

Position	Grade	HQ	VMU	Northern	Western	Southern	Central	Total
Executive	F & E	3	0	0	0	0	0	**3**
Department Managers/Sectional Heads	D3-D5	19	0	3	4	3	3	**32**
Ecologists/ Area Managers/Officers	D1-D2	11	1	19	19	13	4	**67**
Snr Rangers /Officers	C1-C5	29	6	64	89	49	34	**271**
Rangers/Clerical	B2-B5	33	12	507	461	310	197	**1,520**
Gen. Hands / Lodge Attendants	B1	2	2	30	66	33	17	**150**
TOTAL		**97**	**21**	**623**	**639**	**408**	**255**	**2,043**

The current remuneration levels have remained low with the lowest paid worker receiving a gross salary of $375 per month. The last salary increase of 23% was in January, 2014. A comparison with other Parastatals within the same parent ministry, shows that the Authority has the lowest salary scales.

5.2 Transport Operations

As indicated in Table 8, the total cost of operating the Parks transport fleet was is $1,547,172.82 (excluding insurance and licensing) in 2015. The existence of old and obsolete vehicles in the fleet increases costs as most of them require major component replacements thereby increasing vehicle downtime.

Table 8: Overall travel and fuel consumed by Region

Station	Km travelled	Fuel Consumed		Repairs & Maintenance Cost ($)	Total Cost ($)
		Litres	Cost ($)		
Head Office	1,489,294	190,644	272,620	136,419	409,039
Northern	1,429,260	149,577	213,895	147,113	361,007
Southern	1,075,077	110,111	157,458	59,548	217,006
Western	1,313,263	142,012	203,077	161,120	364,196
Central	392,885	47,995	68,632	127,288	195,920
TOTAL	**5,699,779**	**640,339**	**$915,684**	**$631,486**	**$1,547,172.**

Table 9 below summarises the status of the Authority's vehicle fleet as of 2015. Out of the fleet complement of 316 (including tractors and motor cycles), only 70% are in sound condition.

Table 9: Number of vehicles per region

Region	Runners	Non-Runner	Total	% of Non-Runner
Head Office	41	6	47	13
Northern	53	19	72	26
Southern	30	21	51	41
Western	80	39	119	33
Central	17	10	27	37
Total	**221**	**95**	**316**	**30**

The Authority also owns three aircraft: Bell Jet Ranger and Robinson R22 Beta 11 helicopters, and a Cessna 185. The Jet Ranger is based at Hwange National Park and is used for game capture and law enforcement. The remaining aircrafts are non-operational.

5.3 LAW ENFORCEMENT

A major component of the Authority's mandate is law enforcement. This has become increasingly more important with the escalation in illegal wildlife trade, particularly involving elephant and rhino. The Authority has an establishment of 2,146 rangers however by the end 2015, there were 1,448 rangers in post (67%). Of the 1,448 rangers in post, 1,004 are deployable for anti-poaching operations.

The level of effort of law enforcement over the last 3 year is summarised in Table 10. In 2015 there were 2,139 incursions detected, and arrest of 1,354 local and 129 foreign poachers. The number of armed contacts declined from 26 in 2014 to 23 in 2015, and number of poachers killed declined from 13 in 2014 to 11 in 2015. Recoveries made in the field included 25 rifles, 276 rounds of ammunition, 496 pieces of elephant ivory, 4 rhino horns and 5,133 wire snares.

Table 10: Detections, Arrests and Recoveries for 2013, 2014 and 2015

Year	No of Incursions	No of contacts		Number of poachers				Recoveries					Other recoveries and arrests		
				Killed		Arrested									
		Armed	Visual	Local	Foreign	Local	Foreign	Rifles	Ammunition	Ivory	Rhino horn	Snares	Gold	Poachers Camp	Dogs
2013	1842	27	344	9	0	1421	131	20	945	436	5	4415	93	264	180
2014	1571	26	362	10	3	4161	94	20	163	202	19	4864	221	186	272
2015	2139	23	356	6	5	1354	129	25	276	496	4	5133	134	339	167

5.3.1 Illegal Harvesting of Wildlife

Commercial wildlife poaching involving both local and foreign nationals continues to plague Zimbabwe, especially with respect to elephant and rhino located in the Zambezi Valley, Sebungwe, North-West Matabeleland, South-East Lowveld. The species targeted are shown in Table 11 and 12. Note that 21 lions were killed illegal between 2013 – 2015, with 6 animals killed through snaring in the area adjacent to Hwange National Park in 2015.

Table 11: Trends in wildlife poaching in the parks estate

Year	Illegally killed wildlife										
	Elephant	Buffalo	**Lion**	Kudu	Zebra	Impala	Warthog	Nyala	Eland	Crocodile	Waterbuck
2013	293	65	**12**	65	21	67	22	5	6	2	15
2014	176	44	**2**	34	8	65	26	2	5	3	15
2015	317	78	**7**	76	21	92	46		9	17	6
2016*	101	23	0	23	22	54	12	1	4	1	5
Total	**807**	**210**	**21**	**200**	**72**	**278**	**106**	**8**	**24**	**23**	**41**

*To September 2016

Table 12: Illegally killed wildlife 2015 in the four regions

Region	Elephant	Buffalo	**Lion**	Kudu	Sable	Zebra	Croc	Impala	Eland	Warthog	B/Buck	waterbuck
Central	46	30	**0**	16	0	6	1	28	0	17	7	
Northern	75	6	**0**	6	0	0	0	0	0	0	0	0
Southern	65	38	**1**	42	0	9	4	31	4	25	1	6
Western	131	4	**6**	12	1	6	12	33	5	4	1	0
Total	**317**	**78**	**7**	**76**	**1**	**21**	**17**	**92**	**9**	**46**	**9**	**6**

5.3.2 Illegal trophy hunting – the "Cecil" effect

Professional hunter Theodor Bronkhorst was arrested for allegedly illegally hunting of a lion popularly known as 'Cecil' with a foreign client on Antoinette and Antoinette farm in Gwayi River Conservancy (which is adjacent to Hwange National Park). The same case involved Umguza Rural District Council in alleged illegal quota transfer[1]. At the time of writing, this case has not been brought before the court, and is still under judicial review[2].

The Authority immediately implemented the following measures in response to this incident:

- Hunting of lions, leopards and elephant in areas outside of Hwange National Parks required confirmation and authorization in writing by the Director-General of the Zimbabwe Parks and Wildlife Management Authority, and all hunts are to be accompanied by the Authority's staff whose costs will be met by the landowner.
- Bow hunting was suspended except with confirmation and authorization in writing by the Director-General of the Zimbabwe Parks and Wildlife Management Authority.
- Members of the hunting fraternity were reminded that it was illegal for quotas to be transferred from one hunting area to another. Any case of quota transfer would be regarded as poaching, and the Authority will not hesitate to arrest, prosecute, and ban for life any persons including professional hunters, clients and land owners who were caught on the wrong side of the law.

[1] This system facilitated the transfer of a quota from one property to another has since been suspended by the Authority.

[2] Note: This case has been dismissed by the court on 12th November 2016.

- 2015 hunting quotas and permits for Antoinette and Antoinette farm, Railway farm 33, Umguza Rural District Council and Kusile Rural District Council were suspended.
- Professional hunters' license for Theodor Bronkhorst was suspended.

5.4 HUMAN WILDLIFE CONFLICT

The Authority is called upon to deal with human-wildlife conflict (HWC) issues across the country, and this continues to be a challenge. A total of 863 reports of problem wild animals causing threat to human life and property were received in 2015 compared to 1,637 reports in 2014 (Table 13). From these incidents, a total of 39 human fatalities by crocodiles, elephants, lions and buffaloes were recorded in 2015 compared to the 27 fatalities in 2014.

Table 13: Trends of Human and Wildlife Conflict Incidents

Year	Total Reports Received	People killed	People Injured	Cattle killed	Goats killed
2013	1 088	21	16	67	65
2014	1 637	27	24	217	129
2015	863	39	23	232	213
Total	**3 588**	**87**	**63**	**516**	**407**

The scale and species involved in HWC is summarised in Table 14. The authority received 200 problem lion reports and responded to 177. One person was killed by lion, and 206 livestock. The Authority elected to capture problem lion (6) rather than destroy the animals.

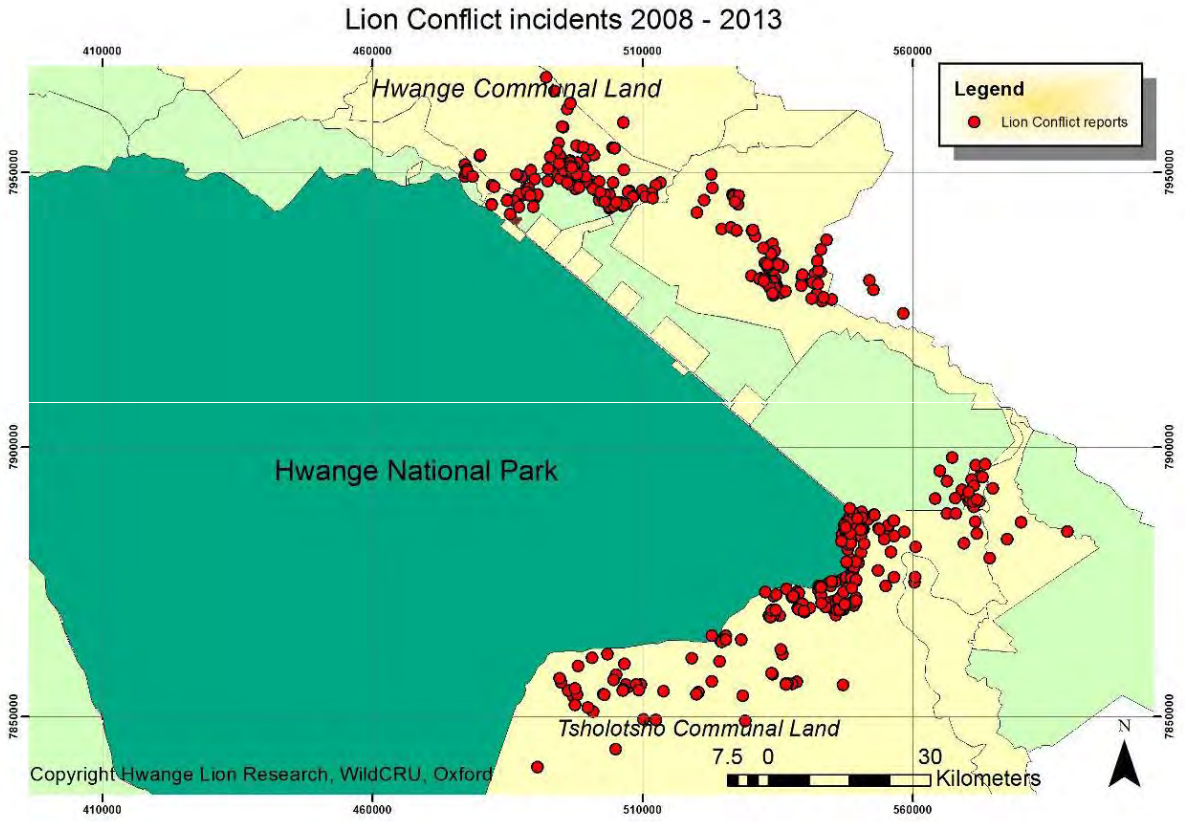
Table 14: Scale of countrywide human wildlife conflict in 2015.

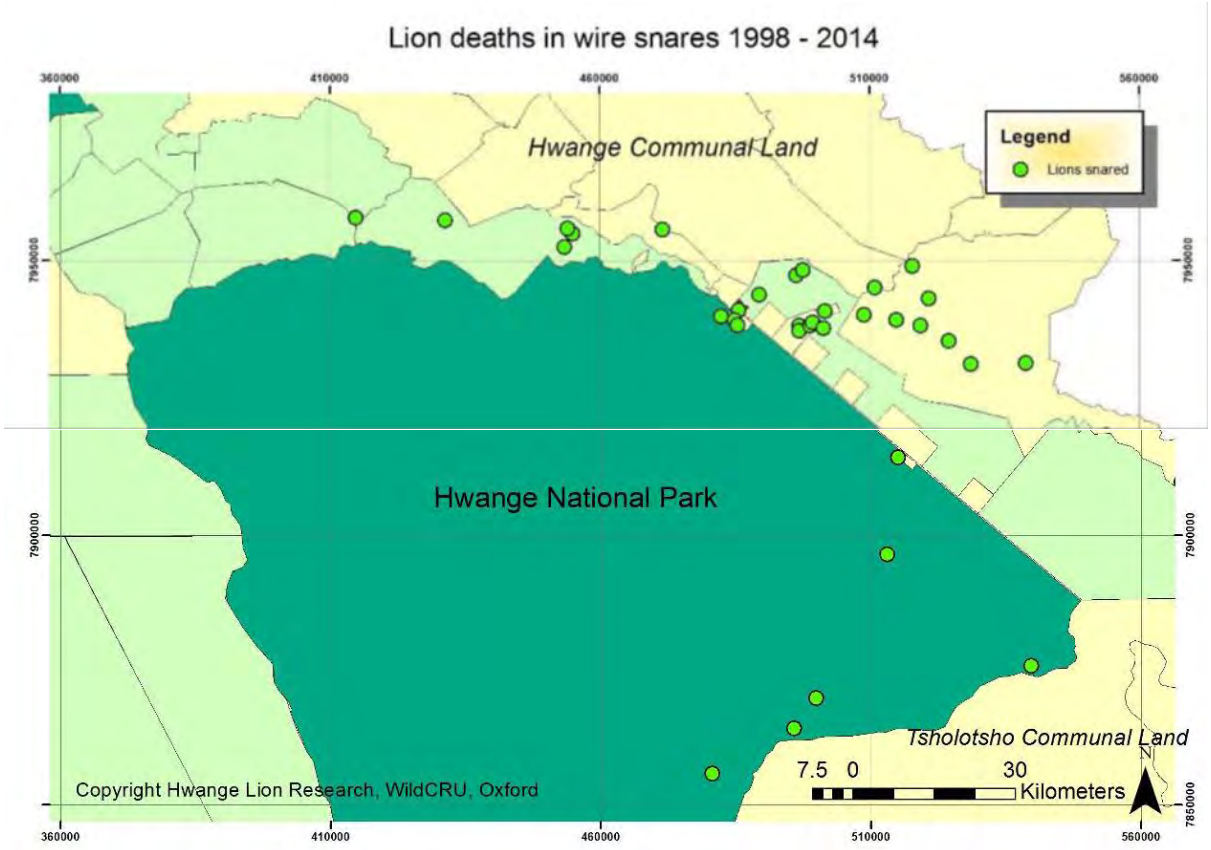
Species	Nature of problem	No of reports received	Reports attended	Number of animals eliminated		People		Livestock killed		
				Killed	Captured	Killed	injured	Cattle	Donkeys	Goats
Baboons	Damage to infrastructure, crop raiding, threat to humans	109	105	51	48	0	0		0	0
Buffalo	Threat to human life and crop raiding	46	40	0	15	2	1		0	0
Elephant	Threat to human life, crop raising, destroying property	216	177	0	38	4	5	0	0	0
Hippo	Threat to human life and crop raiding	131	87	0	34	0	0	0	0	0
Crocodile	Threat to human life and killing livestock	106	85	39	9	27	14	16	1	47
Hyenas	Killing livestock	36	18	0	7	0	0	68	2	54
Leopard	Killing livestock	19	11	0	1	0	0	32	0	33
Lion	**Threat to human life and livestock killing**	**200**	**177**	**0**	**6**	**1**	**0**	**115**	**12**	**79**
Total		**863**	**700**	**90**	**158**	**34**	**20**	**231**	**15**	**213**

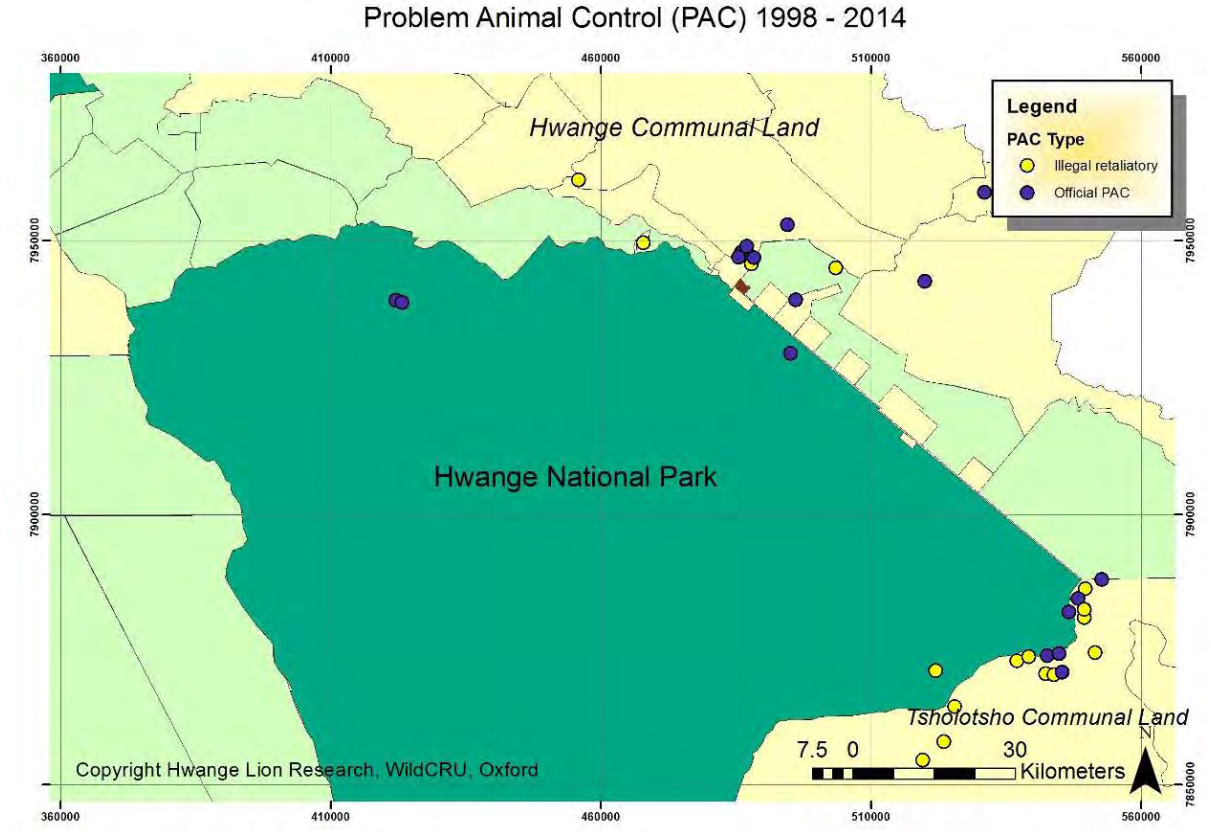
5.4.1 Case Study of Human- Lion Conflict from Hwange National Park

The following information has been extracted from the Hwange National Park Management Plan (ZPWMA, 2016) and is provided here to illustrate the challenges facing the management of lion populations residing adjacent to communal and commercial properties. Variations of the scenario described here apply to other areas of the country where hyaenas and lions are the most problematic carnivores in the communal areas adjacent to protected areas. Hyaenas are perceived to be more of a problem than lions as they account for large numbers of livestock (cattle, goats and sheep). The data presented here has been extracted from the WildCru Lion Research project in Hwange and considers only lions.

Since its inception in 2007 a significant component of the WildCru Lion Research project has focused on understanding the ecological and human socio-economic factors of conflict between the local agro-pastoralist people residing in Tsholotsho and Hwange Communal Land and lions. The project developed an intensive reporting system to record conflicts and has undertaken a detailed survey to record the baseline data on human wildlife conflict at the household level. Between 2007 and 2013 a total of 1,113 conflict incidents were recorded in the Hwange area in which 915 head of stock was lost to lions.







To mitigate this conflict, the project has initiated the "Long Shields Guardian Programme" whereby communities are notified of movements of collared into their areas via cell phone who then motivate the community to take appropriate action (i.e. moving the cattle, chase the lions etc.). In 2013 alone,

1,850 warnings were passed to the "Long Shields". In addition, the project is working on improving bomas and husbandry techniques as another way to lessen the conflict between lions and people, and although these actions may reduce the incidents of livestock marauding lions, cattle deaths still occur resulting in retaliatory killings or action on the part of National Parks to destroy the animals.

5.5 Trend in Financial Performance of the Authority

The average Income and Expenditure for the period 2010 – 2015 is shown in Table 15 that highlights the inability of the Authority to generate adequate revenue to cover both the capital and operating requirements. The average total income over this period is US$22.4 million (range US$16.5 – US$29.3 million). For the period ending December 2015, the Authority generated total revenue of $24,1million, which is 32% below the anticipated budget of $35.5 million. This includes a government grant of $716 000 and a donation of vehicles and equipment worth $2,1 million from the Government of China.

The average total expenditure for the period 2010 – 2015 is US$25.3 million (range US$18.1 – US$30.7 million). The Authority has thus incurred a loss of approximately US$2.8million/year. For the year ended December 2015, the Authority incurred a loss of US$5,4 million including depreciation.

The Authority is dependent on income from Conservation Fees (i.e. entry fees to Parks etc.) that accounted for 39% in 2015 (average 34%/year), hunting (13% in 2015) and leases (10% in 2015, Table 15).

Although individual salaries remained low, staff costs in 2015 were $20,7 million which is 71% of total revenue raised (average 64%). This is unsustainably high and leaves very limited resources for operation (16%), marketing (1%) and administrative expenses (7%, Table 15).

The major reasons for the budget deficits in the past six years can be attributed to:

- Declining income from hunting – this has been exacerbated by the recent bans imposed on elephant trophy imports into the United States by US Fish Wildlife Service (USFWS) and the much-publicised death of *Cecil the lion* that had a negative effect on revenue generated from hunting.
- Government Grant – The Authority has not received meaningful funding from the fiscus despite requests made by management that non-revenue generating activities which are of national nature be funded by Government.
- The Authority failed to dispose of its ivory stock pile due to the continued ban on ivory trade by CITES. The ivory stock which the Authority is currently holding exceeds 80 tons.

Table 15: Statement of Comprehensive Income for period 2010 – 2015 and the year ended 31 December 2015 (extracted from 2015 ZPWMA Annual Report).

Revenue	US$ 2015	%	Average 2010 - 2015	%
Conservation Fees Land	$7,879,987	33%	$6,506,508	29%
Conservation Fees River	$1,409,160	6%	$1,136,041	5%
Accommodation	$1,720,640	7%	$1,904,477	8%
Annual registration	$507,211	2%	$722,847	3%
Permits	$1,476,176	6%	$849,916	4%
Service and Facilities	$307,692	1%	$152,616	1%
Law enforcement (fines etc.)	$224,657	1%	$215,591	1%

Revenue	US$ 2015	%	Average 2010 - 2015	%
Hunting income	$3,256,698	13%	$5,049,089	22%
Fishing permits	$561,797	2%	$941,833	4%
Leases and rentals	$2,434,676	10%	$1,880,258	8%
Parks product sales	$623,084	3%	$767,347	3%
Examinations	$116,000	0%	$70,873	0%
Projects	$349,864	1%	$248,614	1%
Other income/donations	$2,555,729	11%	$907,169	4%
Government grant	$716,000	3%	$1,141,119	5%
Total	**$24,139,371**			
Expenditure				
Operational costs	$4,801,815	16%	$5,146,091	20%
Staff costs	$20,766,023	71%	$16,311,677	64%
Marketing and promotions	$212,406	1%	$147,334	1%
Administration costs	$2,056,681	7%	$2,631,019	10%
Depreciation	$1,531,000	5%	$1,069,138	4%
Total expenditure	**$29,367,925**		**$25,305,258**	
Operating surplice/deficit	**-$5,365,082**		**-$2,810,962**	

The Authority receives considerable support from many local and international NGOs who undertake a variety of routine management activities e.g. supply and maintain artificial game water supplies, provide logistic support to law enforcement operations. This is in addition to the support provided by hunting operators that hold concessions in the Safari Areas.

6 STAKEHOLDER INVOLVEMENT IN LION MANAGEMENT AND CONSERVATION

There are several private sector initiatives that are directly or indirectly involved with lion management and conservation both inside and outside the Parks estate. These stakeholders are represented by companies from the consumptive and non-consumptive sectors of the industry.

6.1 BENEFICIARIES OF WILDLIFE BASED LAND USE

Various forms of wildlife based land use occur in Zimbabwe that benefit different segments of the community depending on the authority for the land. Table 16 summarises these broad categories. The Authority is the direct beneficiary from the use of wildlife in National Parks and Safari Areas while the Forestry Commission is the beneficiary in Forestry Areas. In terms of the Act, Communal CAMPFIRE areas are the primary beneficiaries where the income generated from hunting is shared between the Rural District Council and Community Wards (see below). Similarly, private conservancies and land owners are the primary beneficiaries.

Collectively, these different management regimes contribute to the overall conservation of the wildlife both inside and outside the Parks Estate, and is supported through the existing policy and legal framework that facilitates incentives to promote wildlife based land use.

Table 16: Direct beneficiaries from Wildlife Based Land Use

Land category	Direct Beneficiary
National Parks and Safari Areas	Zimbabwe National Parks and Wildlife Management Authority
Forestry Areas	Forestry Commission
Communal Campfire Areas	Rural District Council and Wards
Private Conservancies	Private Landowners

6.2 CONTRIBUTION OF THE PRIVATE SECTOR

A questionnaire was circulated to all safari hunting operations to gather data on:

- Area and land category where hunting takes place
- Payments in terms of concession fees
- Number of people employed
- Approximate value of investment in assets
- Approximate costs of the hunting operations
- Hunter days generated through various packages
- Indication of the prey base

Data from 18 companies that have been allocated lion on quota and offer these trophies as part of their hunting packages is summarised below (Table 17). These data indicate that

- The average hunting concession covers 1,590km^2 and generates $178,488 in concession fees annually.
- Each company on average employs 109 people of which 24 are seasonal staff (22%). Law enforcement staff make up 26% of the staff complement.
- On average, each company has invested approximately $1.3 million in fixed and moveable assets (buildings, tents, vehicles, equipment etc.).
- On average, each company incurs approximately $1 million in expenses annually, with staff wages (24%) and operating expenses (27%) forming the bulk of these costs.
- Lion safaris contribute approximately 9% (126 hunter days) to the 3-year average number of hunter days generated (1,405) with the bulk of hunter days generated from buffalo safaris (see below for more details on the financial significance of this contribution).
- On average, each hunting area supports 2,000 large mammals, 3,000 medium sized mammals and 6,000 small sized mammals. However, there are large differences between state, forestry, CAMPFIRE and conservancies areas. State areas tend to support more large animals (buffalo, giraffe) while conservancies support greater numbers of medium and small animals.
- Observations on the status of lion populations indicates that each area supports on average 5 prides of 7 animals (i.e. 35 lions) although there is a wide variation in these numbers with more prides occurring in the conservancies than on Forest and CAMPFIRE areas. In these areas, the operators report that lion are transient/migratory rather than permanent.
- All areas report incidents of human-lion conflict, including incidents of snared animals.

Table 17: Summary of 18 hunting company statistics where lion hunting occurs

Companies (N=18)	**Total**	**Average**	
Total Hunting Area (ha)	2,872,932	159,607	
Concession fee	$2,141,860	$178,488	
Number people employed			
Owner/Manager	65	4	3%
Administration	59	3	3%
Camp Maintenance	308	17	16%
Safari operations	295	17	16%
Professional Hunters	82	5	4%
Skinners	59	3	3%
Trackers	138	8	7%
Law enforcement	449	28	26%
Seasonal/Casual staff	379	24	22%
Average Staff employed/company		**109**	
Approximate Asset Value (US$)	**$21,557,610**	**$1,347,351**	
Major Expense Items			
Central Government Licenses:	$415,700	$25,981	3%
ZNWMA Fees:	$1,932,472	$128,831	13%
Community Development:	$525,378	$35,025	4%
Law Enforcement:	$1,319,562	$87,971	9%
Staff wages & Welfare:	$3,601,439	$211,849	24%
Administrative costs:	$1,870,267	$116,892	13%
Operating expenses:	$3,986,619	$249,164	27%
Management and Marketing costs	$661,974	$41,373	4%
Any other costs	$411,693	$25,731	3%
Overall costs	**$14,725,104**	**$922,818**	
Hunter days generated over 3 years			
Lion	2,137	126	9%
Leopard	4,565	269	19%
Buffalo	10,344	608	43%
Elephant	3,131	184	13%
Plains game	999	59	4%
Total Hunter days	**25,294**	**1,405**	
Prey base status			
Large mammals (Buffalo, Giraffe)	28,190	2,014	
Medium mammals (Eland, zebra, kudu, waterbuck etc.)	53,273	3,552	
Small mammals (Bushbuck, warthog, impala)	82,297	5,878	
Status of lion population			
Number of prides	71	5	
Average pride size	80	7	

Companies (N=18)	Total	Average	
Number of cubs	243	19	
Number Coalition males	89	7	
Monitoring of lion population			
Natural deaths	4	1	
Reports of Human-Lion Conflict	33	5	
Incidents of infanticide recorded	6	2	

6.3 CAMPFIRE COMMUNITY PROGRAMMES

The right to exploit and benefit from wildlife was extended to communal areas through granting of Appropriate Authority Status over their wildlife resources to Rural District Councils in 1982. The intention was to return rights of access to natural resources through legislative change, devolve responsibility and economic empowerment. The CAMPFIRE model focuses on three main criteria:

- Voluntary interest in participation by communities and their Rural District Councils (RDCs),
- Presence of wildlife populations capable of producing sustainable and economically significant revenues.
- Benefit sharing for local communities based on:
    - The number of animals harvested within a local community's area each hunting season.
    - The extent of wildlife habitat present within a local community's area annually.

Currently 58 Rural Districts have been granted the Appropriate Authority status to manage wildlife resources in their areas, however only 16 are actively engaged in some form of wildlife based land use (see Figure 5).

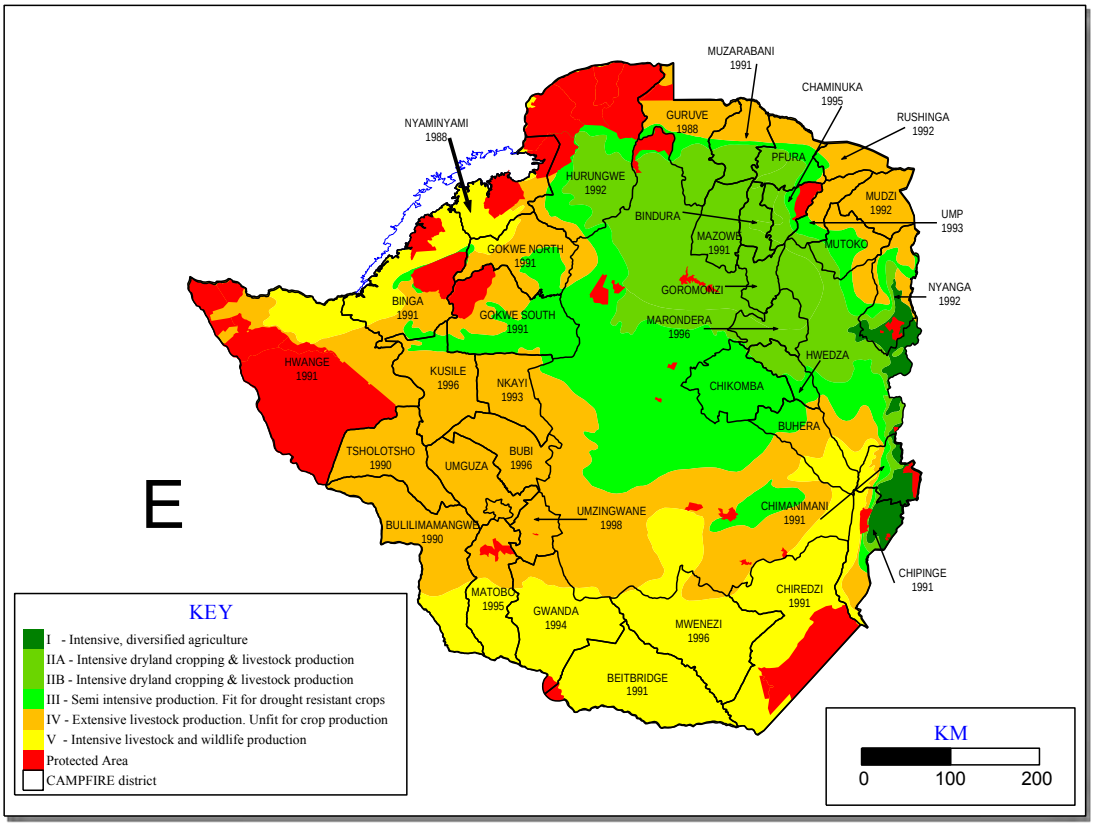


Figure 5: Map of Zimbabwe showing CAMPFIRE districts and year of establishment

The performance of ten key CAMPFIRE Districts is summarised below to illustrate the level of benefits that flow to RDCs, Wards and households, and the role that income from lion play in this process.

1. OVERALL QUOTA ALLOCATION, UTILISATION AND INCOME GENERATION FROM KEY SPECIES: All Districts: 2010 - 2015

	Elephant	Lion	Leopard	Buffalo	Hippo	Crocodile	Total
Quota	1,079	140	487	2050	602	471	
Offtake	655	45	193	908	270	305	
% Utilisation	61%	32%	40%	44%	45%	65%	
Total income N=6 years)	**$7,129,658**	**$240,000**	**$532,675**	**$2,263,150**	**$464,000**	**$441,903**	**$11,071,386**
Average/year	**$1,188,276**	**$40,000**	**$88,779**	**$377,192**	**$77,333**	**$73,651**	**$1,845,231**
Percentage	64%	2%	5%	20%	4%	4%	

The overall income generated over a 6-year period was US$11 million. An overall quota of 140 lions (average 23/year) were allocated to the CAMPFIRE programme over which 45 (32%) were utilised (8 per year). This generated US$240,000 or 2% of the overall income.

2. SOURCE OF CLIENTS AND GROSS INCOME TO SAFARI OPERATIONS:2010 - 2015

Origin of Clients	USA	Canada	South America	Europe	Asia	Middle East	Oceania	Africa	Total (N=6 years)
Total	**880**	**16**	**54**	**456**	**82**	**9**	**51**	**131**	**1679**
Percentage	51%	1%	3%	27%	5%	1%	3%	8%	
Total	**$8,624,059**	**$150,987**	**$543,003**	**$5,201,168**	**$550,062**	**$781,076**	**$394,208**	**$567,897**	**$16,812,459**
Average/year	**$1,462,508**	**$25,165**	**$90,500**	**$866,861**	**$91,677**	**$130,179**	**$65,701**	**$94,650**	**$2,802,077**
Percentage contribution	**51%**	**1%**	**3%**	**31%**	**3%**	**5%**	**2%**	**3%**	

Hunting clients from the USA are by far the most numerous (880 over 6 years) contributing 51% (or US$8.6 million) of the estimated US$16 million generated from hunting in CAMPFIRE areas from 2010 - 2015.

3. INCOME TO DISTRICTS: 2010 - 2015

	Hides (US$)	Trophy fees (US$)	Percentage of daily rate	Hunting concession fees	Photographic (lease fees/bed night levy)	Other (vehicle hire, grinding mill etc.)	Total	Average (N=6)
Total	$131,741	$10,618,127	$1,277,525	$862,721	$737,613	$731,218	$14,358,945	$2,393,158
Percentage	1%	74%	9%	6%	5%	5%		

The CAMPFIRE districts that benefit from hunting rely heavily on trophy fees (74%) as their primary source of income.

4. INCOME TO WARDS, VILLAGES AND HOUSEHOLDS: 2010 – 2015

Overall Income to CAMPFIRE Wards: 2010 - 2015						
	No Concessions	Area (ha)	Number Wards	Number Villages	Number Households	Gross Income
Total	**26**	**2,288,284**	**62**	**603**	**56,297**	**$5,946,370**
Income (n=6 YEARS)	**$228,706.55**	**$3**	**$95,909.20**	**$9,861.31**	**$105.6**	

Income generated at the District level is then disbursed to Wards. Since 2010, this is estimated to be approximately US$5.9 million. The available data shows that 62 wards representing 603 villages (or 56,297 households) received the equivalent of US$95,909/ward (or US$105/household).

These levels of income are not sufficient to make a significant impact at the individual level, and require that the Districts and Wards channel these revenues into activities that benefit the overall community. This is achieved through supporting several communal projects such as schools, clinics, water provisions etc.

5. DISTRICT EXPENDITURE AND COMMUNITY BENEFITS: 2010 - 2015

	Administration	Law Enforcement	Compensation	Management	Social Services	Other	Total
Total	**$2,486,268**	**$1,778,100**	**$67,600**	**$682,740**	**$1,084,779**	**$779,030**	**$6,878,517**
Average	**$414,378**	**$296,350**	**$11,267**	**$113,790**	**$180,796**	**$129,838**	**$1,146,420**
Overall costs	**$5,014,708**				**$1,084,77**	**$779,039**	
Percentage	**73%**				**16%**	**11%**	

At the District level, 73% of the revenues from hunting are channelled towards administration, law enforcement, compensation and general management while limited funds are used to support social services (16%).

6. WARD EXPENDITURE AND COMMUNITY BENEFITS

	Administration costs					Community Benefits				
	Meetings & Admin	Wages/salaries	Compensation schemes	Management activities	Project Management Costs	Social services	Food security	Direct cash benefits	Other	Total
Total	**$553,260**	**$815,639**	**$56,432**	**$312,178**	**$345,762**	**$2,468,216**	**$223,659**	**$216,077**	**$139,565**	**$5,302,709**
Overall costs	**$2,083,271**					**$2,907,952**			**$139,565**	
Percentage	**39%**					**55%**				

At the Ward level, where communities are directly involved, the tendency is to channel most the income towards community benefits (55%) rather than administration which is seen to be the responsibility of the local government. This means that the bulk of the income from hunting is used to support social services such as schools, clinics, irrigation schemes etc. where the impact at the community level (village, household) is far greater (Figure 6).

Figure 6: Bhemba Clinic in Ward 2 of the Tsholotsho Communal Area (top) and Masera Secondary School (Beitbridge, bottom) that are supported by funds generated through the CAMPFIRE programme

Lessons learnt

1. Quota utilisation of lion (32%) is low in CAMPFIRE areas, equating to 8 lion/year.

2. Trophy fees from key species (elephant, lion etc.) contributed $1,845,231/year to CAMPFIRE revenues:
    a. Elephant (64%) and buffalo (20%) are major contributors
    b. Lion and leopard contribute 7%

3. Income from the sale of safaris generate approximately $2,802,077/year
    a. Hunters from USA contribute 51% and Europe 31% of this income.

4. Income to Districts from a variety of wildlife related revenue streams is approximately $2,510,783/year:
    a. Trophy fees are responsible for 74% of this income, of which lion play a small role.
    b. Fees from photographic tourism are responsible for 5%.

5. Wards receive $5,830,244 (57%) from district trophy fees. These revenues are used to support a variety of social services that benefit a large proportion of the local community.

The cessation of import of lion (and elephant) trophies into the USA has had a significant impact on these revenue streams and consequently on the benefits reaching communities at the local level. These revenues cannot be replaced through alternative revenue streams.

7 Management and Administration of the Safari Hunting Industry in Zimbabwe

7.1 Performance of the industry

To fully account for earnings in the Hunting Sector, the Reserve Bank of Zimbabwe, in collaboration with all the relevant stakeholders, introduced the Tourism Receipts Accounting System (TRAS2) in January 2015. The TRAS2 is a web-based system which links Safari Operators, Zimbabwe Parks and Wildlife Management Authority, Taxidermists, Shipping Agents, International Marketing Agents and Reserve Bank for the purposes of authorizing hunts, capturing hunting data, monitoring hunting quota utilization and tracking hunted trophies.

On an annual basis, Exchange Control Division of the Reserve Bank of Zimbabwe attends the SCI Conventions to achieve the following objectives: -

1. To assess regional price differentials of same hunts at the SCI Convention and the reasons thereof;
2. To present Form TRAS2 systems updates to the users including international marketing agents;
3. To engage international marketing agents of sport-hunting (standardised international marketing agreements, payment arrangements and follow up on overdue export receipts);
4. To obtain relevant insights on governing of the hunting sector; and
5. To come up with an effective mechanism to fully account for export proceeds from the hunting sector.

7.1.1 Global earnings of the industry

The TRAS2 system was introduced in January 2014, and has since recorded a total of $44.6 million ($18.9 million in 2015 compared to $25.9 million in 2014) as shown in Figure 7. The figures are inclusive of daily rates, trophy fees and other incidental revenue. In line with other regional

countries offering safari hunting, the market is dominated by the USA (59%) and Europe (25%) with the remainder of the market taken by the Americas (Canada, Argentina etc.), Asia, Africa, Oceania and Africa (mostly South Africa). Appendix III illustrates the distribution of total hunting revenue by country of destination (Chitauro, 2016).

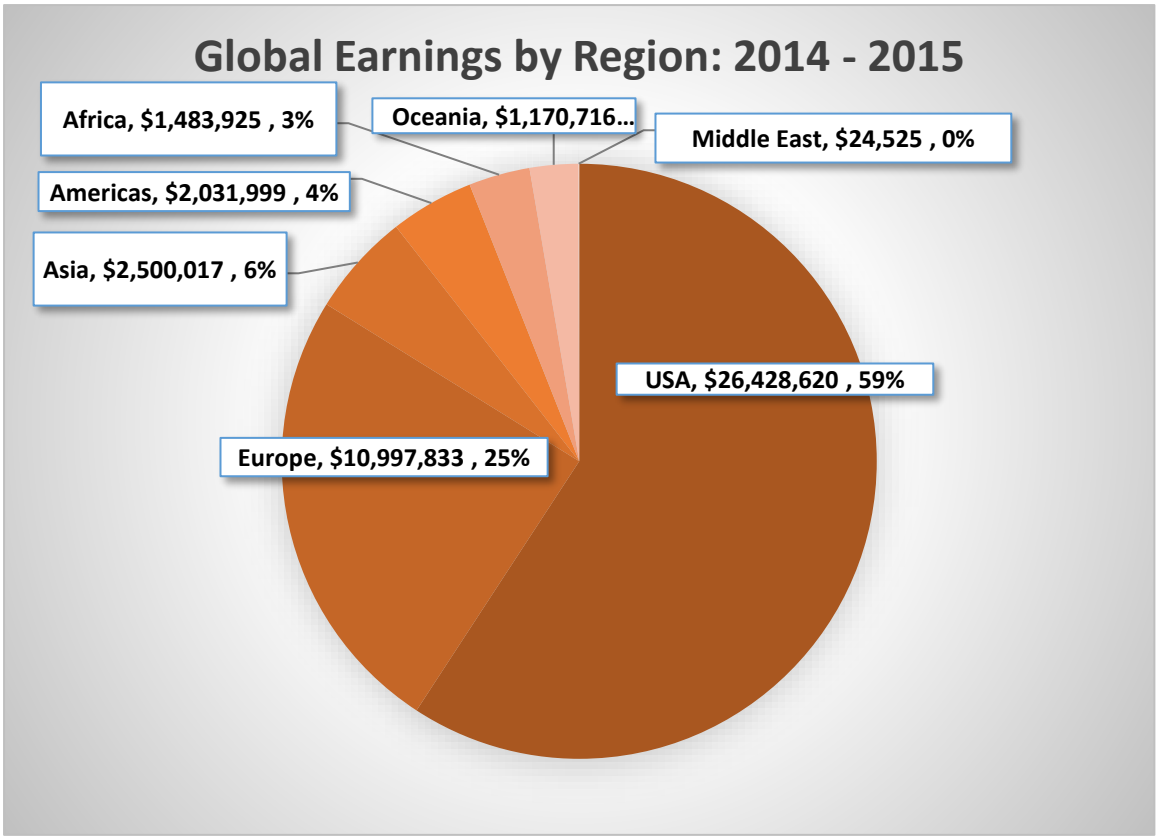


Figure 7: Breakdown of source of hunting income (2014 and 2015) from various regions in the world (adapted from Computerised Exports Payments Exchange Control System, CEPECS - TRAS2)

7.1.2 Quota allocation, Utilisation and Total Trophy Fees Earned

The total income from the sale of trophies in 2014 and 2015 is shown in Table 18. The income in 2015 (US$8.2 million) is less than that in 2014 (US$11.1 million) because of the import restrictions of elephant and lion into the USA.

Table 18 also provides data on the quotas allocated in 2015 and the number of level of utilisation. The complete list of species is provided in Appendix III (Chitauro, 2016). These data show that levels of utilisation for all species varies from 10 – 40% for most mammals and far less for birds etc.

Table 18: Summary of the revenue generated from the 11 most common species utilised for hunting, and the percentage utilisation in 2015 (adapted from Computerised Exports Payments Exchange Control System, CEPECS - TRAS2)

Species	2014	2015	Total	2015 Quota	Utilised	% Utilised
Buffalo	$2,528,559	$1,962,570	$4,491,129	1,635	482	29%
Elephant (Tusks)	$2,042,610	$1,447,090	$3,489,700	246	64	26%
Elephant (Tuskless)	$1,444,040	$229,860	$1,673,900	462	113	24%

Species	2014	2015	Total	2015 Quota	Utilised	% Utilised
Lion	**$630,950**	**$753,000**	**$1,383,950**	**82**	**49**	**59%**
Leopard	$714,100	$668,490	$1,382,590	530	151	28%
Zebra	$594,239	$555,744	$1,149,983	2,480	600	24%
Sable	$456,615	$309,260	$765,875	718	78	11%
Kudu	$341,092	$357,963	$699,055	2,503	289	12%
Waterbuck	$293,903	$256,133	$550,036	988	156	16%
Hippo	$310,321	$217,470	$527,791	303	83	27%
Impala	$277,198	$242,624	$519,822	8,594	1,261	15%
Other Species	$1,465,560	$1,287,845	$2,753,405			
Grand Total	**$11,099,187**	**$8,288,049**	**$19,387,236**			

7.1.3 Total trophy fees generated by land category

The ZPWMA allocated quotes to all owners and occupiers of land in terms of SI 26. Any person utilising wildlife on these properties is required to submit a TRAS2 form to process any export of trophies and other animal products. Approximately 262 companies/properties submitted returns in 2014 and 2015. From these data, it is possible to determine the income generated from trophy fees and daily rates per company. To protect the privacy of the individual companies, these data have been arranged to show the level of income generated by different land categories from trophy fees (Figure 8),

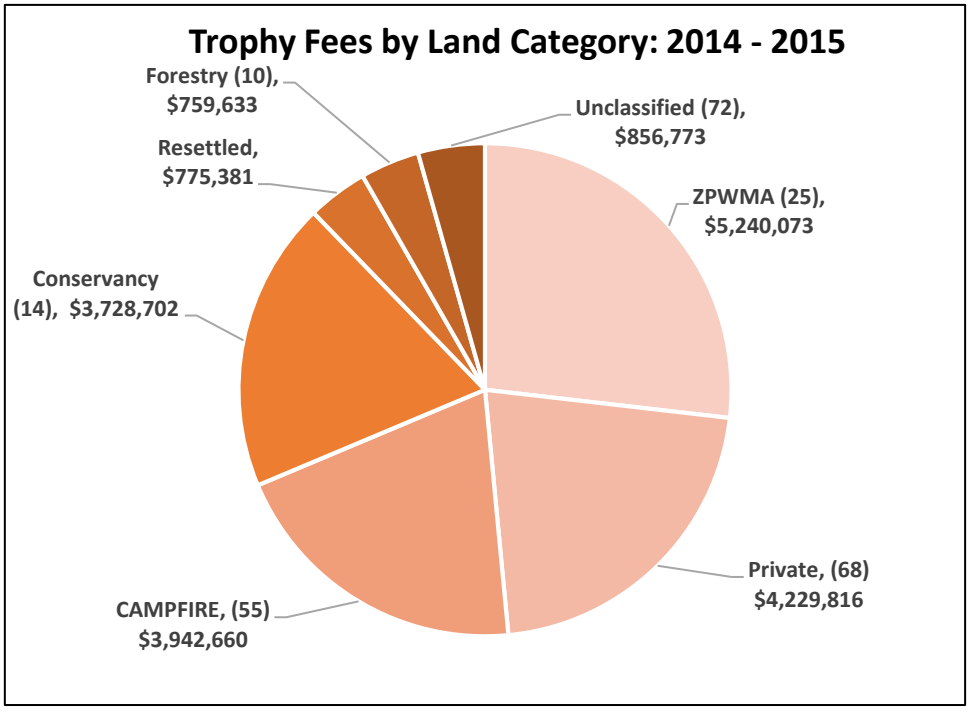


Figure 8: Hunting Trophy Fee Earnings by Land Categories (2014 - 2015). Note that from the description provided in the database, it was not possible to allocate some individual properties to a specific category. These have been recorded as unclassified (adapted from Computerised Exports Payments Exchange Control System, CEPECS - TRAS2).

Overall, approximately US$10.7 million was generated in 2014 and US$8.7 million in 2015 from the 62 species on offer. The ZPWMA represented by 25 properties that it either offers on tender to the private sector or operates as hunting areas itself generated the largest income from trophy fee sales

(US$5.2 million). The 14 Conservancies accounted for US$3.7 million while the 68 private properties are recorded as generating US$4.2 million. The CAMPFIRE areas (N=55) generated US$3.9 million.

Together with the income from daily rates (US$13,190,372 in 2014 and US$9,684,396 in 2015 (gross US$22,874,768), extracted from Computerised Exports Payments Exchange Control System, CEPECS - TRAS2), these funds are used to pay for several operational expenses including employment, law enforcement, administration and management.

7.5 Quota Setting Process

The process for quota setting follows procedures agreed to by all stakeholders (ZPWMA, 2014).

- Step 1: Allocate existing quota to each block/hunting area

The starting point for implementation of age-restrictions and adaptive quota management was to allocate existing lion quotas. This quota would then be managed adaptively in line with the age of lions hunted. In future, it is envisaged that fixed quotas for lions would fall away as quotas would be based on the age of lions hunted in the previous year.

- Step 2: Hunters complete and submit return forms and photos after each lion hunt

The data would be compiled into a database by a ZPWMA representative (currently Ms Roseline Mandisodza-Chikerema, Senior Ecologist, ZPWMA). Export permits for trophies will not be issued unless completed hunt return forms (all the required photographs and the first upper premolar) is provided to ZPWMA for aging and monitoring purposes. Furthermore, because the following year's quotas will be based on the ages of the lions hunted in the current year, operators must submit their lion hunt returns and photographs soon after the hunt. At the end of the season, all the teeth would be taken to a dentist to have x-rays conducted to allow for measurement of the size of the pulp cavity.

- Step 3: ZPWMA and Panel of experts assign an age value to each lion trophy

Lion trophies will be aged by ZPWMA, with input from lion scientists and representatives from the hunting industry at a trophy aging session. This is conducted at the end of each hunting season.

- Step 4: Calculate the next years' quotas based on a points system for the ages of lions hunted

A quota setting meeting is held where lion quotas are established for each area based on the age of lions hunted in those areas the year before. This programme commenced in 2014, and so the ages of lions hunted in 2014 will affect the lion quotas in 2015. Table 19 summaries the trend in lion quota allocations since 2002 while Table 12 provides a detailed overview of the lion trophies taken in 2015.

Table 19: Summary of lion quota allocations and offtake since 2002 (Data provided by ZPWMA)

Year	Lion Allocated Quotas	Female Offtake	Male Offtake	% Utilisation
2002	126	22	49	56%
2003	138	5	11	6%
2004	155	4	9	8%
2005	108	3	20	21%
2006	124	1	17	14%

Year	Lion Allocated Quotas	Female Offtake	Male Offtake	% Utilisation
2007	117	0	9	7%
2008	90	0	17	18%
2009	111	0	9	8%
2010	98	12	30	43%
2011	121	20	38	48%
2012	101	18	27	44%
2013	101	1	34	34%
2014	101	0	37	26%
2015	82	0	49	60%
2016	81	0	33	41%

Table 20: Analysis of lion trophies taken on various properties in 2015

Hunting Area Name	Sex	Killed Wounded	Grid Ref	Date Shot	Trophy Size
Sapi Area	M	KILLED	35l0783	03/06/2015	
Matetsi Safari Area - Unit 3	M	KILLED	307551	05/04/2015	61.31
Antoinette & Antoinette Extension	M	KILLED	187159	02/07/2015	26 7/16"
Tsholotsho District Area 2-South	M	KILLED	S1926181 E02652250	27/10/2015	25 6/8 inches
Hurungwe Safari Area - Rifa	M	KILLED	35K178113	10/05/2015	24.5
Deka Tail	M	KILLED	651 480	10/04/2015	60.38 cm
Hurungwe Safari Area - Nyakasanga	M	KILLED	s15.56.457 e029.15.584	07/06/2015	26
Msaise	M	KILLED	VN204700	14/05/2015	23
Mapari	M	KILLED	VN798124	09/06/2015	23SCI
Ngamo/Sikumi	M	KILLED	456923	09/05/2015	
Deka Safari Area	M	KILLED	278493	26/06/2015	61.5
Mbire (Guruve) South Area 2	M	KILLED	919056	09/08/2015	25.3
Bubye Valley Conservancy	M	KILLED	0194090 7625410	21/02/2015	25"
Bubye Valley Conservancy	M	KILLED	9337	29/03/2015	26"
Bubye Valley Conservancy	M	KILLED	31129	07/04/2015	25
Woodlands Farm	M	KILLED	644972	22/05/2015	25"
Bubye Valley Conservancy	M	KILLED	35K 453 159	10/05/2015	23.625
Bubye Valley Conservancy	M	KILLED	36K 908 852	25/04/2015	25"
Chewore Safari Area - North	M	KILLED	TT015643	05/06/2015	25
Bubye Valley Conservancy	M	KILLED	36K 227 593	12/05/2015	26"
Matetsi Safari Area - Unit 4	M	KILLED	4.05E+12	09/06/2015	24
Matetsi Safari Area - Unit 5	M	KILLED	865505	09/06/2015	25.25
Gunundwe	M	KILLED	822094	11/06/2015	
Bubye Valley Conservancy	M	KILLED	36K 004 971	24/06/2015	25.5625

Hunting Area Name	Sex	Killed Wounded	Grid Ref	Date Shot	Trophy Size
Bubye Valley Conservancy	M	KILLED	942 151	25/06/2015	12
Kusile District Area 1	M	KILLED	S185604.9 E0271547.4	02/07/2015	
Mokore Ranch	M	KILLED	VN110030	15/07/2015	15"
Bubye Valley Conservancy	M	KILLED	36K 229 607	29/07/2015	26"
Bubye Valley Conservancy	M	KILLED	191 623	25/07/2015	27.0625
Nyaminyami District Area 2 (Omay)	M	KILLED	657019PM	18/07/2015	24 1/8"
Matetsi Safari Area - Unit 5	M	KILLED	862 451	15/07/2015	25 8/16 inches
Matendere	M	KILLED	781021	26/07/2015	23.875
Matetsi Safari Area - Unit 1	M	KILLED	740726	13/08/2015	25
Bubye Valley Conservancy	M	KILLED	213 602	15/08/2015	15
Sango	M	KILLED	62691	23/08/2015	23.125
Sango	M	KILLED	320548	27/08/2015	
Dande Safari Area	M	KILLED	945352	13/10/2015	24in
Hurungwe Safari Area - Rifa	M	KILLED	35k062038	30/09/2015	25.25
Bedford	M	KILLED	190429	06/09/2015	
Ngamo/Sikumi	M	KILLED	456919	07/09/2015	
Bubye Valley Conservancy	M	KILLED	206 622	23/09/2015	26"
Hammond	M	KILLED	35k880103	17/10/2015	23.375
Kazuma/Panda Masuei	M	KILLED	s18.44144 & E025.64434	09/10/2015	
Nyaminyami District Area 1 (Omay)	M	KILLED	PM453354	13/11/2015	26"
Chewore Safari Area - South	M	KILLED	ST967260	25/10/2015	
Riverside Ranch	M	KILLED	35k227702	31/10/2015	24.78
Matetsi Safari Area - Unit 6	M	KILLED	18.06.55.68.25.22	03/12/2015	
Chewore Safari Area - South	M	KILLED	QN975310	06/12/2015	
Sapi Area	M	KILLED	Mtawatawa	11/06/2015	24"

7.6 POINTS SYSTEM FOR ADAPTIVELY MANAGING LION QUOTAS IN ZIMBABWE

The points system used to adaptively manage lion quotas has been developed following similar systems that have been implemented in Tanzania and northern Mozambique. The systems that are in place in Tanzania and Niassa differ slightly, but both lion quotas are set per the age of the lions harvested during the previous hunting season (Begg and Begg, 2008; Tanzania Wildlife Division 2013). The Tanzanian system is more punitive with significant quota reductions, trophy confiscation and fines for non-compliance, whereas the Niassa system is more accommodating but nevertheless can result in quota reductions if five-year-old lions are hunted. The latter was aimed at a means of accommodating the difficulty of telling five-year-old lions apart from four year olds.

After reviewing the Tanzanian and Mozambican age restriction systems and debating possible models for application in Zimbabwe, an adaptive quota management system for lion hunting based on the ages of lions hunted was agreed on in July 2013 in Harare, Zimbabwe, during a meeting hosted

by the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) and an independent non-governmental conservation organisation. The approach adopted by Zimbabwe recognises four as opposed to three key age categories (Table 21).

Table 21. Proposed points system for lion age restrictions and quota setting in Zimbabwe

	≥6 years	**No trophy**	**5 years' old**	**4 years' old**	**<4 years**	**Failure to submit hunt return/incomplete hunt returns**
For quotas of 3/more	4	3	3	2	-3	0
For quotas of 2	4	3	3	2	0	0
For quotas of 1	6	3	3	2	0	0
Quota setting process	These points are added up and divided by 3 to yield the quota for next year					

During 2013, operators were requested to submit hunt returns and photos as a trial run to get the system up and running. In 2014 operators were requested to do the same but were informed that the age of the lions hunted in 2014 would determine their lion quotas in 2015. The 2015 lion hunt results would thus also determine the 2016 quota. The key distinction of the Zimbabwean system is that the quota will not be affected if they hunt animals that are five years old. This position was adopted after considering various the population models that suggested that the hunting animals of five years of age or older is predicted to be comparatively safe from a population perspective (Whitman et al. 2007). Moreover, after reviewing aging techniques, the consensus was that professional hunters could be distinguish between lions that are five or above. The system therefore rewards operators with increased quotas if they hunt animals of six years and older, but it does not penalize them if they hunt animals of five years. Neither are they penalised if they do not shoot a lion that they have on quota, however, the quotas will be reduced if they hunt animals younger than five years or if they failed to complete hunt returns.

Lions are aged by triangulating multiple different aging characteristics, including:

- The degree of facial scarring;
- The teeth colour and degree of wear;
- The mane development (particularly regarding the shape around the ear and the mohawk);
- Through post mortem analysis of the width of the pulp cavity of the second premolar (which becomes narrower with age).

7.6.1 Results of the Adaptive Lion Quota Management System: 2013 to 2016

In 2013, only 28% of the lions hunted were 5 years or older, in 2014 that figure had risen to 49% and in 2015 to 77.3% (Figure 5). The proportion of lions hunted that were less than 5 years of age dropped overall between 2013 and 2015 (Figure 9).

In 2015 the Zimbabwe national lion hunting quota was set at 82 lions. Of this 82, only 49 were hunted in 2015, and based on the resultant score from aging the trophies, and the fact that operators chose not to hunt lions of inadequate age (see Figures 9, 10 and 11), the recommended quota for 2016 was set at 81. In 2015 there was a marked increase in the age of lions hunted. Notably, only one lion of <4 years of age was hunted and the large majority of lions were 5 years or older (Figure 9).

As was agreed upon at the 2013 lion management meeting in Harare, the CAMPFIRE areas in which lions occur are currently exempted from the age restrictions. This approach was adopted as a means of ensuring that impoverished communities obtain the opportunity to benefit from the presence of lions, recognising the potential negative impacts the species has on the livelihoods of livestock farmers.

Using these figures and estimating the average value of a lion safari at approximately US$ 80,000 then a 50% offtake would generate approximately US$ 2,800,000 annually. If management costs are approximately $150 km^2, then the lion safaris alone can support 18,600 km^2 of wildlife habitat in Zimbabwe.

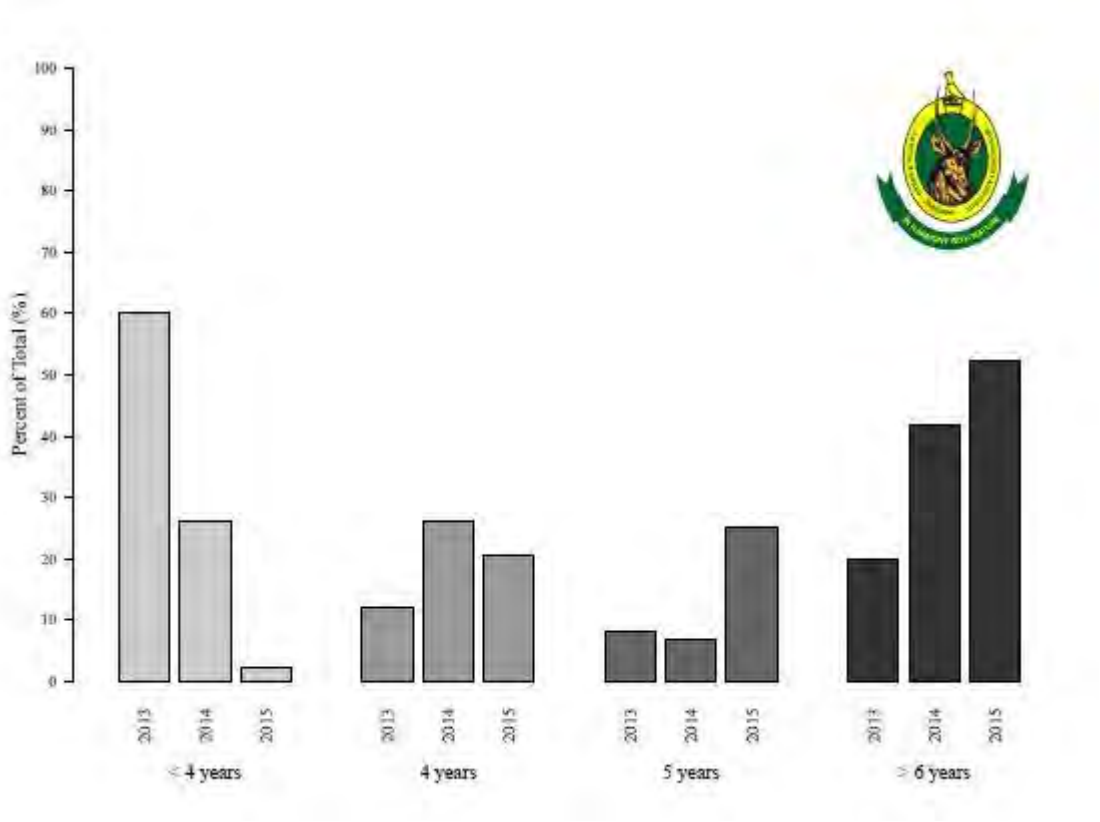


Figure 9: The percentage of lions hunted in each age class in 2013, 2014 and 2015 in Zimbabwe.

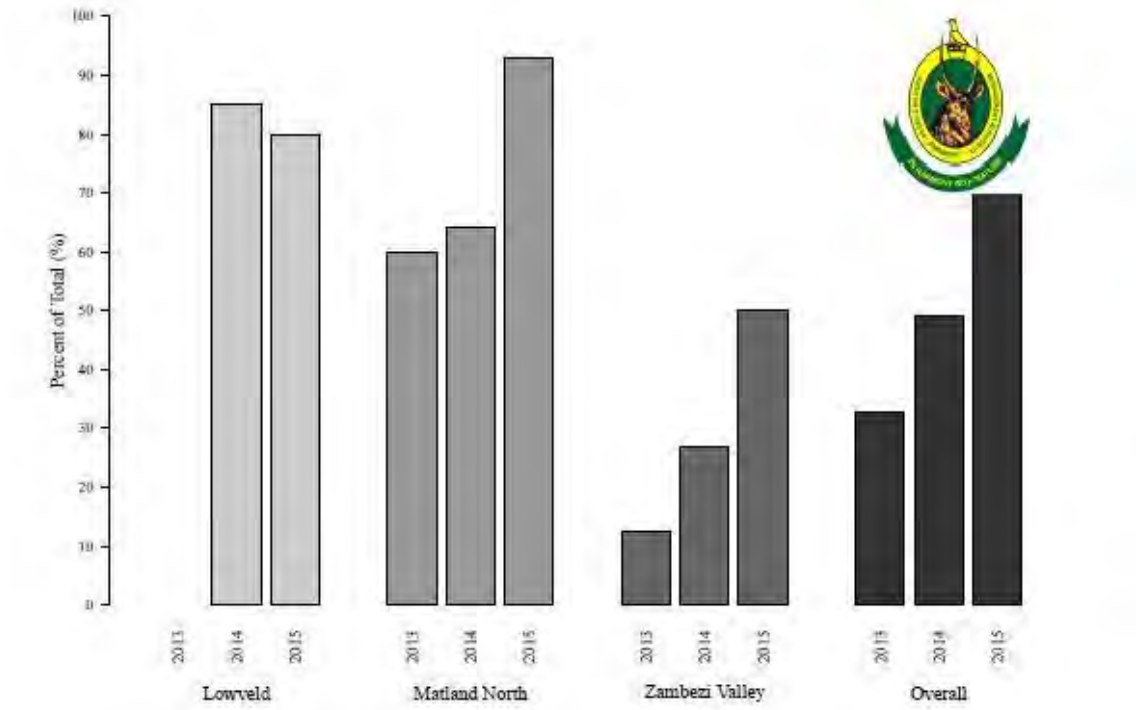


Figure 10: The proportion of lions hunted that were 5 years or older in the three main lion-hunting areas of Zimbabwe.

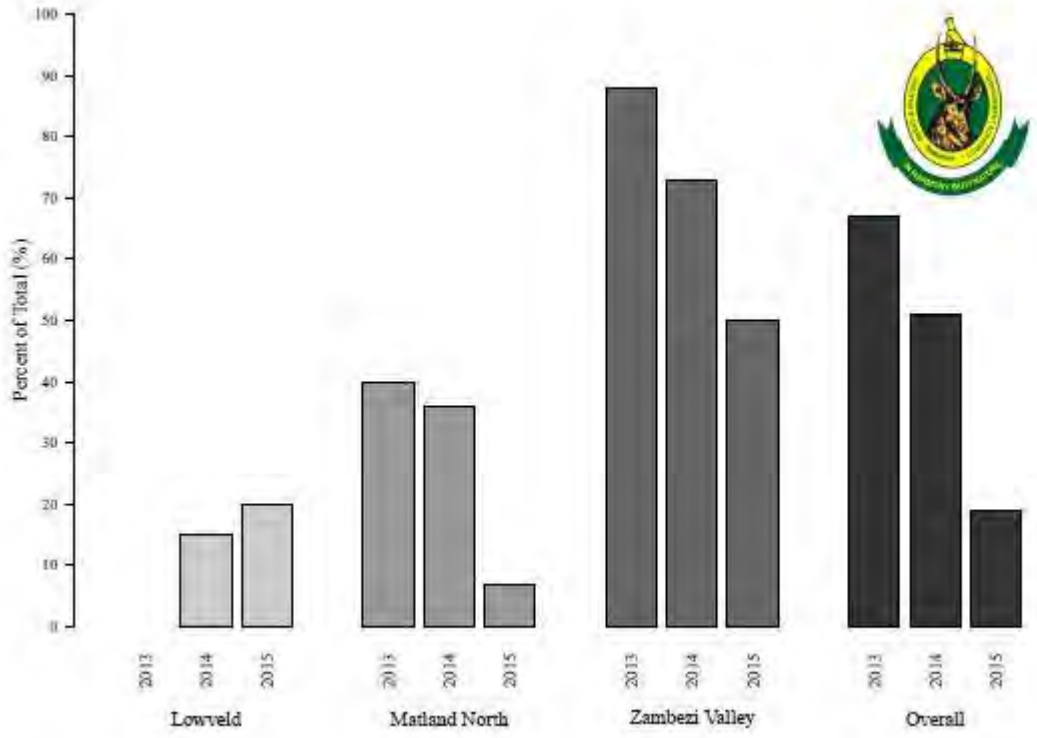


Figure 11: The proportion of lions hunted that were less than 5 years of age in the three main lion-hunting areas of Zimbabwe.

7.6.2 Case study: Safari Hunting surrounding Hwange National Park

The Hwange National Park is surrounded by hunting areas that fall under the Authority, Forestry Land, Private Land and Communal Land. The ZPWMA is responsible for setting and administrating quotas in conjunction with stakeholders for the safari areas, forestry areas, communal lands and private properties.

The Matetsi Safari Area to the north of Hwange National Park was established in the 1970s when several unsuccessful private sector mixed faming properties were expropriated, compensated and the resultant block of land turned over to safari hunting – a largely untried venture at that time on a large scale. An intensive monitoring system was set in place to gauge the effectiveness of the scheme and this continues to this day (Crossmary et al. 2013, Figure 12). The seven concessions (six given over to safari hunting) are leased on five year terms and concessionaires pay a 5 year "right to lease" fee, an annual rental, a fixed quota fee (payable if animals are shot or not) and a supplementary quota fee which allows additional animals to be bought as per need.

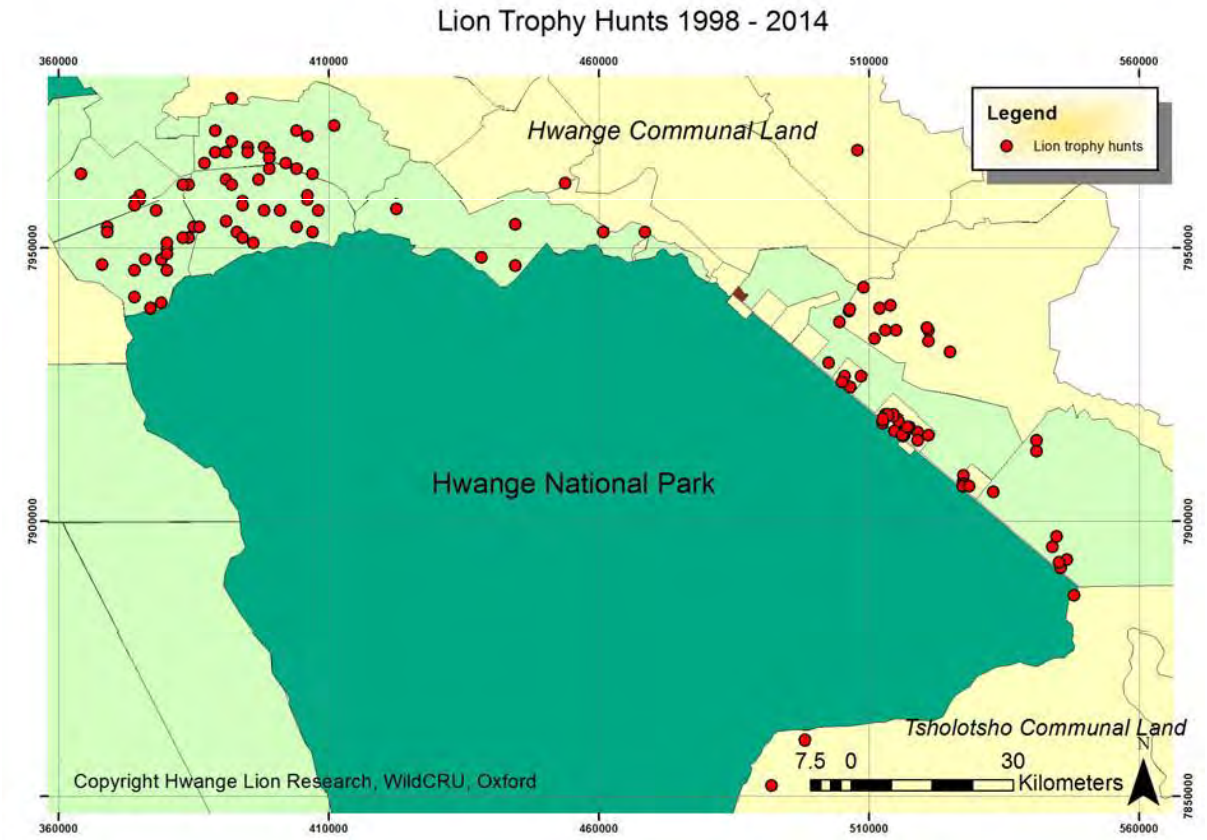


Figure 12: Record of where lion have been hunted on the land surrounding the Hwange National Park since 1998 (data extracted from the Hwange National Park Management Plan).

8 THREATS AND MITIGATION

The consensus of the scientific and animal welfare community is that the populations of lion in Africa has declined by 43% in the last two decades, with the greatest declines having occurred in west Africa. The exception to this are the populations of southern Africa, notably South Africa, Namibia, Botswana and Zimbabwe that are home to 24- 33% of the overall population has increased (Funston et. al. 2016).

Nonetheless, as is the case in other range states, the greatest threats to lion in Zimbabwe are from habitat loss, snaring and retaliatory killings where livestock are involved.

8.1 HUMAN-LION CONFLICT

The main source of illegal killing of lions is a result of Human-Lion conflict. The human population of Zimbabwe has increased since 1960 (estimated at 13 million). There is considerable pressure to convert land to agro-pastoral production, and the pressure is expected to increase. It is not unexpected therefore that the incidence of Human-Lion conflict will increase. ZPWMA records show that 200 attacks occurred on humans and 150+ on livestock (cattle, goats, sheep, dogs etc.) were killed in 2015 (see Table 13 above).

Retaliation for these livestock losses is usually done poisoning or hunting. The exact number of lions killed in this way is difficult to assess, but may number over 50/year. These indiscriminate killings pose the most significant threat to the species, and is of major concern to the management authorities. For example, the Area Manager for Hwange National Parks reported that 6 lions were killed on the Hwange National Parks boundary in 2016, and the Authority responded to several problem animal attacks on livestock.

In accordance with the Parks and Wildlife Act of 2001 when a lion attacks a human or kills livestock, it shall be eliminated. However, despite the numerous incidents reported across the country, less than 10 lions are killed through official "problem animal control" (PAC).

8.2 HABITAT LOSS

Zimbabwe supports substantial populations of lions outside of its protected areas and extensive conservancies. Moreover, despite its expanding human population, many of the protected areas are still intact however, the threat to lions from habitat loss exists in the Sebungwe and the South East Low Veld where the fragmented nature of the protected areas is compounded by an increasing human and livestock populations surrounding these areas. In these areas, habitat loss, reduction in prey populations and killing of problem lions are the major threats to long term lion survival.

Due to the large size of the protected area system in the Zambezi Valley and North West Matabeleland, threats are limited to lion range which extends into adjacent settled areas. The huge natural prey base in these protected areas, reduced killing of problem animals associated with lions preying on livestock in adjacent settled areas.

The potential and real loss of habitat and the fragmentation of range and conflicts with people in the absence of effective incentive mechanisms to maintain such habitat is probably the second greatest threat to lions after retaliatory killings. Increasing livestock numbers is reducing the available habitat in buffer areas adjacent to the protected areas, and increasing the incidents of human-lion conflicts. Lions are being more and more regarded as a liability and economic cost to rural communities. Reversing this trend is difficult under normal circumstances, and this has been made that much more difficult with the cessation of lion hunting. Integrating income from lions into rural economies, and demonstrating that lions contribute to the welfare and development of people is regarded as one strategy to mitigate against this. The involvement and empowerment of rural people in natural resource management through the CAMPFIRE programme that strives to provide economic and financial incentives through sustainable use, is one of the main driving forces behind changes in attitudes towards wildlife in communities where lion-livestock conflicts occur.

8.3 ILLEGAL TRADE IN LION PRODUCTS

Very few lions are poached in Zimbabwe (not to be confused with retaliatory killings). Records, mainly from anti-poaching reports, are for impoundment of body derivatives such as skins, teeth/claws, body

fats and bones. These may be sought after for local traditional medicinal use. Poaching mainly occurs along the boundaries of the protected areas where lions are incidentally snared as non-target prey.

The illegal trade in lions and their products (i.e. bone trade) is very insignificant. There are no records of people found in possession of illegally acquired lion specimens in Zimbabwe, and anyone found in possession of illegally acquired lion specimens is required to pay a fine US$5000 or faces a mandatory jail sentence. On conviction for lion poaching, courts may ask the accused to pay a compensation fee of US$20 000.

8.4 Bushmeat Poaching

Poaching for bushmeat is an important livelihood component of rural communities in Zimbabwe and a vast literature exists on this subject (see Lindsey et. al. 2015a and 2015b). Poverty stands as the major driver of illegal hunting, and the livelihoods of illegal hunters have been augmented considerably through revenue generated from bushmeat sales. Illegal hunters use bushmeat both for supplementing household protein and for economic gain.

Poaching for bushmeat does not seem to have impacted directly the overall lion's status in Zimbabwe, but more research is needed to fully understand its impact on lion. However, lions are often inadvertently caught in snares set for animals targeted by bushmeat poachers. Where possible, lions caught in snares are captured and treated (Figure 13).

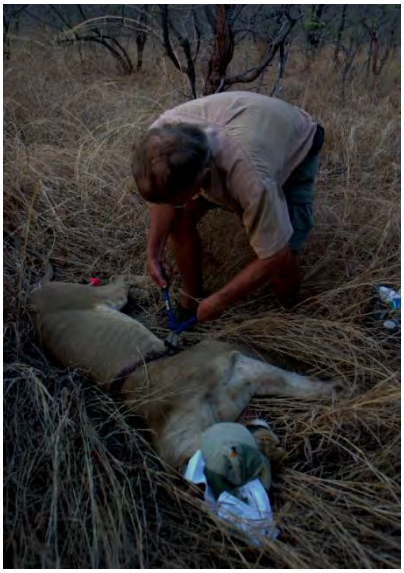


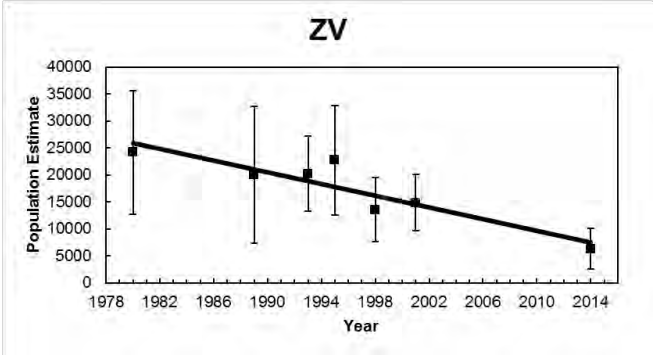
Figure 13: Young lioness being treated by the Victoria Falls Conservation Trust after a snare was removed from around the chest (Source: S. Edwards)

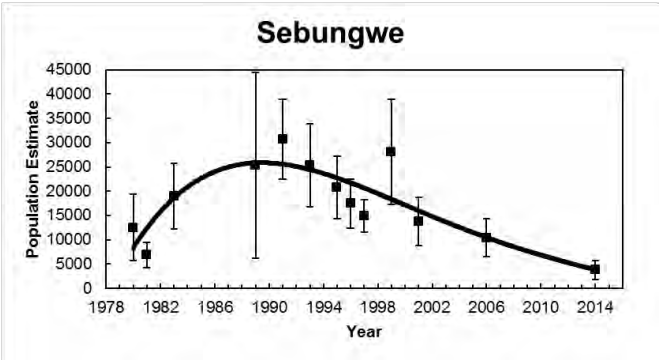
8.5 PREY ABUNDANCE

The extent to which bushmeat poaching outside of the Parks Estate is depleting lion's prey is not known. Prey abundance is still high in all protected areas where lions occur, and as abundance of prey species is highly correlated with lion density (Hayward et al 2007), data on the main prey species for lion, extracted from the 2014 aerial surveys of elephants and other large herbivores (Dunham et. al., 2015, 2015a, b, c, d) are shown in below (ZV = Zambezi Valley, NW Mat = North West Matabeleland).

The overall long term trends show that most population status of most prey species has declined in recent years. There are many possible explanations for these declines, but probably the most critical factor has been droughts, especially that experienced in 2005.

Buffalo


ZV
Population Estimate
40000
35000
30000
25000
20000
15000
10000
5000
0
1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
Year


Sebungwe
Population Estimate
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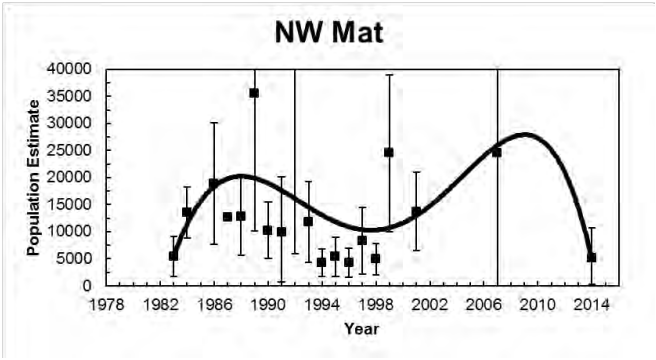
30000
25000
20000
15000
10000
5000
0
1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
Year


NW Mat
Population Estimate
40000
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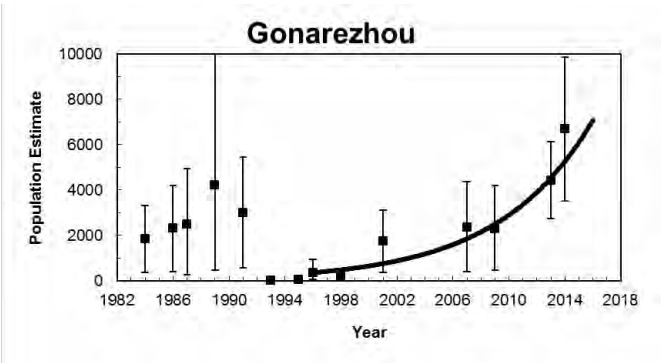
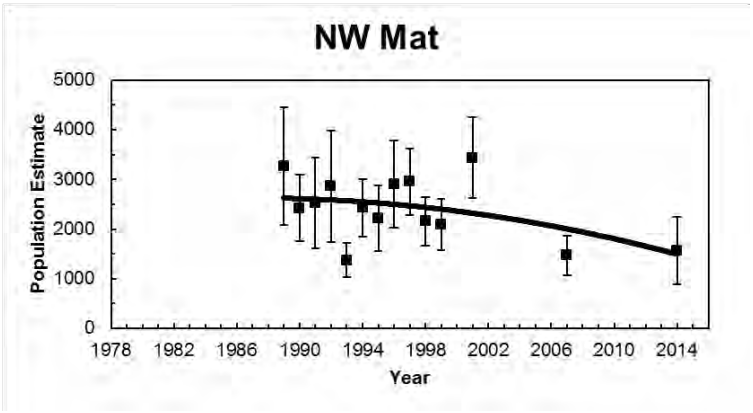
1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
Year


Gonarezhou
Population Estimate
10000
8000
6000
4000
2000
0
1982 1986 1990 1994 1998 2002 2006 2010 2014 2018
Year

Giraffe


NW Mat
Population Estimate
5000
4000
3000
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1978
1982
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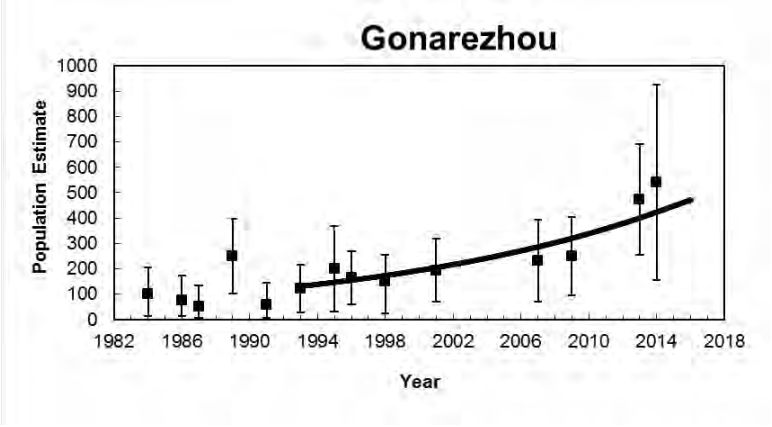
2002
2006
2010
2014
Year


Gonarezhou
Population Estimate
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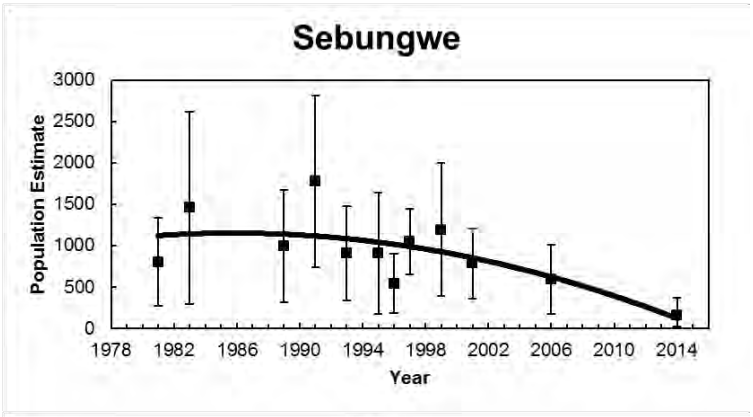
2018
Year

Sable


Sebungwe
Population Estimate
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2000
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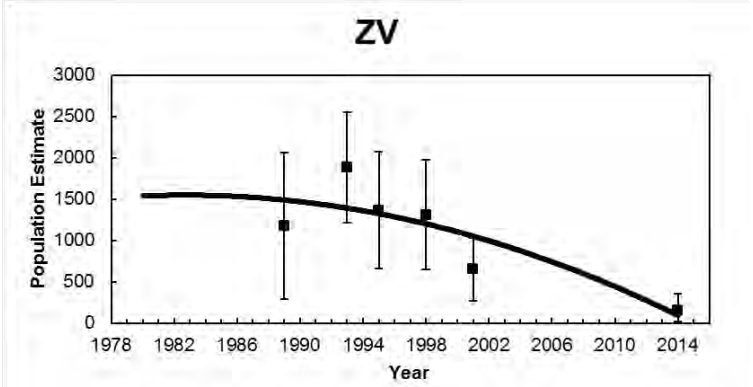
1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
Year


ZV
Population Estimate
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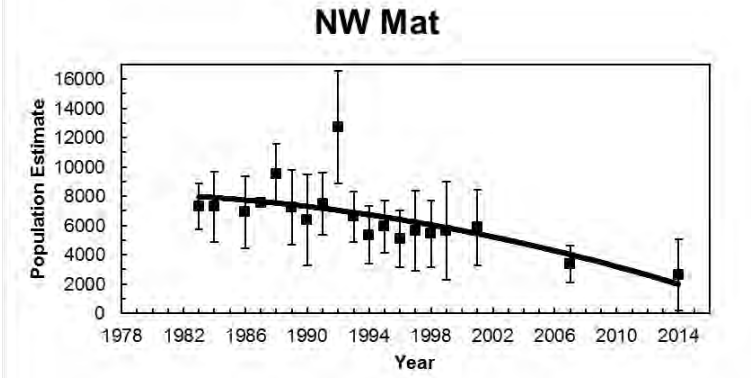
0
1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
Year


NW Mat
Population Estimate
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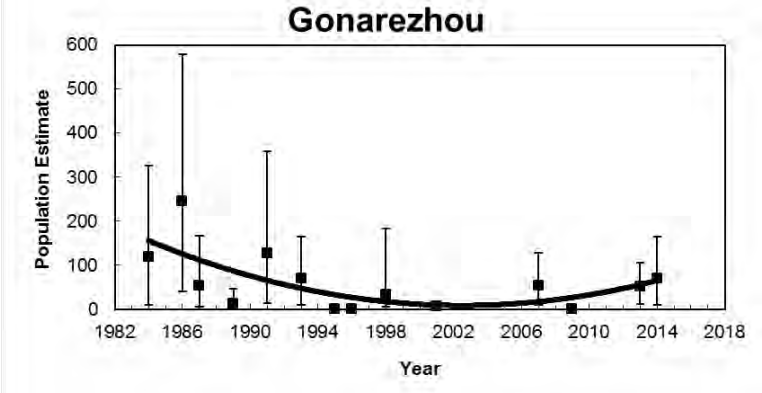
Year


Gonarezhou
Population Estimate
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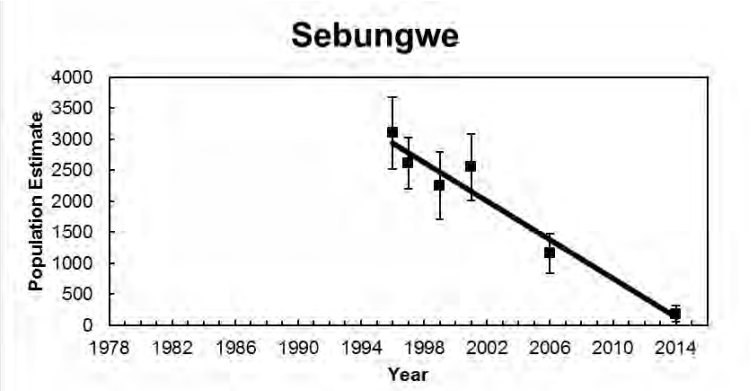
1982 1986 1990 1994 1998 2002 2006 2010 2014 2018
Year

Kudu


Sebungwe
Population Estimate
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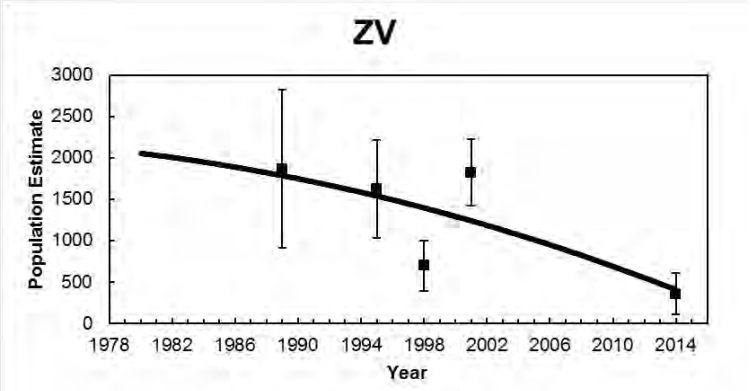
Year


ZV
Population Estimate
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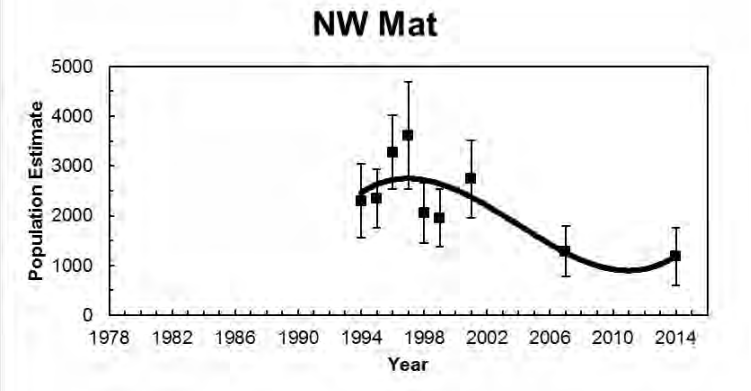
Year


NW Mat
Population Estimate
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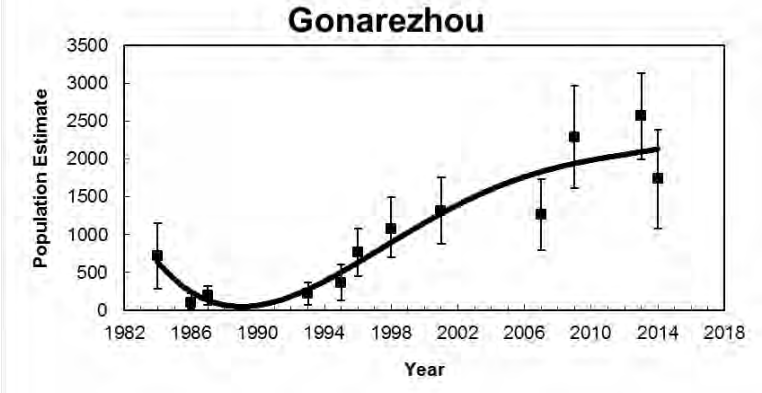
1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
Year


Gonarezhou
Population Estimate
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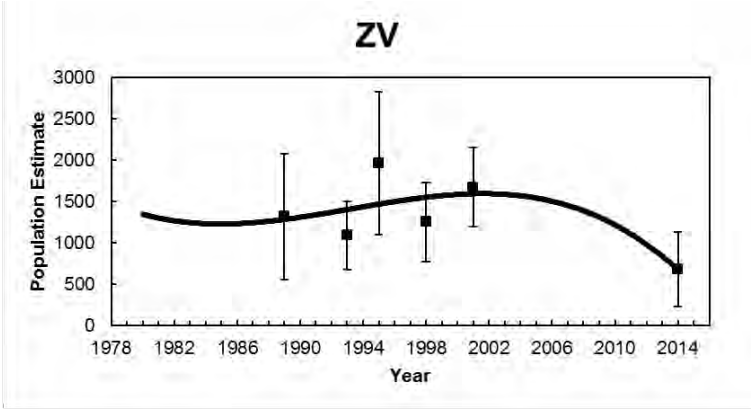
1982 1986 1990 1994 1998 2002 2006 2010 2014 2018
Year

Zebra


ZV
Population Estimate
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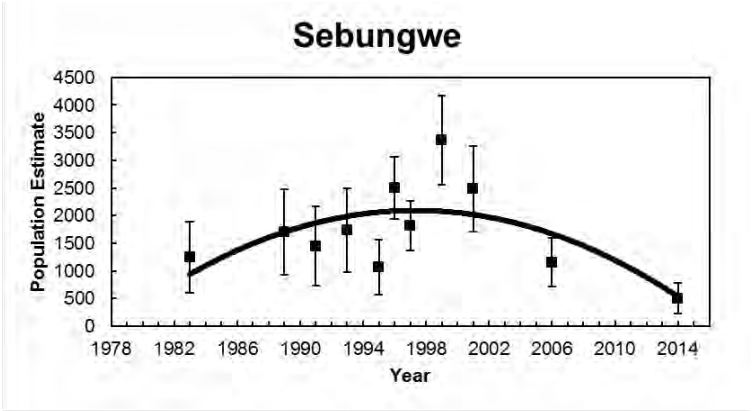
Year


Sebungwe
Population Estimate
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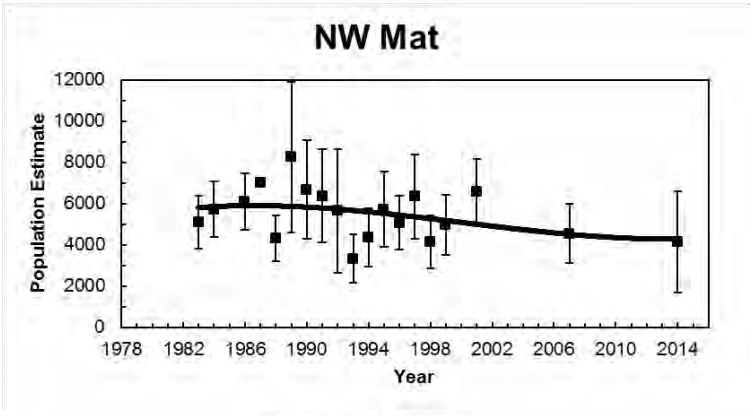
1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
Year


NW Mat
Population Estimate
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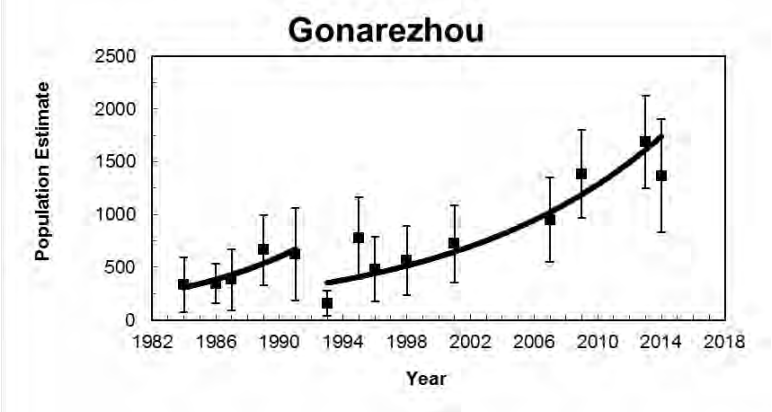
1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
Year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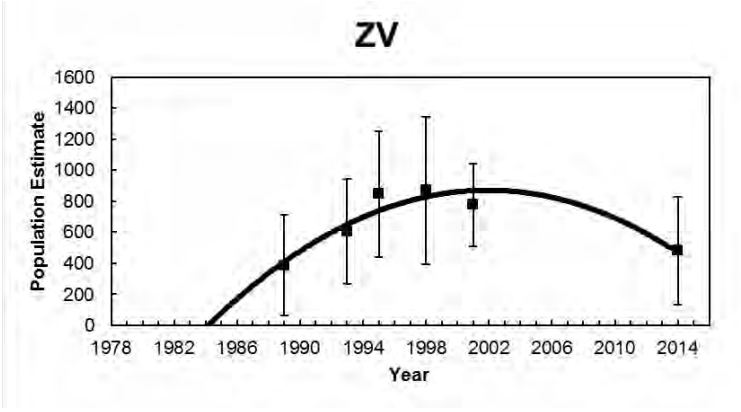
Year

Waterbuck


ZV
Population Estimate
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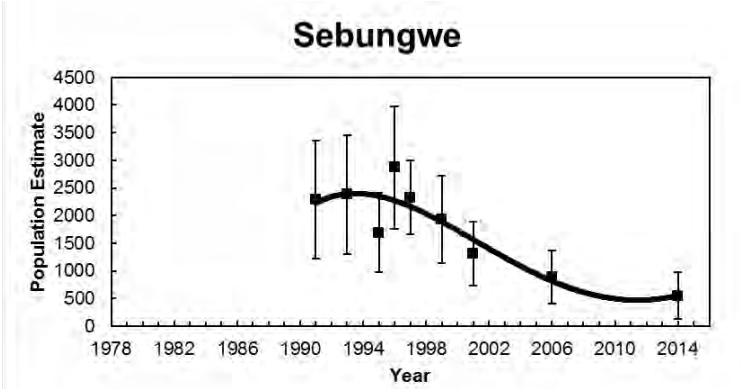
Year


Sebungwe
Population Estimate
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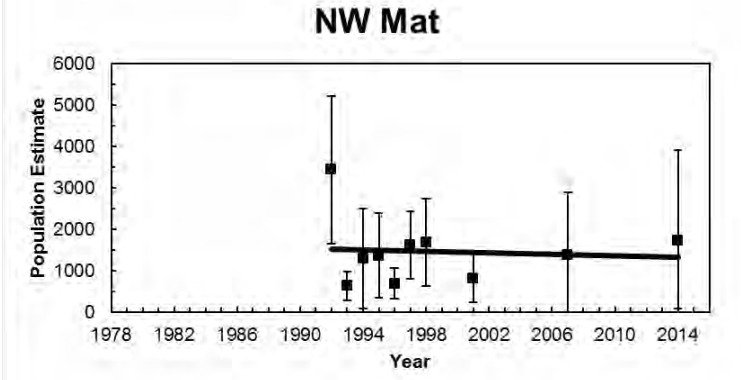
1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
Year


NW Mat
Population Estimate
6000
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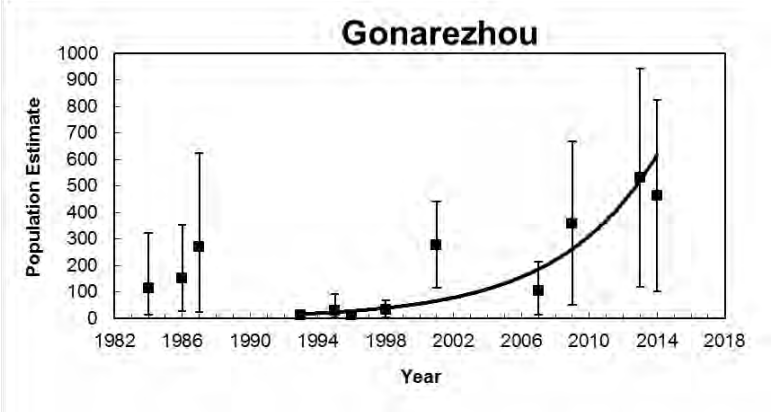
1978 1982 1986 1990 1994 1998 2002 2006 2010 2014
Year


Gonarezhou
Population Estimate
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1982 1986 1990 1994 1998 2002 2006 2010 2014 2018
Year

9 ASSESSMENT OF THE ENHANCEMENT AND NON-DETRIMENT FINDINGS

The assessment of the enhancement and non-detrimental findings for lion in Zimbabwe is presented here using the "IUCN SSC GUIDING PRINCIPLES ON TROPHY HUNTING AS A TOOL FOR CREATING CONSERVATION INCENTIVES. VER. 1.0. IUCN SSC (2012)" as a guide. Zimbabwe recognises the importance of these principles to guide and manage trophy hunting as a legal, regulated conservation activity which provides a critical tool to secure a sound social, economic and ecological conservation scenario.

Biological Sustainability: Trophy hunting can serve as a conservation tool when it:

	Principle	**Remarks**
1	***Does not contribute to long-term population declines of the hunted species or of other species sharing its habitat, noting that a sustainably harvested population may be smaller than an unharvested one***	Considering the latest available estimate of lion population size in Zimbabwe (1,800 – 2,000), trophy hunting harvests a yearly mean of 2.7% of adult male lions. This figure has decreased since the establishment of age restriction rules on lion hunting. This low offtake is sustainable and generates significant financial and other benefits to ZPWMA, Communities and Private Sector.
2	***Does not substantially alter processes of natural selection and ecosystem function; that is, it maintains "wild populations of indigenous species with adaptive gene pools." This generally requires that hunting offtake produces only minor alterations to naturally occurring demographic structure. It also requires avoidance of breeding or culling to deliberately enhance population-genetic characteristics of species subject to hunting that are inconsistent with natural selection***	Safari hunting in does not substantially alter natural selection or ecosystem processes. The limited quota, as further limited by age restrictions, ensures that hunting offtakes do not negatively affect natural processes. This age-based policy was adopted in part to mitigate any social or population impacts from limited safari hunting. (Whitman et al. 2004).
3	***Does not inadvertently facilitate poaching or illegal trade of wildlife***	Safari hunting in Zimbabwe does not facilitate poaching or illegal trade. Poaching and illegal trade in lion products is currently very low suggesting that the existence of licensed, regulated hunting is helping control poaching and not facilitating it. Hunting operators are in the frontlines against poaching, and are obligated through their concession lease agreements to assistance with anti-poaching. Operators spend significant resources on this, and work in close cooperation with the ZPWMA to combat all forms of illegal wildlife trade. Even where anti-poaching is not a legal prerequisite, operators fund their own anti-poaching teams and support government rangers and community scouts e.g. in Sengwa and Dande Safari Area

	Principle	Remarks
4	***Does not artificially and/or substantially manipulate ecosystems or their component elements in ways that are incompatible with the objective of supporting the full range of native biodiversity***	Hunting in Zimbabwe has created financial incentives for the development and retention of wildlife across Safari Areas, Forestry Areas, Communal CAMPFIRE Areas and private Conservancies thereby supporting biodiversity over 145,000km^2 where hunting is a primary land use. Hunting areas on private and communal land outside of the protected areas also serve as buffer zones for many national parks and safari areas which would be converted to other land uses if these were abandoned.

Net Conservation Benefit: Trophy hunting can serve as a conservation tool when it

	Principle	Remarks
1	***Is linked to identifiable and specific parcels of land where habitat for wildlife is a priority (albeit not necessarily the sole priority or only legitimate use); and on which the "costs of management and conservation of biological diversity [are] internalized within the area of management and reflected in the distribution of the benefits from the use"***	Zimbabwe has identified Safari Areas within the Parks Estates where maintaining habitats and wildlife populations is the priority. These gazetted protected areas cover approximately 17,000km^2 where, without safari hunting, it would be difficult to secure and maintain natural ecosystems and prey bases for lions. In addition to these areas, lion occur on 66% (approximately 11,000km^2) of the land set aside as Conservancies. The operational and law enforcement costs incurred by hunting companies on a yearly basis ranges from US$300,000 to US$500,000 per hunting concession, which includes the expense of camps, salaries, anti-poaching, fuel, community assistance, etc. Many of the government's costs of maintaining Safari Areas are transferred to the private sector through the obligations of their concession agreements. Revenues from hunting in communal CAMPFIRE areas are used to support a range of social services (e.g. schools, clinics, irrigation schemes etc.) while operators cover the costs of anti-poaching, maintenance and development, and contributions to communities living nearby (e.g. through boreholes, grinding mills etc.).

		In private hunting areas and conservancies, the costs and benefits of wildlife in the area are internalized and distributed within the area of management. Critically, most of the Conservancies have elected to manage and conserve endangered species, such as black rhino, and offset the costs of this by conducting sustainable hunting of lion and other key trophy species.
2	***Produces income, employment, and/or other benefits that generate incentives for reduction in pressures on populations of target species, and/or help justify retention, enhancement, or rehabilitation of habitats in which native biodiversity is prioritized. Benefits may create incentives for residents to co-exist with such problematic species as large carnivores, herbivores competing for grazing, or animals considered to be dangerous or a threat to the welfare of humans and their personal property***	Hunting produces direct and indirect income, employment, and other benefits that generate incentives that reduce the threats to wildlife populations. Approximately US$44 million accrued to the country from the revenues of trophy hunting over the last two years. This could have been 5% higher if it were not for restrictions on the export of elephant and lion trophies. This revenue pays for the daily wildlife conservation work in all sectors of the wildlife industry, including research projects, surveys, anti-poaching, and other services. Of this amount, approximately 20% is paid directly to the ZPWMA which is then used to support its management activities, including anti-poaching budgets. Local communities benefit from hunting income through leasing the right to hunt and the sale of trophy fees in CAMPFIRE areas as well as from voluntary contributions and meat. Over the last 6 years, payments from hunting operations generated approximately US$16 million. The nature of the hunting industry does not require large numbers of people to be employed. Nonetheless, the average hunting company employs approximately 80 people on a permanent basis and 20 on a seasonal basis. This equates to approximately 3,000 people who would not otherwise secure any form of employment because of the lack of opportunities in the remote areas where hunting takes place.
3	***Is part of a legally recognized governance system that supports conservation adequately and of a system of implementation and enforcement capable of achieving these governance objectives***	All wildlife species in Zimbabwe, including the African lion, are protected under the Parks and Wildlife Act of 1996 (Chapter 20:14) as amended by Act Number 19 of 2001 which came into operation on the 1st of June 2002 through a Statutory Instrument 144C of 2002. The Act that was originally passed by Parliament in 1975 was a unique move in Africa, if not globally, that promoted the rapid development of the country's wild life industry and lead to the partial

		extension of the principle to the Communal Lands through the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in the 1980s. The Act provided a legal basis for the devolution of Authority through granting Appropriate Authority Status to the communal areas to manage the wildlife resources for their own benefit. The Act was subsequently revised in 1996 and 2001 with the latest revision paving the way for the establishment of the current Parks and Wildlife Management Authority to replace the former Department of National Parks and Wild Life Management. Following the introduction of the Parks and Wild Life (General) (Amendment) Regulations, 1998 (No.2), i.e. Statutory Instrument 26 of 1998, the administration of the wildlife industry experienced increasing centralisation of controls on wildlife management and utilisation on alienated and communal land. The Parks and Wildlife Management Authority is mandated by the Parks and Wildlife Act [Chapter 20:14], with the responsibility of conserving Zimbabwe's wildlife heritage through effective, efficient and sustainable protection and utilisation of natural resources for the benefit of present and future generations. The Authority was established to allow it to retain the revenue that it generates to fund its operations and thereby reducing its dependence on Treasury. This entailed introducing a commercial dispensation and putting in place effective revenue generation and financial management systems. The ZPWMA has the mandate to manage the entire wildlife population of Zimbabwe, whether on state, private and communal land.

Socio-Economic-Cultural Benefit

	Principle	**Remarks**
1	***Is premised on appropriate resource assessments and/or monitoring of hunting indices, upon which specific quotas and hunting plans can be established through a collaborative process. Optimally, such a process should (where relevant) include local communities and draw on local/indigenous knowledge. Such resource assessments (examples might include counts or indices of population performance***	Zimbabwe implements an adaptive quota setting quota system that uses inputs from monitoring data and input from a variety of stakeholders including ZPWMA field and research staff, local communities, hunting operators, and independent biologists. Quotas are set based on population estimates or trend analyses, monitoring data, hunt return data, research work and indices as may be reflected in various reports by field personnel.

	such as sighting frequencies, spoor counts) or hunting indices (examples might include trophy size, animal age, hunting success rates and catch per hunting effort) are objective, well documented, and use the best science and technology feasible and appropriate given the circumstances and available resources	For lions, specifically, the ZPWMA together with the Safari Operators Association (SOAZ), the Zimbabwe Professional Hunters Association (ZPHGA) and invited independent scientists (such as Panthera) review the returns from the current hunting season and assign points as per the lion aging criteria. The overall quotas allocated and actual offtake have been reduced in recent years as a precautionary measure, including implementing moratoriums in some regions where lion densities have declined. These measures, i.e., age, population trends, maximum overall numbers and levels of utilisation has resulted in lower quotas thus underlining Zimbabwe's commitment to sustainable hunting.
2	***Involves adaptive management of hunting quotas and plans in line with results of resource assessments and/or monitoring of indices, ensuring quotas are adjusted in line with changes in the resource base (caused by ecological changes, weather patterns, or anthropogenic impacts, including hunting offtake)***	Quotas are set adaptively in line with the results of monitoring trends and on regulatory compliance. If an underage lion is harvested, the quota for that area is removed in the next season to allow the population to age and to penalize the non-compliance. In this way, Zimbabwe ensures responsible and sustainable offtakes that have limited impact on the lion population.
3	***Is based on laws, regulations, and quotas (preferably established with local input) that are transparent and clear, and are periodically reviewed and updated***	Safari hunting in Zimbabwe is regulated through the National Parks and Wildlife Act and supporting Regulations that specify when, where and how animals are hunted. Both the professional hunters and the hunting client are licensed in terms of these regulations, and all returns are lodged electronically and tracked through the Reserve Bank TRAS-2 system. As described above, quotas are established in a transparent and participatory way.
4	***Monitors hunting activities to verify that quotas and sex/age restrictions of harvested animals are being met***	The monitoring of the lion hunting is carried out through the implementation of a specific database and a specific safari return form. All hunting permits issued by (and compulsorily returned to) the ZPWMA are registered on a specific database that has been developed under the auspices of the Exchange Control Division of the Reserve Bank that records all parameters related to hunting safaris, including records of lion hunting. The database is accessible to the ZPWMA who can extract reports on all lion hunting activities for all areas in the country. Since 2013, all professional hunters conducting lion hunting safaris are required to fill in the return form for both successful and unsuccessful safaris that

		captures a broad range of general information on the safari (client name, duration, date, payments etc. For the successful lion hunting safaris, additional information related to hunting effort and success, trophy skull measures (total length and width) and specified photographs are taken of the physical features (mane etc.) and upper and lower jaws. These return forms and trophy photographs are compulsory. No CITES export permit can be issued without compliance. All data forms are reviewed by the ZPWMA together with a committee appointed by the SOAZ and ZPHGA to ensure the offtakes and subsequent exports are not detrimental to the survival of the species. Zimbabwe also requires that a ZPWMA ranger accompany all lion safaris both on state land and private land.
5	***Produces reliable and periodic documentation of its biological sustainability and conservation benefits (if this is not already produced by existing reporting mechanisms).***	The Exchange Control Division of the Reserve Bank publishes a detailed report that summarises all data related to sport hunting. This includes country of origin of clients, gross income from daily rates and trophy fees (by company), average trophy and safari values, and the contribution of key species to the overall income generated through hunting. The ZPWMA also produces annual reports that highlight the performance of the hunting industry, listing the challenges that it faces. It also submits periodic reports to CITES.

Accountable and Effective Governance

	Principle	**Remarks**
1	***Is subject to a governance structure that clearly allocates management responsibilities***	The governance structure is described in the Parks and Wildlife Act and its subsidiary regulations that clearly provides for institutional arrangements and administration defining the management responsibilities within the relevant Government Authority.
2	***Accounts for revenues in a transparent manner and distributes net revenues to conservation and community beneficiaries according to properly agreed decisions;***	The equitable distribution of costs and benefits take into consideration the role of stakeholders in relation to the land category. Benefit sharing to communities under the CAMPFIRE programme is determined through an approved ratio that channels 55% of all income from hunting to the Ward level. This institution is monitored at the local level by the Rural District Councils that guide Ward

		Wildlife Committees with respect to community projects and services. At national level this is monitored by Ministry of Rural Development, Preservation and Promotion of Culture and Heritage Safari operators contribute substantially and voluntarily, over and above the prescribed fixed contribution, especially where this involves anti-poaching efforts and community developments. They provide funding, equipment and the technical expertise for repairs, transportation, and other social services (schools, boreholes). In addition, hunting companies collaborate with both ZPWMA and District anti-poaching teams to remove snares, participate in serious wildlife crime investigations and arrest poachers.
3	***Takes all necessary steps to eliminate corruption;***	Anti-corruption efforts in Zimbabwe are governed by the following legislation: • The Prevention of Corruption Act (1983); • Public Service Act (1995); • The Ombudsperson Amendment Act (1997); • Anti-Corruption Commission Bill (2004); • The Criminal law (Codification and Reform) Act (2004); • Bank Use Promotion and Suppression of Money Laundering Act (2004); • Criminal Procedure and Evidence Amendment Act (2004); and • Criminal Law (Codification and Reform) Act of 2006 The Zimbabwean Anti-Corruption Commission (ACC) was established after the passing of the Anti-Corruption Commission Bill in June 2004. The Commission is a signatory to the Southern Africa Development Community (SADC) Protocol as well as the African Union (AU) and United Nations Convention on Anti-Corruption.
4	***Ensures compliance with all relevant national and international requirements and regulations by relevant bodies such as administrators, regulators and hunters.***	The CITES Management Authority of Zimbabwe, the ZPWMA, ensures compliance of safari hunting to CITES guidelines and provisions.

10 REFERENCES

Bauer, H. Chardonnet, P. and Kristin Nowel, l. 2005. Status and distribution of the lion (*Panthera leo*) in East and Southern Africa. Background paper for the East and Southern African Lion Workshop, Johannesburg, 2006. IUCN, Pretoria.

Bauer, H. and Van der Merwe, S. 2004. Inventory of free-ranging lions *Panthera leo* in Africa. 26–31 pp. Available at: WOS:000220283600007.

Bauer, H., Chapron, G., Nowell, K., Henscheld, P., Funston,P.,Hunter, L.T.B., Macdonald, D.W. and Packer, C. 2015. Lion (*Panthera leo*) populations are declining rapidly across Africa, except in intensively managed areas. www.pnas.org/cgi/doi/10.1073/pnas.1500664112

Begg, C. and Begg, K. 2008. Trophy monitoring of lion and leopard trophies in Niassa National Reserve, Mozambique: 2007 hunting season. Ratel Trust and SRN, Mozambique.

Chitauro. 2016. Status of the hunting sector in Zimbabwe. Internal report prepared by the Director of Exchange Control om behalf of the Reserve Bank of Zimbabwe. Unpublished.

Creel, S. and Creel, N.M. 1997. Lion density and population structure in the Selous Game Reserve: evaluation of hunting quotas and offtake. Afr. J. Ecol. Volume 35, pages 83 - 93

Crosmary, W.G., Loveridge, A.J., Ndaimani, H., Lebel, S., Booth, V., Côté, D. and Fritz, H. 2013. Trophy hunting in Africa: long-term trends in antelope horn size. Animal Conservation •• (2013) ••–•• © 2013 The Zoological Society of London.

Davidson, Z. and Loveridge, A. 2005. Population Estimation by Spoor Counts with Calibration Using Known Lion Density. Status report of the Gwaai ICA; Wildlife Conservation Research Unit, Oxford University.

Davidson, Z. and Romanach, S. 2007. Estimations of lion and hyena density in the Savé Valley Conservancy using two different census techniques: spoor transects and call-up stations. Report for SVC, WildCRU and University of Zimbabwe, TREP.

du Preez, B., Groom, R., Mufute, O., Mandisodza-Chikerema, R. and Booth, V. 2016. Sport-Hunting and Lion *Panthera leo* Conservation in Zimbabwe. Report prepared by the Bubiana Valley Conservation Research.

Dunham, K.M. Mackie, C.S. and Nyaguse, G. 2015a. Aerial Survey of Elephants and other Large Herbivores in the Zambezi Valley (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 118 pp.

Dunham, K.M., Mackie, C.S., Nyaguse, G. and Zhuwau, C. 2015b. Aerial Survey of Elephants and other Large Herbivores in north-west Matabeleland (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 126 pp.

Dunham, K.M., Mackie, C.S., Nyaguse, G. and Zhuwau, C. 2015c. Aerial Survey of Elephants and other Large Herbivores in the Sebungwe (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 111 pp.

Dunham, K.M. & van der Westhuizen, H.F. 2015d Aerial Survey of Elephants and other Large Herbivores in Gonarezhou National Park and Save Valley Conservancy (Zimbabwe): 2014. Great Elephant Census, Vulcan Inc., Seattle, WA, USA. 115 pp.

Funston, P.J., Herrmann, E., Babupi, P., Kruiper, A., Jaggers, H., Masule, K. and Kruiper, K. 2001. Spoor frequency estimates as a method of determining lion and other large mammal densities in the Kgalagadi Transfrontier Park. (Book chapter).

Funston, P., Henschel, P., Hunter, L., Lindsey, P., Nowak, K., Vallianos, C. and Wood, K. 2016. Beyond Cecil: Africa's Lions in Crisis. Panthera and WildAid, New York and San Francisco.

Groom, R. 2008. Carnivore densities in the Savé Valley Conservancy; Results of the 2008 spoor survey. Report for Savé Valley Conservancy Technical Advisory Committee.

Groom, R. J. 2009. Carnivore Densities in Gonarezhou National Park: Results of the May/June 2009 Spoor Survey. Lowveld Wild Dog Project.

Groom, R.J. 2010. The abundance and conservation status of lions (*Panthera leo*) and spotted hyenas (*Crocuta crocuta*) in Gonarezhou National Park, Zimbabwe. Results of the 2010 call-up survey. African Wildlife Conservation Fund, unpublished report.

Groom, R.J., Funston, P.J. and Mandisodza, R. 2014. Surveys of lions *Panthera leo* in protected areas in Zimbabwe yield disturbing results: what is driving the population collapse? Oryx http://journals.cambridge.org.

Groom, R. J. and Watermeyer, J. 2015. Carnivore Densities in Gonarezhou National Park. Results of the 2015 Spoor Survey. Gonarezhou Predator Project

Groom, R. J. and Watermeyer, J. 2015a. Carnivore Densities in the Savé Valley Conservancy. Results of the 2015 Spoor Survey & Wild Dog Monitoring Project. African Wildlife Conservation Fund

Hayward, M. W., O'Brien, J., and Kerley, G.I.H., 2007. Carrying capacity of large African predators: predictions and tests. Biological Conservation, 139(1), 219-229.

IUCN/SSC. 2012. IUCN/SSC Guiding principles on trophy hunting as a tool for creating conservation incentives. Ver. 1.0. IUCN, Gland. http://cmsdata.iucn.org/downloads/iucn_ssc_guiding_principles_on_trophy_hunting_ver1_09aug2012.pdf

Loveridge, A.J. Searle, A.W., Murindagomo, F., Macdonald, F.W. 2007. The impact of sport-hunting on the population dynamics of an African lion population in a protected area. Biological Conservation 134: 548 – 558

Lindsey, P. A., Balme, G., Becker, M., Begg, C., Bento, C., Bocchino, C., Dickman, A., Diggle, R. W., Eves, H., Henschel, P., Lewis, D., Marnewick, K., Mattheus, J., McNutt, J. W., McRobb, R., Midlane, N., Milanzi, J., Morley, R., Murphree, M., Opyene, V., Phadima, J., Purchase, G., Rentsch, D., Roche, C., Shaw, J., van der Westhuizen, H., van Vliet, N. and Zisadza-Gandiwa, P. 2015a. The bushmeat trade in African savannas: Impacts, drivers, and possible solutions. FAO/Panthera/Zoological Society of London/WCS Report, Harare. 79 pages.

Lindsey, P., Taylor, W.A., Nyirenda, V., Barnes, L., 2015b. Bushmeat, wildlife-based economies, food security and conservation: Insights into the ecological and social impacts of the bushmeat trade in African savannahs. FAO/Panthera/Zoological Society of London/SULi Report, Harare. 58 pages.

Miller, J.R.B., Balme, G., Lindsey, P.A., Loveridge, A.J., Becker, M.S., Begg, C. Brink, H., Dolrenry, S., Hunt, J.E., Janssoni, I., Macdonald, D.W., Mandisodza-Chikerema, R.L., Cotterill, O.L., Packer, C., Rosengren, D., Stratford, K., Trinkel, M., White, P.A., Winterbach, C., Winterbach, H.E.K. and Funston, P.J. 2016. Aging traits and sustainable trophy hunting of African lions. Biological Conservation 201 (2016) 160–168.

Mills, M.G.L. , Biggs, H.C. and White, I.J. 1995. The relationship between rainfall, lion predation and population trends in African herbivores. Wildl. Res. 22: 75–88

Stander, P.E. (1998) Spoor counts as indices of large carnivore populations: the relationship between spoor frequency, sampling effort and true density. Journal of Applied Ecology, 35, 378-385

Seymour-Smith, J. L. and Loveridge, A. J. 2015. Mana Pools National Park Predator Survey July – October 2015.

Whitman, K.L., Starfield, A.M., Quadling, H. and Packer, C. 2007. Modeling the effects of trophy selection and environmental disturbance on a simulated population of African lions. Conservation biology: The Journal of the Society for Conservation Biology, 21(3): 591–601.

ZPWMA, 2006. Conservation Strategy and Action Plan for the Lion (*Panthera leo*) in Zimbabwe. Zimbabwe Parks and Wildlife Management Authority, Ministry of Environment and Tourism, Harare, Zimbabwe. 19 pages.

ZPWMA, 2014. Age Restrictions on Lion Trophies and the Adaptive Management of Lion Quotas in Zimbabwe.

ZPWMA, 2016. Hwange National Park Management Plan 2016 – 2016. Prepared by African Wildlife Foundation on behalf of the Zimbabwe Parks and Wild Life Management Authority, Harare.

11 APPENDICES

11.1 ANNEX I: SUMMARY OF NATIONAL PARKS ESTATE, FORESTRY, COMMUNAL AND PRIVATE LAND WHERE LION ARE KNOWN TO OCCUR

1. National Parks Estate

Type of Land	Name of Park	District	Area (hectares)	Presence of lion
NP	Chizarira	Binga	191,000	Yes
NP	Gonarezhou	Chiredzi	505,000	Yes
NP	Matusadonha	Nyaminyami	140,700	Yes
NP	Chimanimani	Chimanimani	17,110	No
NP	Mana Pools	Hurungwe	219,600	Yes
NP	Kazuma Pan	Hwange	31,300	Yes
NP	Hwange	Hwange	1,465,100	Yes
NP	Victoria Falls "A"	Hwange	1,904	No
NP	Victoria Falls "B"	Hwange	436	No
NP	Zambezi	Hwange	56,010	Yes
NP	Rhodes Nyanga	Nyanga	47,150	Migratory
NP	Rhodes Matopos	Matobo	42,400	No
Total Area National Parks (ha)			**2,717,710**	
Botanical Gardens	Pioneer Reserve	Beitbridge	38	No
Botanical Gardens	Tolo River Reserve	Beitbridge	44	No
Botanical Gardens	South Camp Reserve	Beitbridge	26	No
Botanical Gardens	Chisekera Hot Springs	Chiredzi	95	No
Botanical Gardens	Mawari Raphia Palm	Mt. Darwin	34	No
Botanical Gardens	Tingwa Raphia Pan	Mt. Darwin	290	No
Botanical Gardens	Haroni Forest	Chimanimani	20	No
Botanical Gardens	Rusitu Forest	Chimanimani	150	No
Botanical Gardens	Sebakwe Acacia Karoo	Kwekwe	60	No
Botanical Gardens	Sebakwe Great Dyke	Kwekwe	165	No
Botanical Gardens	Sebakwe Mountain Acacia	Kwekwe	53	No
Botanical Gardens	Mazowe "A"	Harare	43	No
Botanical Gardens	Mazowe "B"	Harare	3	No
Botanical Gardens	Bunga Forest	Mutare	495	No
Botanical Gardens	National Botanic Garden	Harare	67	No

Type of Land	Name of Park	District	Area (hectares)	Presence of lion
Botanical Gardens	Vumba Botanic Garden	Mutare	200	No
Botanical Gardens	Ewanrigg Botanic Garden	Goromonzi	286	No
Total Area of Botanical Gardens and Botanical Reserves:			**2,069**	
Sanctuary	Maninii Pan	Chiredzi	300	No
Sanctuary	Melsetter Eland	Chimanimani	1,800	No
Sanctuary	Mbaze Pan	Nkayi	40	No
Sanctuary	Nyamanyetsi (Nyamanechi)	Guruve	2,840	No
Sanctuary	Mushandike	Masvingo	12,900	No
Sanctuary	Rhodes - Bulawayo	Matobo	1,100	No
Total Area Sanctuaries			**18,980**	
Safari Area	Tuli	Beitbridge and Gwanda	41,600	Yes
Safari Area	Chete	Binga	108,100	Yes
Safari Area	Chipinga (Chipinge)	Chipinge	26,100	No
Safari Area	Malapati (Malipati)	Chiredzi	15,400	Yes
Safari Area	Chinsa	Gokwe	171,300	Yes
Safari Area	Hartley (Chegutu)	Chegutu	44,500	No
Safari Area	Charara	Kariba and Hurungwe	169,200	Yes
Safari Area	Hurungwe	Hurungwe	289,400	Yes
Safari Area	Doma	Makonde	94,500	Yes
Safari Area	Umfurudzi	Shamva	76,000	No
Safari Area	Dande	Guruve	52,300	Yes
Safari Area	Chelvore (Chewore)	Hurungwe	339,000	Yes
Safari Area	Sapi	Hurungwe	118,000	Yes
Safari Area	Deka	Hwange	51,000	Yes
Safari Area	Matetsi	Hwange	295,500	Yes
Total Area of Safari Areas:			**1,891,900**	
Recreational	Chibwatata	Binga	6	No
Recreational	Kavira	Binga	50	No
Recreational	Lake Kariba	Binga, Nyaminyami and Hwange	287,200	Yes

Type of Land	Name of Park	District	Area (hectares)	Presence of lion
Recreational	Ngezi	Kadoma	5,800	No
Recreational	Umfuli (Mfurudzi	Chegutu	12,700	No
Recreational	Lake Robertson (Manyame Lake)	Chegutu, Makonde and Harare	11,200	No
Recreational	Lake Cunningham	Insiza	4,172	No
Recreational	Chinhoyi Caves	Makonde	120	No
Recreational	Manjirenji	Zaka	3,400	No
Recreational	Bangala	Zaka and Masvingo	2,700	No
Recreational	Sebakwe	Kwekwe	2,600	No
Recreational	Robert McIlwaine (Chivero)	Harare	6,180	No
Recreational	Umzingwane	Umzingwane	1,233	No
Recreational	Kyle (Mutirikwi)	Masvingo	16,900	No
Recreational	Lake Matopos	Matobo	2,900	No
Total Area of Recreational Parks, Lakes and Dams			**357,161**	

Total Area National Parks (ha)	2,717,710
Total Area of Botanical Gardens and Botanical Reserves:	2,069
Total Area Sanctuaries	18,980
Total Area of Safari Areas:	1,891,900
Total Area of Recreational Parks, Lakes and Dams	357,161
Total Ha	**4,987,820**

2. Forestry Land

Land	Name	District	Area (ha)	Presence of lion
Forestry Areas	Fuller	Hwange	23,300	Yes
Forestry Areas	Panda Masuie	Hwange	33,500	Yes
Forestry Areas	Kazuma	Hwange	24,000	Yes
Forestry Areas	Mvutu	Hwange	2,100	No
Forestry Areas	Sikumi	Hwange	54,400	Yes
Forestry Areas	Gwayi	Lupane	144,265	Yes
Forestry Areas	Lake Alice	Lupane	39,000	No
Forestry Areas	Ngamo	Lupane	102,900	Yes

Land	Name	District	Area (ha)	Presence of lion
Forestry Areas	Chisengu	Lupane	4,006	No
Forestry Areas	Glencoe	Lupane	2,050	No
Forestry Areas	Lionhills	Lupane	2,747	No
Forestry Areas	Martin (i)		400	No
Forestry Areas	Martin (ii)		4,400	No
Forestry Areas	Mudima		6,355	No
Forestry Areas	Nyambewa		5,484	No
Forestry Areas	Tandai		5,450	No
Forestry Areas	Tarka		4,343	No
Forestry Areas	Gwampa	Nkayi	47,000	No
Forestry Areas	Chesa	Nkayi	14,250	No
Forestry Areas	Inseze	Nkayi	35,200	No
Forestry Areas	Inseze Extension	Nkayi	8,400	No
Forestry Areas	Umgusa	Nkayi	32,200	No
Forestry Areas	Umzibani	Nkayi	2,471	No
Forestry Areas	Kavira	Binga	28,200	Yes
Forestry Areas	Mzolo	Binga	67,200	No
Forestry Areas	Sijarira	Binga	25,600	Yes
Forestry Areas	Bembesi	Binga	55,100	No
Forestry Areas	Molo	Binga	2,900	No
Forestry Areas	Mtao	Chirumanzu	8,170	No
Forestry Areas	Chirindu	Chirumanzu	950	No
Forestry Areas	Gungunyana	Chirumanzu	1,650	No
Forestry Areas	Mafungabusi	Chirumanzu	82,100	No
Forestry Areas	Mudzongwe	Chirumanzu	1,420	No
Forestry Areas	Ungwe	Chirumanzu	567	No
Forestry Areas	Nyangu	Chirumanzu	16,600	No
Forestry Areas	York	Chirumanzu	1,455	No
Forestry Areas	Banti	Mutare	2,219	No
Forestry Areas	Stapleford	Mutare	24,600	No
Rhodes Estate	Erin	Nyanga	10,700	No
Rhodes Estate	Sauerdale North	Nyanga	214	No

Land	Name	District	Area (ha)	Presence of lion
Total Forest Areas (ha)			**927,866**	

3. CAMPFIRE Districts

District	Natural Region	Total Area (km^2)	Area of CF Wards (km^2)	Number of Wards	**CF Wards**	**District Pop (persons)**	**Presence of lion**
Beitbridge	5	12,935	4,595	21	6	80,946	Migratory
Binga	3,4&5	12,308	7,930	27	21	87,802	Migratory
Bubi	4	5,547	88	12	2	36,614	Migratory
Bulilimamangwe	4&5	12,574	1,530	33	10	156,641	Migratory
Chaminuka	2a,2b,3,4&5	2,752	380	26	2	94,047	No
Chimanimani	1,2a,3,4&5	3,419		28		110,836	No
Chipinge(Gazaland)	1,2a,3,4&5	5,223	408	33	2	336,893	Migratory
Chiredzi(Gaza Khomanani)	5	17,748	3,633	32	9	183,228	Yes
Chiweshe(Mazowe)	2a	4,482	375	29	5	198,319	No
Gokwe North	3,4&5	7,359	2,523	25	4	164,558	Migratory
Gokwe South	3&4	11,138	1,308	28	6	238,581	Migratory
Goromonzi	2a	2,504		26		147,126	**No**
Mbire (Guruve)	2a,3&4	7,810	4,215	28	14	135,637	Yes
Gwanda	4&5	10,792	2,283	23	6	112,984	No
Hurungwe	2a,3,4&5	19,895	2,793	40	9	246,902	Yes
Hwange	4&5	29,934	4,021	27	15	71,707	Yes
Hwedza	2b&3	998				69,981	No
Kusile(Lupane)	3&4	7,780	2,885	24	11	94,469	Migratory
Marondera	2a&2b	3,554		24		104,601	No
Matobo	4&5	7,278	1,233	26	4	89,281	No
Mudzi	4	4,222	1,009	18	2	109423	No
Mutoko	2b,3&4	4,052		29		122,941	No
Muzarabani	2a,3&4	4,322	2,540	17	9	69,851	Migratory
Mwenezi	4&5	12,933		31		101,354	Migratory
Nkayi	4	5,333	2,628	23	6	113,302	Migratory
Nyaminyami(Kariba)	4&5	6,327	3,532	16	11	27,717	Yes
Nyanga	1,2b,3&4	5,738	253	37	1	128,439	Migratory
Pfura(Mt. Darwin)	2a,2b,3&4	1,771				164,362	No
Rushinga	3&4	2,408		17		75,332	No
Tsholotsho	4	7,823	5,354	20	8	111,828	Yes
UMP Zvataida	2b,3&4	2,682	619	15	2	86,302	No
Umzingwane	4	1,074				62,954	No

District	Natural Region	Total Area (km^2)	Area of CF Wards (km^2)	Number of Wards	**CF Wards**	**District Pop (persons)**	**Presence of lion**
Zivagwe	4	2,363				65,752	No
TOTAL/AVERAGE		247,078	56,135	735	165	4,000,710	

4. Conservancies

	Name of Conservancy	**District**	**Area (hectares)**	**Presence of lion**
Conservancies	Malilangwe	Chiredzi	40,000	Yes
Conservancies	Save	Chiredzi	344,200	Yes
Conservancies	Chiredzi River	Chiredzi	28,500	No
Conservancies	Bubye Valley	Matabeland South	374,000	Yes
Conservancies	Bubiana	Matabeland South	130,000	No
Conservancies	Gwayi	Hwange	150,897	Migratory
Conservancies	Midlands Black Rhino	Midlands	85,000	No
Other	Matetsi Farms	Hwange	155,627	Migratory
Total Area of Conservancies			**1,308,224**	

11.2 ANNEX II: SUMMARY OF PRIMARY LEGISLATION AND REGULATIONS

11.2.1 The Policy for Wild Life of 1992

This policy provides for Government to maintain a protected area network known as the Parks and Wild Life Estate for the conservation of the nation's wild resources and biological diversity. According to the policy, government will use the Estate to promote a rurally based wild life industry and will harmonise the management of the Estate with the efforts of neighbouring communities that are developing wild life as a sustainable form of land use. The policy vests executive responsibility for the Parks and Wildlife Estate in the Department of National Parks and Wild Life Management (DNPWLM). It provides for the following categories of protected area: National Park; Safari Area; Sanctuary; Recreational Park, Botanic Reserve and Botanic Garden.

- The objectives of the Parks and Wild Life estate will be to:
- Preserve representative samples of Zimbabwe's aquatic and terrestrial flora and fauna and their physical environments;
- Protect areas of scenic beauty and special interest;
- Preserve rare, endangered and endemic species;
- Conserve water catchments;
- Provide opportunities for public education and the advancement of scientific knowledge;

and, without prejudice to any of the above:

- Encourage public use related to the enjoyment and appreciation of these areas; and
- Generate economic activity within the Estate and surrounding areas to enhance rural development.

The policy commits the DNPWLM to an adaptive management strategy in which research and monitoring are incorporated as integral components of management. It states that where sport

hunting is an objective in a protected area, quotas will be set to the maximum sustainable level at which trophy quality can be maintained and the hunting can be marketed. In terms of the policy the emphasis of tourism in parks should be low density and high quality tourism. An EIA must be carried out for major developments such as construction of roads, powerlines, buildings or dams.

With respect to Wildlife Conservation, the Policy states that the Government of Zimbabwe aims to encourage the conservation of wild animals and their habitats outside the Parks and Wild Life Estate recognising that this is only likely to be successful if wild life can be used profitably and the primary benefits accrue to people with wild life on their land. "*Recognising that much of Zimbabwe does not consist of good arable land, Government regards wild life management in all its diverse forms as a legitimate land use which may be the most appropriate or highest-valued form of development in many areas*". The policy also states that Government will take the necessary legal and enforcement measures to prevent the illegal use of wildlife.

Addressing community rights to natural resources the Policy states that government intends to "*transform land use in remote communal areas through its Communal Areas Management Programme for Indigenous Resources (CAMPFIRE), under which rural peoples have the authority to manage their wild life and other natural resources and benefit directly from so doing*". Further government will "*ensure that wildlife is not undervalued to the people living with it by permitting them to use it sustainably for their own gain as they are able to do with other natural resources and agricultural products*".

The policy states that the mechanism for communities to gain rights over wild life will be through the granting of Appropriate Authority to Rural District Councils (under the Parks and Wildlife Management Act of 1975). For this authority to be granted, the Minister will require:

1. An acceptable management plan from councils in which objectives for wild life are stated and preliminary intentions for achieving these objectives are outlined;
2. An acceptable institutional plan which outlines clearly the methods by which councils intend a) to involve wild life producer communities in district level management and b) to devolve the decision-taking process in local wild life management and the distribution of wild life benefits to producer communities;
3. The department to assist councils in managing their wild life and to coordinate the activities of NGOs who are assisting councils;
4. The approval by the department of all annual quotas of wild life killed or sold in communal lands during the interim period while councils develop their management capacity;
5. The presentation of annual reports from Councils to the Director and to their constituents detailing the year's performance in wild life management in their district.

The policy provides for the Minister to withdraw Appropriate Authority from a council not conforming to conditions and objectives under which it was granted.

11.2.2 Wildlife Based Land Reform Policy

In 2004 there was a move to revise the Policy for Wildlife to cater for the Land Reform programme. The revised policy, known as the Wildlife-Based Land Reform Policy, has not however been formally accepted by Government. Nonetheless, it is important to summarise what was envisioned at that time since this has influenced the way the management of wildlife outside of the Parks Estate has unfolded.

The vision of this reformed policy is to ensure profitable, equitable and sustainable use of wildlife resources, particularly in areas where agricultural potential is limited. It states that "*the policy has*

been developed in the context of Zimbabwe's Land Reform Programme and is underpinned by recognition that wildlife is a viable land-use option, that it can facilitate attainment of equity objectives and that it is feasible. This policy is complemented by existing natural resources legislation and the state protected area system."

The policy also states that the key issues that were taken into consideration were:

- The State will continue to make provision for wildlife management outside the protected area system, including setting aside certain core zones for wildlife production. Wildlife should be the only permitted primary land use option in these areas.
- Outside core zones, wildlife production, amongst other land use options, will be encouraged. The most profitable and ecologically sustainable land use option must be allowed to evolve in response to changing economic influences, notwithstanding the need to ensure food security in these areas.
- The scale of wildlife operations must be allowed to vary from intensive to extensive, depending on agro-ecological settings.
- All beneficiaries of wildlife operations, whether individually or jointly, must equitably share the costs of production.
- Wildlife management responsibility and authority must be devolved to the most appropriate level for efficient resource management and production incentives must be maximized for landholders.
- Security of tenure over resources is key to successful wildlife-based land reform. These core areas should be identified.

The aims of the Wildlife-Based Land Reform Policy are listed as:

1. To facilitate the indigenisation of the wildlife sector and to ensure more equitable access by most Zimbabweans to land and wildlife resources and to the business opportunities that stem from these resources.
2. To maintain a proportion of land outside state protected areas under wildlife production.
3. To enhance diversity of land uses through wildlife production.
4. To promote secure and equitable tenure.
5. To develop and implement appropriate institutional arrangements for wildlife-based land reform.

The policy recognized that wildlife production can be at different scales, which are dependent on several factors that include the type of wildlife, management regime and ecological conditions. Three categories are highlighted in the policy:

1. Intensive production systems with captive or semi-captive species such as crocodiles and ostriches (1 – 100 hectares).
2. Semi-intensive to semi-extensive production systems with free-ranging "plains game" populations (1,000 to 10,000 hectares).
3. Extensive production systems incorporating "big game" populations (over 10,000 hectares).

The Wildlife Based Land Reform Policy promotes two land redistribution models:

1. A state leasehold approach which is based on the reallocation of leasehold leases.
    a. This approach entails the acquisition of the entire land-holding with compensation for infrastructure, wildlife, etc.,

b. The land will be reallocated to lessees under terms and conditions that will ensure sustainable wildlife management, on-going investment and capacity-building in that area.

2. A corporate equity model that involves transfer of shares within a land-owning company.
    a. The transfer of shares will be in accordance with the Indigenisation goals and sound business principles;
    b. Proposals from stakeholders must outline realistic ways in which new entrants can increase their shareholdings well beyond an initial level, over a reasonable time scale.
    c. The proposals must make provision for immediate allocation of shareholdings to new participants.

The Policy document also acknowledges that the two approaches can be applied in combination and shall be considered on a case by case basis, and that the State may from time to time consider other approaches that meet the objectives of the Wildlife Based Land Reform Policy.

11.2.3 Parks and Wild Life Act Chapter 20:14 of 1996 as amended in 2001:

This is the pivotal Act with respect to wildlife management in Zimbabwe. The Act includes the following sections:

1. Parks and Wildlife Board
2. Parks and Wildlife Estate and Parks and Wildlife Land
3. National Parks
4. Botanical Reserves and Botanical Gardens
5. Sanctuaries
6. Safari Areas
7. Recreational Parks
8. Specially Protected Animals
9. Specially Protected Indigenous Plants
10. Indigenous plants
11. Hunting, removal, viewing and sale of animal products
12. Protection of animals and Indigenous plants on alienated land
13. Fish Conservation
14. Evidence, prevention and detection of offences and additional penalties and forfeitures
15. Inspectors, Officers, employees and advisory committees
16. General

The Act also defines the different types of land (Alienated land):

a. “Private Land” means land the ownership of which is vested in any person other than the President.
b. “State Land” means land vested in the President other than Communal Land or trust land vested in the President.
c. “Trust land” means any land, other than Communal land held in trust by the President or a statutory body or by a person, whether solely or jointly with others, by virtue of his being the holder of some office in a statutory body.

The Parks and Wildlife Act of 1975 (as amended) states that the purposes of National Parks are:

1. To preserve and protect the natural landscape and scenery.
2. To preserve and protect wild life and plants and the natural ecological stability of wild life and plant communities for the enjoyment, education and inspiration of the public.

Establishment of Protected Areas: The Act enables the President to declare National Parks on State land or Trust Land if the trustees give their consent (Section 22). The Act enables the Minister acting on the authorisation of the President to acquire land for the Parks and Wild Life Estate either compulsorily or by agreement in terms of the procedures contained in the Communal Land Act and the Land Acquisition Act. The Act gives the Minister the power to manage National Parks, control entry and authorise or restrict certain activities and carry out various conservation measures. The Act provides for the provision of facilities and services for tourists in National Parks or to lease out such facilities or services. The Act allows the Minister to issue a permit for hunting in National Parks.

The Act makes provision for the establishment of Botanical Reserves and Botanical Gardens (Section 26) on State Land or Trust Land for the preservation and protection of rare or endangered indigenous plants or representative plant communities for the enjoyment, education and benefit of the public.

A third category of protected area is a Sanctuary which may be established by the President on State Land or Trust Land (Section 31) to afford special protection to all animals or a particular species of animal in the sanctuary for the enjoyment and benefit of the public. The Minister may provide tourism facilities and services in a Sanctuary or lease facilities or services. The Minister may also issue permits for hunting or the removal of game from a sanctuary for certain purposes.

In terms of the Act the President may establish Safari Areas on State Land or Trust Land as part of the Parks and Wild Life Estate (Section 36) for the preservation and protection of the natural habitat and the wild life in these areas in order that facilities and opportunities may be afforded to the public for camping, hunting, fishing, photography, viewing of animals, bird watching and similar activities. The Minister may lease sites in safari areas for various purposes and may grant hunting or other rights. Hunting or removal of wildlife in a safari area may only take place with a permit.

The fifth category of protected area provided for by the Act is a Recreational Park (Section 41), which may be established by the President for the purpose of preserving and protecting the natural features for the enjoyment, benefit and recreation of the public. The Minister may designate areas within Recreational Parks which can be alienated or leased for the provision of tourism facilities and services.

Prospecting and mining are prohibited in National Parks, Botanical Reserves, Botanical Gardens, Sanctuaries or Recreational Parks without a permit issued by the Minister and with the consent of the Minister of Mines (Section 119). The Environmental Management Act of 2002 also makes provision for land to be acquired by the State for conservation purposes. According to Section 109 the President may acquire land or set land aside for the improvement or proper management of the environment. In the absence of an agreement with the land owner the President may acquire the land in accordance with the procedures under the Land Acquisition Act. The President may set aside any area of Communal Land for the conservation or improvement of natural resources or for the protection of irrigation works or sources of water supplies provided that no such area shall be set aside until the Minister responsible for the administration of the Communal Land Act is satisfied that suitable provision has been made elsewhere for the inhabitants who will be affected by the setting aside of the area (Section 110).

Specially Protected Animals and Plants: The Act makes provision for the Minister to declare certain animals as specially protected (Section 44). In terms of the Act, no-one may hunt, have in their possession, or sell a live specially protected animal or the meat or trophy from such an animal without a permit. The trophy of any specially protected animal must be surrendered to the state if not obtained by a permit. The Act specifies the purposes for which the Minister may issue a permit for use of

specially protected animals (Section 46), but provides the Minister with some flexibility as he/she may issue a permit for any purpose which in the opinion of the Minister is in the interests of the conservation of animals.

The Act also makes provision for the declaration of specially protected indigenous plants (Section 49). No person may pick a specially protected plant without a permit, although the owners or occupiers of land or a person acting under their authority may pick a specially protected plant for cultivation, forestry, building construction or the construction of roads and other infrastructure. No person may sell a specially protected plant without a permit unless the person is a recognised dealer in specially protected indigenous plants or a member of a recognised horticultural society and the purchase is from a member of the same or other recognised society. The Act specifies the purposes for which the Minister may issues permits for the picking or sale of specially protected indigenous plants. The Act also stipulates that no person may pick or sell indigenous plants without a permit (Section 55) provided that the appropriate authority for any land may pick or sell or authorise others to pick or sell indigenous plants (Section 56). If the Minister deems it necessary for the conservation of an indigenous plant, the Minister may prohibit the picking or selling of that plant (Section 57).

Hunting and removal of animals: The Act prohibits hunting, removal of an animal or any part of an animal or the sale of an animal without a permit unless by an appropriate authority for the land (Section 59), which is the owner of freehold land, a Rural District Council on communal land, the Forestry Commission on state forests and the DNPWLM on the parks and Wildlife Estate. The appropriate authority for the land may issue permits to others to use the wild life (except for specially protected species). If the Minister deems it necessary for the conservation of a animal, he/she may prohibit the hunting or removal of such animals in a specific area (Section 60) and may serve a notice to prohibit a specific person from hunting, conducting photographic tourism, or being in the possession of a weapon used for hunting save for self-defence. The Minister does not have to give reasons for such prohibitions. The Act enables the killing of an animal without a permit for self-defence (Section 61).

The Act prohibits anyone from conducting of hunting or photographic safaris within the parks and wild life estate or on forest land without holding a professional hunter's licence or a professional guide's licence (Section 65). No person may manufacture an article from a trophy, process a trophy or sell or otherwise dispose of a trophy or an article manufactured from a trophy from an animal that has been hunted in contravention of the Act (Section 73).

If the Minister believes it in the interests of conservation, he/she may declare any animal that is not a specially protected animal as a protected animal and any indigenous plant that is not a specially protected plant as a protected plant (Section 77) on alienated land within the area of an environment committee established in terms of the Environmental Management Act of 2002 and the Rural District Councils Act of 1988. No person may, without a permit, hunt an animal or pick an indigenous plant that has been declared protected. The Minister may also restrict the extent of hunting animals or picking of indigenous plants on alienated (private freehold) land in the area of an environment committee if the Minister believes that the hunting of animals or picking of plants is unsustainable. The Minister may authorise an environment committee to reduce the numbers of problems animals on any alienated land within its area if the number of such animals is sufficient to cause excessive damage or nuisance. Section 79 gives environment committees the power to restrict hunting on alienated land if it believes that hunting is unsustainable.

The Minister may declare any person to be the appropriate authority for any waters (Section 83) and may declare controlled fishing waters (Section 84) for which the Minister may make regulations for

the control, regulation, restriction of prohibition of fishing. Unless the Minister designates areas of water where a permit is not required, no-one except the appropriate authority for that water may fish in any water without a permit. Section 87 regulates the means of fishing by prohibiting the use of explosives, firearms and poisons. Section 88 controls the introduction into any water of fish and plants that are not native to that water. No-one except the appropriate authority for a water may fish commercially and sell the fish without a permit (Section 90). The minister may ban fishing by specific persons in any area in the interests of conservation (Section 96).

Enforcement: The Act provides for the powers of conservation officials, and police officers in relation to enforcing the Act. It provides for penalties for various offences and for the Minister to make regulations on a wide range of issues and activities. The Act provides for the highest penalties to be awarded for the unlawful killing of a rhinoceros or other specially protected game specified by the Minister in an
official notice and for the unlawful possession or trade in rhino horn, ivory or the trophy of any other specially protected animal specified by the Minister in an official notice (Section 128).

The Environmental Management Act of 2002 provides the Minister responsible for the Environment to regulate the use of wetlands. In terms of Section 113 of the Act the Minister may declare any wetland to be an ecologically sensitive area and may impose limitations on development in or around such area. Further, no person may without authorisation in terms of the Act:

a. reclaim or drain any wetland;
b. disturb any wetland by drilling or tunnelling in a manner that has or is likely to have an adverse impact on any wetland or adversely affect any animal or plant life therein;
c. introduce any exotic animal or plant species into the wetland. Section 114 enables the Minister to serve an order on the owner, occupier or user of land under which they must take measures, construct such works or refrain from specific activities in order to protect the environment.

Biological Diversity: Further the Act enables the Minister to take such measures as may be necessary for the conservation of biological diversity and the implementation of Zimbabwe's obligations under the United Nations Convention on Biological Diversity adopted in 1992 and may, in so doing (Section 116):

a. identify the components of the biological diversity of Zimbabwe;
b. determine the components of biological diversity which are threatened with extinction;
c. prepare and maintain an inventory of the biological diversity of Zimbabwe;
d. determine actual and potential threats to the biological diversity and devise such measures as are necessary for preventing, removing or mitigating the effect of those threats;
e. devise measures for better protection and conservation of rare and endemic species of wild fauna and flora;
f. develop national strategies, plans and programmes for the conservation of the biological diversity of Zimbabwe;
g. promote the integration of conservation and sustainable use of biological diversity into relevant sectoral policies, plans and programmes;
h. require in writing any developer, including the government, to integrate the conservation and sustainable utilisation of the biological diversity in any project the implementation of which has or is likely to have detrimental effects to the biological diversity of Zimbabwe;
i. protect indigenous property rights of local communities in respect of biological diversity with scientific knowledge;

j. support the integration of traditional knowledge on conservation of biological diversity with scientific knowledge;
k. prohibit or restrict access by any person to or the exportation of any component of the biological diversity of Zimbabwe.

The Minister may also take such action or measures as may be necessary for the conservation of the biological diversity of a specific locality and may:

a. promote such land use methods as are compatible with the conservation of the biological diversity of that locality;
b. select and manage environmental protection areas for the conservation of the various terrestrial and aquatic ecological systems;
c. establish and manage buffer zones near environmental protection areas;
d. prohibit or control the importation of and introduction into the wild of exotic animal and plant species;
e. identify, promote and integrate traditional knowledge into the conservation and sustainable utilisation of the biological diversity of that locality; and
f. determine special measures for the protection of species, ecosystems and habitats faced with extinction.

Community rights to natural resources: The Act provides for land holders to acquire rights over wildlife through the granting of "appropriate authority" status. Thus, the owners of private freehold land are deemed to be the appropriate authority over wildlife on their land (Section 2). Communities acquire rights over wildlife through Rural District Councils (RDCs). A 1982 amendment to the Act provides for the Minister to appoint an RDC as the appropriate authority for wild life on the communal land within the jurisdiction of the RDC (Section 108). The Act states that no person may hunt any animal on any land or remove any animal or part of an animal except in term of a permit issued by the appropriate authority for that land [Section 59(2)]. The appropriate authority may hunt any animal on the land, remove any animal or part of an animal from the land and may issue permits to others to hunt or remove animals from the land. RDCs are then expected to apply the guidelines contained in the 1992 Wildlife Policy to devolve the decision-taking process in local wild life management and the distribution of wild life benefits to producer communities (i.e. smaller and more localised groups of people with wildlife on their land). Further policy guidelines state that RDCs
are expected to distribute a percentage of income derived from wildlife use to producer communities and to allow these communities to be responsible for several wildlife management activities. Because of the existing administrative system of local government, producer communities had to be represented by Ward Development Committees (WADCOs) and Village Development Committees (VIDCOs) which are advisory bodies to Councils.

In this way, various legal entities are granted authority over wildlife outside the Parks Estate. These authorities include private land-owners (where the land is held under an agreement of purchase or lease), forest land (such as Forestry Commission estates). For Communal Land, the Rural District Councils (RDC) may be appointed the Appropriate Authority. The Minister of Environment grants this authority, with input from the Zimbabwe Parks and Wildlife Management Authority. If appropriate authority is not granted, the authority remains vested in Central Government. This Appropriate Authority clause in the Act, paved the way for the implementation of the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)[3].

Statutory Instruments: There are several statutory instruments (SI) that regulate the wildlife sector:

[3] Note that the CAMPFIRE programme is about to undergo a comprehensive review that will impact on future policies.

- SI 362 of 1990: This legislation provides in sections 66-75 for the Regulation of Manufacture, Processing and Dealing in trophies.
- SI 76 of 1998: Parks and Wild Life (Import and Export) (Wild Life) Regulations specifically deals with Import and Export of wildlife products. This legislation was enacted to ensure compliance with CITES requirements for export and import of wild flora and fauna. These provide for the following:
    - Section 3 deals with the Control of Import and Export of wild life and trophies and lays down a general prohibition on the import into or export from Zimbabwe of any "wild life" or trophy of "wild life" except in accordance with either a certificate issued in terms of section 5 by the Director or Director of Customs, or an open general permit:
    - Section 5 deals with Permits and Certificates and is consistent with CITES legislation.
    - Section 15 deals with Offences and Penalties. Any person who contravenes any of the provisions of subsection 1 shall be guilty of an offence, and liable to a fine or imprisonment. To effectively ensure compliance, the Zimbabwe Parks and Wildlife Management Authority deployed a permanent team of officers based at all ports of exit and entry to assist border control officials in monitoring and inspection of all wildlife exports.
- SI 26 of 1998: The regulation provides for the monitoring of all hunting activities in the country to ensure compliance by all Safari Operators and international clients and to ensure that the TR2 Form. (Tourism Hunting Return Form) is duly completed.
- Trapping of Animals (Control) Act Chapter 20:21: The Act provides for the control, restriction and regulation of the construction, possession and use of certain traps for the purpose of trapping animals; to control the sale and disposal of certain animals, to include lions and to provide for matters incidental to or connected with the foregoing.
- SI 92 of 1992: Parks and Wild Life (Payment for Hunting of Animals and Fish) Notice, 2009: This instrument provides for compensation values of various wildlife forms to include animals and fish. It acts as an additional deterrent measure in matters where poaching cases are being dealt with in accordance with the law. The compensation value for illegal hunting of lion is USD 5 000, 00.
- SI 93 of 2009: Parks and Wild Life (Payment for Trapping of Wild Animals) Notice, 2009. This instrument provides for the payment of compensation to the state or game owners in the event that one is convicted for illegally trapping wild animals on various land categories. The compensation value for illegal hunting of lion is USD 5 000, 00.
- SI 40 Of 1994: Parks and Wildlife (Appropriate Authorities for Communal Land) Notice, 1994. This SI facilitates the granting of Appropriate Authority status to various Rural District Councils. This legislation devolved authority to Rural District Councils and gave rights to local communities to sustainable utilize wildlife and other natural resources in their areas of jurisdiction.

11.2.4 The Rural District Councils Act Chapter [29:13] 2002

The Rural District Councils Act is important in the wildlife sector as it provides for a legal entity (in Communal Lands) responsible for wildlife resources. Since the land in Communal areas is not privately owned by the communities and given that most of the communities do not constitute a legal entity, the Appropriate Authority status is conferred to the Rural District Councils (RDCs). Thus the RDCs act as custodians of the wildlife resources on behalf of the communities.

Efforts are now underway in some areas to form Community Development Trusts. There is scope for these Community Development Trusts to be used as vehicles to further devolve authority from the District level to the sub-district level, which will provide more income at a community level and therefore increase conservation support from the community as they will have a true vested interest.

The feasibility of granting Appropriate Authority to these Trusts in Zimbabwe needs to be assessed and piloted. The major challenge with these Trusts is that of financial sustainability as they do not have adequate funds to cater for their activities. Capacity-building of all Trust members is also a key requirement to ensure institutional sustainability.

In the Rural District Councils Act, there are three key terms that will be described further: Ward, Ward Development Committee and Communal Land. According to the Act, a "Ward" (an administrative unit) means a ward into which a council area is divided or re-divided. Several villages make up a ward. In the Act, a "Ward Development Committee" means a village development committee established in terms of Section 58 of the Act. A Ward Committee is made up of members who are elected from the community to represent the community in discussions/meetings with the Rural District Council. The Act further defines three different types of Wards. These are, Commercial Ward, Communal Ward and Resettlement Ward. The Commercial Ward is a large-scale commercial ward or a small-scale commercial ward. A Communal Ward is a ward consisting wholly or mainly of Communal Land. A Resettlement Ward is a ward consisting wholly or mainly of Communal Land (as in the case of the Communal Ward). It is important to establish whether in practice, the RDCs make
this distinction of the wards or whether they are all considered simply just as wards.

The "Communal Land" is defined as any land that is Communal Land in terms of the Communal Land Act [Chapter 20:04]; and any other land that was within the area of a district council on the 19th August 1988.

11.2.5 The Forest Act of 1948

This Act establishes the Forestry Commission and places demarcated forests under its control. The commission is responsible for the control, management and exploitation of state forests including the leasing of timber harvesting rights. The Act also gives the Minister the power to regulate the commercial use of timber from indigenous trees on other land.

As the appropriate authority for the Forest Areas, the Commission is also responsible for the management and conservation

11.3 Annex III: Analysis of Total Revenue by Country of Destination

Destination	2014	2015	Total
United States	$14,485,835	$11,942,785	$26,428,620
Russian Federation	$1,444,729	$861,925	$2,306,654
China	$1,416,196	$441,759	$1,857,955
Germany	$1,100,534	$698,450	$1,798,984
Canada	$620,852	$474,935	$1,095,787
South Africa	$513,070	$576,035	$1,089,105
France	$825,975	$158,291	$984,266
Australia	$671,527	$259,136	$930,663
Spain	$488,616	$321,064	$809,680
Austria	$519,322	$201,073	$720,395
India	$302,653	$241,741	$544,394
United Kingdom	$357,317	$183,888	$541,205
Italy	$181,956	$343,197	$525,153
Hungary	$418,824	$104,262	$523,086
Mexico	$252,263	$266,543	$518,806

Destination	2014	2015	Total
Norway	$300,645	$119,831	$420,476
Denmark	$132,690	$194,435	$327,125
Switzerland	$171,991	$123,828	$295,819
Sweden	$196,575	$80,014	$276,589
Ukraine	$80,432	$163,604	$244,036
Czech Republic	$104,450	$137,456	$241,906
Neatherlands	$89,042	$105,227	$194,269
Nigeria	$171,830	$0	$171,830
Bulgaria	$21,865	$123,469	$145,334
Argentina	$106,529	$24,888	$131,417
Finland	$65,768	$63,223	$128,991
Brazil	$56,785	$59,886	$116,671
Honduras	$104,683	$0	$104,683
Poland	$38,911	$62,015	$100,926
New Zealand	$17,880	$81,127	$99,007
Mauritius	$56,225	$36,945	$93,170
Chile	$91,374	$0	$91,374
Belgium	$9,340	$80,355	$89,695
Portugal	$78,470	$0	$78,470
Columbia	$77,944	$0	$77,944
Slovakia	$69,420	$0	$69,420
Botswana	$59,401	$0	$59,401
Pakistan	$54,208	$0	$54,208
Namibia	$20,298	$18,862	$39,160
Latvia	$37,611	$0	$37,611
Estonia	$12,078	$23,586	$35,664
Slovenia	$20,620	$11,200	$31,820
Kenya	$14,302	$16,957	$31,259
Dominican Republic	$30,463	$0	$30,463
Belarus	$0	$29,430	$29,430
Kazakhstan	$0	$28,460	$28,460
Romania	$0	$20,112	$20,112
United Arab Emirates	$19,629	$0	$19,629
Lao Peoples Democratic Republic	$15,000	$0	$15,000
Bolivia	$0	$11,553	$11,553
Lithuania	$9,164	$0	$9,164
Costa Rica	$5,900	$0	$5,900
Qatar	$4,896	$0	$4,896
Grand Total	**$25,946,088**	**$18,691,547**	**$44,637,635**

11.4 Annex IV: Analysis of Total Revenue by Species

Species	$2,014	$2,015	Total	2015 Quota	Utilised	% Utilised
Buffalo	$2,528,559	$1,962,570	$4,491,129	1,635	482	29%
Elephant (Tusks)	$2,042,610	$1,447,090	$3,489,700	246	64	26%
Elephant (Tuskless)	$1,444,040	$229,860	$1,673,900	462	113	24%
Lion	$630,950	$753,000	$1,383,950	82	49	59%
Leopard	$714,100	$668,490	$1,382,590	530	151	28%
Zebra	$594,239	$555,744	$1,149,983	2,480	600	24%
Sable	$456,615	$309,260	$765,875	718	78	11%
Kudu	$341,092	$357,963	$699,055	2,503	289	12%
Waterbuck	$293,903	$256,133	$550,036	988	156	16%
Hippo	$310,321	$217,470	$527,791	303	83	27%
Impala	$277,198	$242,624	$519,822	8,594	1,261	15%
Crocodile	$284,650	$202,705	$487,355	211	70	33%
Eland	$179,470	$187,990	$367,460	1,659	132	8%
Wildebeest	$180,665	$170,350	$351,015	2,189	220	10%
Giraffe	$158,385	$157,410	$315,795	880	135	15%
Nyala	$130,840	$117,175	$248,015	174	38	22%
Bushbuck	$116,011	$94,936	$210,947	1,082	125	12%
Warthog	$98,975	$89,820	$188,795	3,060	208	7%
Hyeana	$75,648	$54,503	$130,151	1,702	118	7%
Klipspringer	$44,130	$40,441	$84,571	823	59	7%
Bush Pig	$18,226	$30,370	$48,596	1,972	69	3%
Tsessebe	$19,800	$19,500	$39,300	186	15	8%
Baboon	$24,909	$13,664	$38,573	8,017	264	3%
Reedbuck	$23,265	$12,731	$35,996	371	20	5%
Steenbok	$13,790	$15,070	$28,860	927	31	3%
Jackal	$9,656	$15,889	$25,545	2,179	105	5%
Civet	$8,850	$11,368	$20,218	1,034	29	3%
Grysbok	$9,435	$8,585	$18,020	632	31	5%
Eland	$16,750	$0	$16,750	1,659	132	8%
Genet	$6,020	$14,183	$20,203	1,136	38	3%
Duiker, Grey	$2,774	$12,523	$15,297	2,005	53	3%
Duiker, Blue	$7,991	$0	$7,991	-	-	-
Honey Badger	$3,681	$3,625	$7,306	622	15	2%
Wild Cat	$3,160	$4,180	$7,340	812	19	2%
Guinea Fowl	$5,496	$968	$6,464	29,174	121	0%
Porcupine	$4,123	$1,473	$5,596	857	9	1%
Serval	$2,670	$2,410	$5,080	536	6	1%
Egyptian Goose	$3,025	$60	$3,085	4	-	0%
Cheetah	$2,560	$0	$2,560	42	-	0%
Ant Bear	$900	$1,651	$2,551	39	6	15%
Francolin	$1,166	$609	$1,775	22,449	109	0.5%

Species	2014	2015	Total	2015 Quota	Utilised	% Utilised
Dove	$1,321	$418	$1,739	34,485	63	0.2%
Monkey, Vervet	$885	$800	$1,685	3,677	15	0.4%
Ostrich	$1,200	$0	$1,200	14	-	0%
Mongoose	$508	$690	$1,198	279	3	1%
Sandgrouse	$456	$688	$1,144	8,088	78	1%
Oribi	$500	$500	$1,000	82	2	2%
Duiker, Red	$950	$0	$950	-	-	-
Caracal	$900	$0	$900	351	-	0%
Bushbaby	$850	$0	$850	-	-	-
Bontebok	$700	$0	$700	-	-	-
Waterfowl	$0	$400	$400	40	2	5%
Springhare	$60	$120	$180	-	-	-
Gemsbok	$105	$0	$105	6	-	0%
Hyrax	$75	$20	$95	371	1	0.3%
Duck	$29	$20	$49	10,779	13	0.1%
Aardwolf	$0	$0	$0	-	-	-
Blesbok	$0	$0	$0	40		0%
Rabbit	$0	$0	$0	252	-	0%
Hare	$0	$0	$0	138	3	2%
Lichtenstein's Hartebeest	$0	$0	$0	5	-	0%
Red Hartebeest	$0	$0	$0	7	-	0%
Grand Total	**$11,099,187**	**$8,288,049**	**$19,387,236**			

ZIMBABWE PARKS AND WILDLIFE MANAGEMENT AUTHORITY

LEGAL TRADE, CONSERVATION AND RURAL LIVELIHOODS: A ZIMBABWEAN PERSPECTIVE:

- L.W. NYAGUSE

AREAS TO BE COVERED

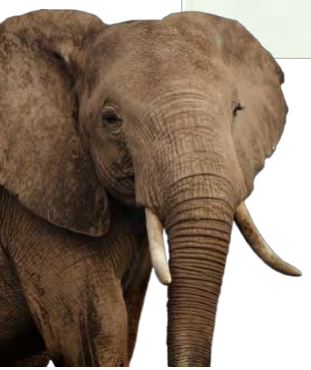
- Sustainable Utilisation
- Population Status of Key Species
- Quota Setting and CITES Quotas
- Quota Setting Considerations
- Legal Trade Framework
- Funding For Conservation
- Rural Livelihoods and Legal Trade
- How Does CAMPFIRE Work
- Community Benefits
- Revenue Generation
- Impacts of Community Benefits on Conservation

SUSTAINABLE UTILISATION

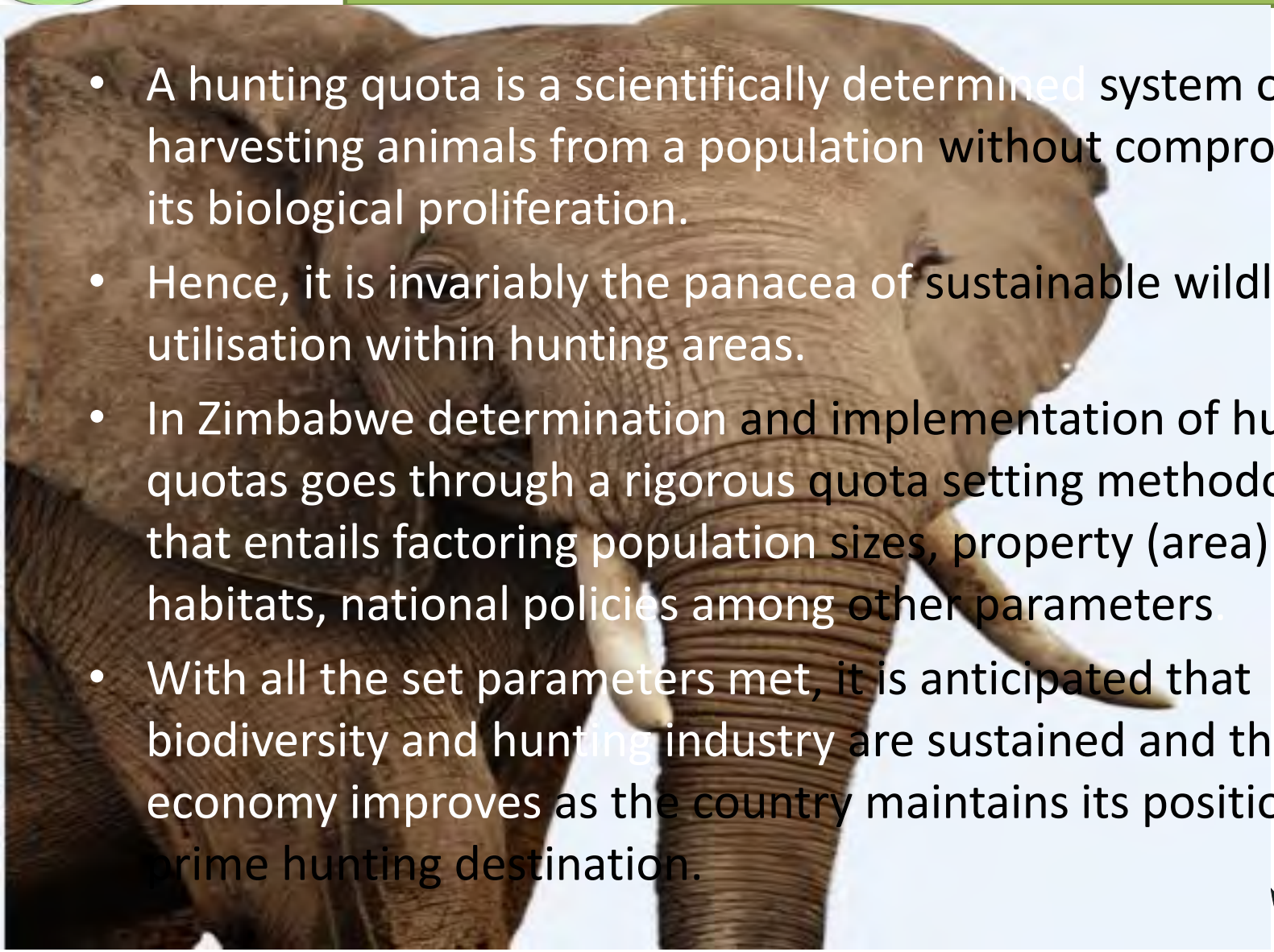
- Zimbabwe's conservation is based on the principle of sustainable utilisation, that the various species that are being conserved must contribute to conservation. This is the major source of funding for conservation.
- How successful has the concept been?????
- Adaptive management is probably one of the most important concepts in the implementation of this philosophy.

POPULATION STATUS OF KEY SPECIES (ELEPHANTS)

REGION	1980	1983	1989	1993	1995	2001	2014	2001 vs. 2014
North-West Matabeleland	20 444	25 888	27 411	27 841	30 985	49 310	53 949	9.4% increase at 0.7% per annum
Zambezi Valley	10 152	9 907	13 029	14 361	16 842	19 297	12 2 11	36.7% decline at 2.8% per annum
Sebungwe	11 126	9 302	12 946	10 742	11 796	13 989	3 634	75% decline at 5.7% per annum
Gonarezhou	4 704	3 985	5 286	5 241	4 156	4 992	10 722	115% increase at 8.8 % per annum
TOTAL	46 426	49 082	58 672	58 185	63 779	88 123	80 516	8.6% decline at 0.7% per annum



Quota Setting and CITES Quotas



- A hunting quota is a scientifically determined system of harvesting animals from a population without compromising its biological proliferation.
- Hence, it is invariably the panacea of sustainable wildlife utilisation within hunting areas.
- In Zimbabwe determination and implementation of hun quotas goes through a rigorous quota setting methodology that entails factoring population sizes, property (area) sizes habitats, national policies among other parameters.
- With all the set parameters met, it is anticipated that biodiversity and hunting industry are sustained and the economy improves as the country maintains its position as a prime hunting destination.

Quotas and Quota Setting Considerations

1. CITES National Quota
2. National aerial survey results
3. Research publications and preliminary results
4. Off takes for key species including leopards, lion and elephant
5. Size of property relative to the species requested and distribution
6. Illegal Off-take/Poaching
7. Property based Ecological assessments
8. Management regime on the properties (habitat, fire, water, land-use planning and zonation, fencing, supplementary feeding).
9. Human wildlife Conflict hotspots, Communal Benefits and conflict mitigation
10. Species sensitivity
11. Other off-takes (illegal management offtakes, live sells)
12. Trophy Quality
13. Habitat Change/fragmentation
14. Recommended sustainable off-take levels
15. Offtake Data

Quota Setting and CITES Quotas

Species	CITES Quota
Elephant	500
Leopard	500
Crocodile	200
Cheetah	50

LEGAL TRADE FRAMEWORK

- Current CITES regulations on trade in elephant and elephant products for Zimbabwe have an annotation affecting Zimbabwe's population of *Loxodonta africana* on Appendix II which restrict trade in hunting trophies for non-commercial purposes, trade in live animals to appropriate and acceptable destinations, trade in hair, hides, and leather goods for non-commercial purposes and trade in registered raw ivory for whole tasks and pieces.

FUNDING CONSERVATION

Zimbabwe's Protected Area Management system is self-funding in nature. This means therefore that the resource protection budget is financed through the sustainable utilisation of the various wildlife resources therein.

The African Elephant is one of the biggest drawcard species from a hunting perspective, and is at the centre of all the major hunts in the country. Generally hunting contributed an average of USD22m to the country's GDP in 2014 and 2015 (*RBZ Exchange control report on hunting tourism in Zimbabwe*) and contributes about 20% annually of the Authority's revenue budget.

The annual offtake quota provided through CITES is for 500 elephants per annum.

It is the utilisation of these offtake quotas that contribute significantly to Zimbabwe's conservation budget.

FUNDING CONSERVATION

Zimbabwe's Protected Area Management Funding

	2013	2014	2015	2016	2017
	Actual	Actual	Actual	Budget	Budget
	US$	**US$**	**US$**	**US$**	**US$**
REVENUE					
Hunting Income	5,423,995	5,072,493	3,256,698	4,418,700	3,000,000
Sale of park products/live sales	515,509		810,000		
TOTAL Revenue	**5,939,504**	**5,072,493**	**4,066,629**	**4,418,700**	**3,000,000**
EXPENDITURE					
Operational costs	5,766,886	6,071,981	5,123,926	7,525,500	4,000,000
Staff costs	16,850,007	20,294,821	19,705,931	21,666,800	19,725,000
Administration costs	2,558,886	3,244,961	2,922,619	2,004,900	2,000,000
TOTAL EXPENDITURE	**25,175,779**	**29,611,763**	**27,752,476**	**31,197,200**	**25,725,000**
SURPLUS/ DEFICIT	**-19,236,275**	**-24,539,270**	**-23,685,847**	**-26,778,500**	**-22,725,000**

RURAL LIVELIHOODS AND LEGAL TRADE

- One of the biggest CBNRM initiatives in Zimbabwe is the Communal Areas Management Programme For Indigenous Resources (CAMPFIRE)
- CAMPFIRE has a combined 2.4 million beneficiaries, made up of 200,000 households that actively participate in the program, and another 600,000 households that benefit indirectly from social services and infrastructure supported by CAMPFIRE income within districts.
- There are in excess of 120 elected and constituted Village and Ward CAMPFIRE Committees that operate through specific Traditional Leaders in their areas. *'Communal' in the acronym CAMPFIRE, has since been changed to 'Community' in order to focus on communities instead of the geographic spread of the programme.*

HOW CAMPFIRE WORKS

There are rural communities living adjacent or around most of Zimbabwe's National Parks or Protected Areas. These communal areas are under Rural District Councils (RDCs)

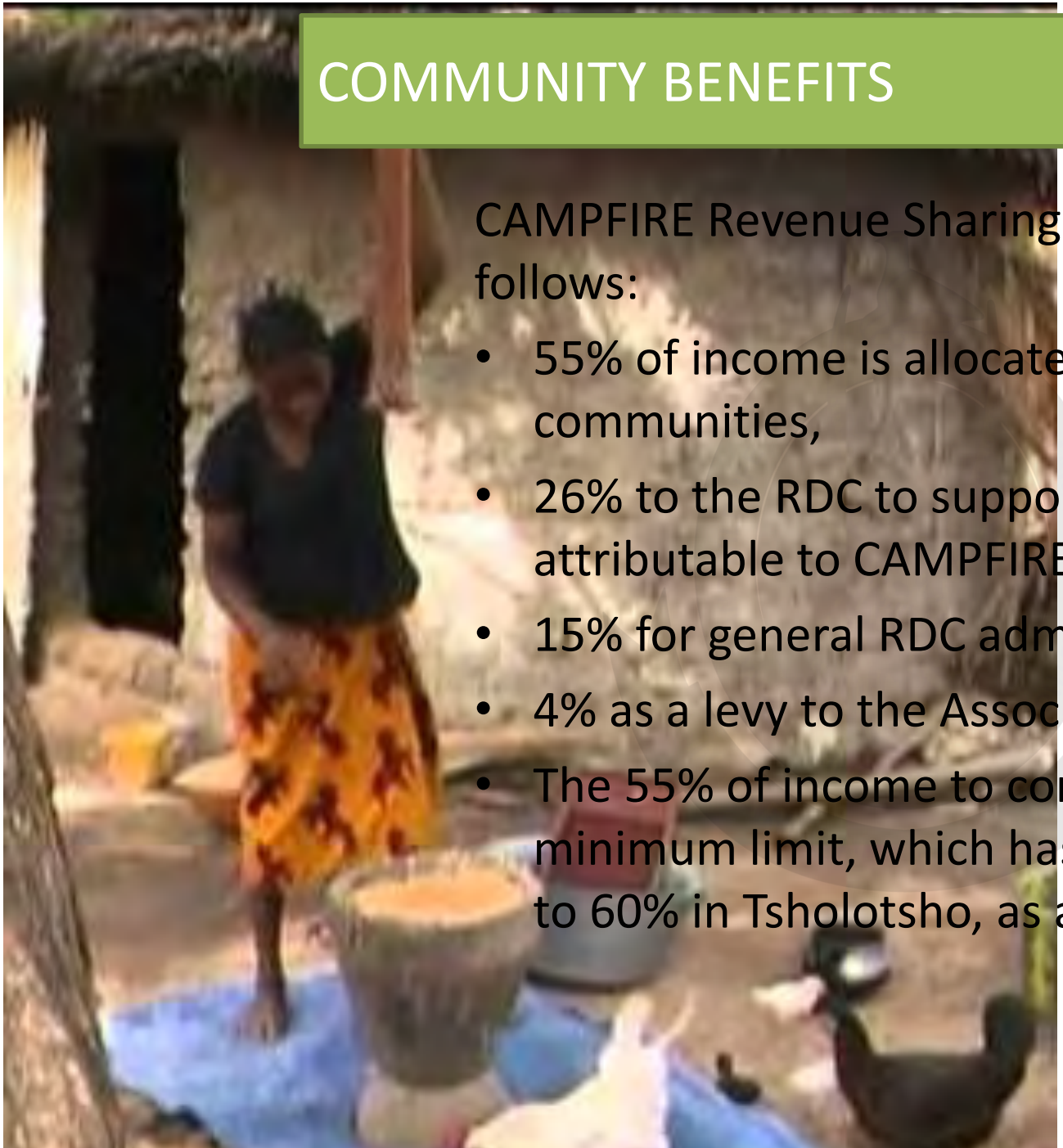
In the 1980s, the Zimbabwean government embarked on a Community Based Natural Resources Management Programme which would empower the rural communities to manage and utilise the natural resources in their districts.

To this end, the communities applied for and were given Appropriate Authority over their wildlife resources. This appropriate Authority meant that they could then embark on empowerment programmes for their own benefit.

All these districts fall under the CAMPFIRE Association

CAMPFIRE AREAS

Land area under CAMPFIRE	50,000 km^2 - 12% of Zimbabwe
No of CAMPFIRE Districts	58
No of wildlife districts	28 (15 active in hunting)
No of Safari Operators	33
No of Photographic safaris	10
No of leased Parks Safari Areas	4



COMMUNITY BENEFITS

CAMPFIRE Revenue Sharing Guidelines are as follows:

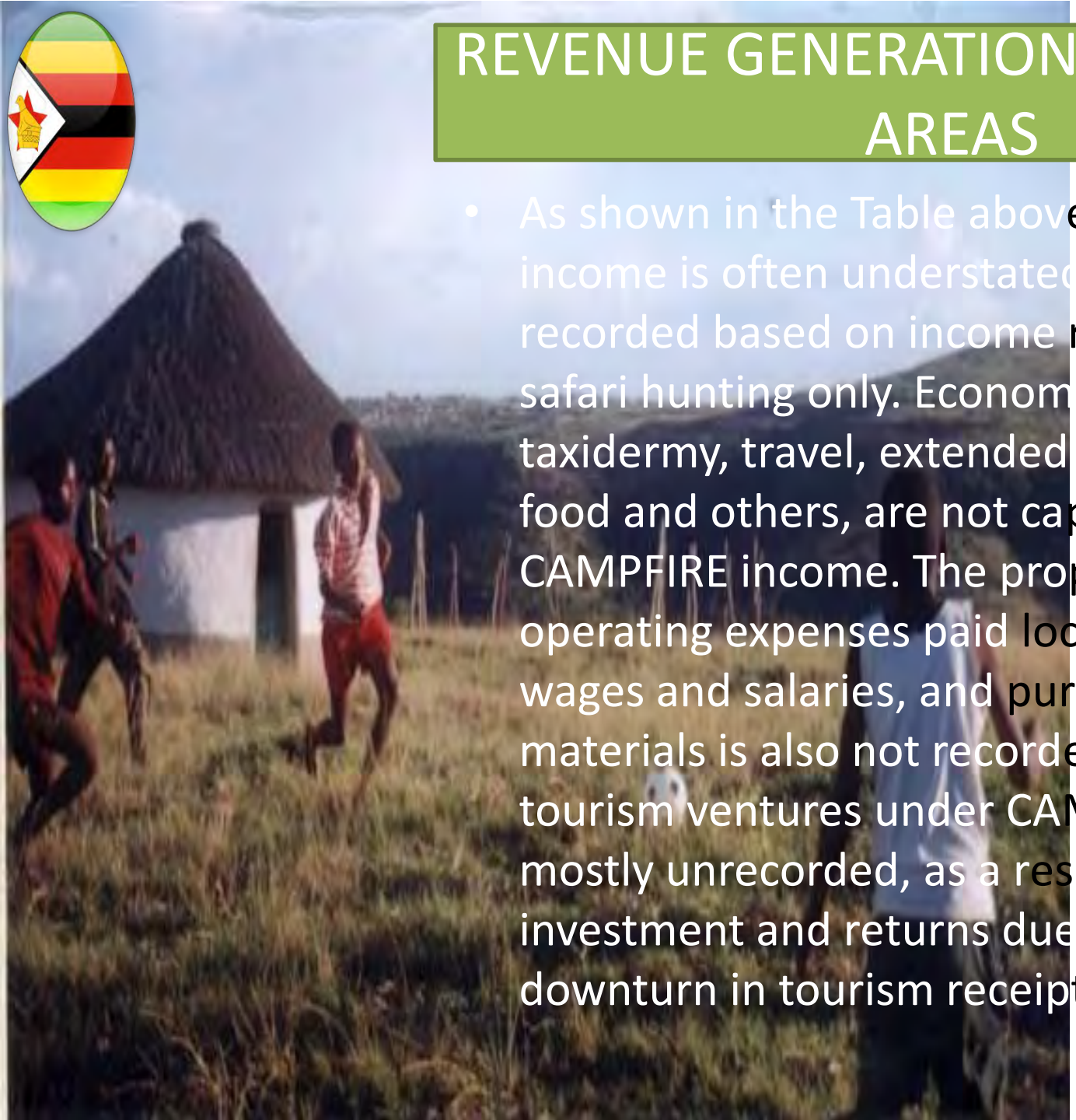
- 55% of income is allocated to communities,
- 26% to the RDC to support costs attributable to CAMPFIRE activities,
- 15% for general RDC administration, and
- 4% as a levy to the Association.
- The 55% of income to communities is the minimum limit, which has been exceeded to 60% in Tsholotsho, as an example.

REVENUE GENERATION - HWANGE

YEAR	GROSS INCOME	COMMUNITY 55%	CAMPFIRE MGT 26%	COUNCIL LEVY 15%	CAMPFIRE ASS 4%
2009	32,500	17,874	8,450	4,875	1,300
2010	41,725	22,948	10,848	6,258	1,669
2011	63,070	34,648	16,398	9,460	2,522
2012	74,408	40,924	19,346	11,161	2,976
2013	65,300	35,915	16,978	9,795	2,612
2014	85,777	47,177	22,302	12,866	3,431
2015	49,350	27,142	12,831	7,402	1,974

REVENUE GENERATION IN CAMPFIRE AREAS

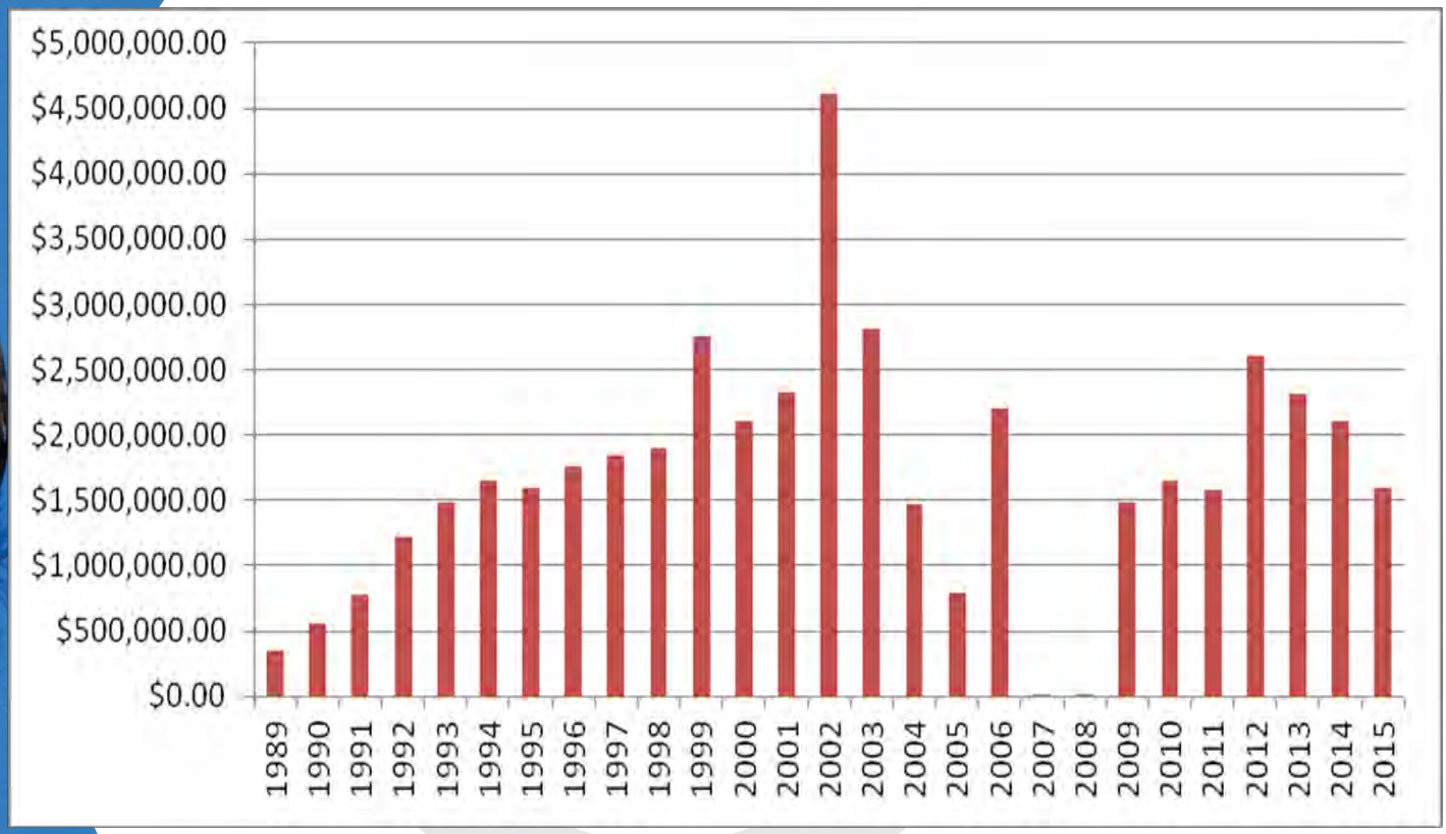
- On average CAMPFIRE generates nearly US$2million per year. This means that communities in major CAMPFIRE areas receive about US$1million every year in total. Since 2007, these communities have been opening their own bank accounts to receive cash from safari operators under a Direct Payment System. This system eliminates previous delays in money reaching the communities and ensures that communities see the value of wildlife.



REVENUE GENERATION IN CAMPFIRE AREAS

- As shown in the Table above, CAMPFIRE income is often understated as it is largely recorded based on income receipts from safari hunting only. Economic multipliers like taxidermy, travel, extended tourism activities, food and others, are not captured as part of CAMPFIRE income. The proportion of safari operating expenses paid locally in the form of wages and salaries, and purchase of materials is also not recorded. Income from tourism ventures under CAMPFIRE is also mostly unrecorded, as a result of low investment and returns due to the current downturn in tourism receipts for the coun

REVENUE GENERATION – CONT'D



MODELS FOR REVENUE DISBURSEMENTS

- The gross amount disbursed to communities as dividends from 1989 to 2006 was US$20,8million, representing 52% of the total income earned. Total income generated between 2009 and 2015 was US$10,2million. The amount disbursed to communities was US$5,5million, representing 54% of total income earned.
- American clients generally constitute 76% of hunters in CAMPFIRE areas for all animals hunted each year. The suspension of ivory imports from Tanzania and Zimbabwe by the United States of America (USA) in April 2014 resulted in the cancellation of 108 out of 189 (57%) elephant hunts initially booked by US citizens in CAMPFIRE areas. As a result of the ban, CAMPFIRE income dropped to US$2,1million in 2014, compared to US$2,3million in 2013, as fewer American hunters conducted their safaris nevertheless in anticipation of the lifting of the ban. However, the ban continued into 2015, resulting in a massive decline of total CAMPFIRE income to US$1,6million.

Use of Income

- Revenue received by communities (about USD1 million annually) helps directly offset the costs of living with wildlife.
- Most communities have voluntarily invested in infrastructure which has long term benefits such as clinics, schools, and grinding mills.
- However, in some areas, the projects are spread too thinly to meet the needs of a growing number of people.
- Other communities have drilled boreholes, constructed seasonal roads, erecting of fencing to keep out wildlife, purchase of tractors, and direct purchase of drought relief food. Children benefit from reduced walking distances through the construction of schools, procurement of learning materials, and payment of school fees from CAMPFIRE proceeds.
- Communities also benefit from meat in excess of the requirements of safari hunting operations, and from problem animal control.

COMMUNITY PROJECTS FUNDED FROM CAMPFIRE REVENUE

District	Project
Beitbridge	Rehabilitation of schools, clinics and protection of irrigation schemes
Bililima	Rehabilitation of 3 clinics and 3 primary schools, hall, fencing of fields and rehabilitation of lodge, community truck, tractor, dam repair machinery.
Chipinge	3 grinding mills, lorry, teachers houses, community office, shop
Chiredzi	Clinics, mothers waiting shelters, teachers' houses, primary schools, community-grinding mills, Police sub-office, piped water and electrification of clinic.
Hurungwe	Construction of classroom block - Nyamakate Secondary, Maintenance of Nyamakate bridge. Purchase of tractor tube, Payment of carpenters, Roofing Chipfuko Primary School and Huyo Secondary School, CAMPFIRE Ward tractor major service, Purchase of Treasurers bicycle, Payment of Nyamakate Clinic guard, 7 resource monitors allowances, 26 bag cement Chitindiva, Kabidza , Manyenyedzi and Mawau cchools for toilets construction, Renovation Karuru School (5 bags cement), and toilet construction, Chitindiva Clinic toilet construction, Roofing Chikova Secondary School, Purchase of buiding materials Chikova Secondary Block, Painting Dete Primary School, Building toilets Makwiye school, Building shed Mupuse school, Roofing Bhashungwe primary school, Sanyati Bridge camp renovation, Purchase of Cement Tashinga Primary School, 6 pairs uniform for resource monitors, Purchase of 20 bags cement Chisipite Primary School, Purchase of tyres for ward tractor, Bridge maintenance
Mbire	Clinics, nurses houses, ward offices, storerooms, 14 classrooms, 7 teachers houses, grinding mills, school offices, wildlife administration offices, 2 hand pump boreholes, water piping, toilet, water storage tanks, 2 tractors, a basic tourist camp with 4 chalets;
Nyaminyami	Tillage tractors, renovation of dispensary at clinic, nurse's house. Construction of Mayovhe classroom block, 3 grinding mills, Teacher's house, Jongola school. School bursaries x 3 students at Seke Teacher's College. Renovation of pre-schools x 2. Negande: Rehabilitation of water pipeline, grinding mill. Nebiri: Chikuro primary block, rehabilitation of Harudziva water pipeline. Kasvisva: Rehabilitation of water pipeline to supply water to Kasvisva clinic, Kasvisva Secondary school block. Msampa: Teacher's house, Majazu primary, renovation of ward warehouse; Kanyati: Cement for teacher's house renovation.
Tsholotsho	Classroom blocks and furniture (Sihazela, Mlevu, Mtshwayeli, Ntulula, Dibutibu, Gwaai, Nkwizhi, Zibalongwe, Malindi, Mgodimasili, Phelela, Mpilo, Jimila, and Kapane Primary schools), 2 F14 cottages, 10 sewing machines (Dibutibu Secondary school), 7km piped water system for Thembile primary school, Sikente Clinic, Tshitatshawa and Jowa clinics construction, fencing of Madlangombe clinic, 10 water engines, borehole drilling and repairs and repair kits, Lister diesel engines for 6 villages in ward 21 and at Sihazela Line in ward 1, grinding mills, solar water pumping in wards 1, 2 and 4. 2 pickup trucks for wildlife monitoring purchased in 2015.

IMPACT OF COMMUNITY BENEFITS ON CONSERVATION

- Every time there is human-elephant conflict, the communities need to see that action is taken by the Authorities, either through compensation for loss and/or damage and through eliminating further potential threats. Any inaction by the Authorities usually results in communities taking matters into their own hands, to the detriment of the wildlife resources therein. However, where communities derive benefit and where there are locally designed and built-in mechanisms for compensation for the whole community through the utilisation of the resources, the communities tend to be more tolerant towards the animals.
- Elephant damage to Community Property includes the following;
- Destruction of crops which affects both the quality and quantity of harvests and impacting negatively on food security;
- Destruction of property;
- Depletion of water sources;
- Destruction of water infrastructure;
- Reduced grazing land;
- Restricted access to essential commodities such as firewood;
- All this results in loss of property and opportunities to carry out other activities due to time spent guarding crops and property.

THANK YOU

MAZVITA!!!

RESPONSE TO THE UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE (USFWS)

JULY 2015

BACKGROUND TO ELEPHANT MANAGEMENT IN ZIMBABWE

Zimbabwe has a proud history of successful elephant conservation, and is one of the key elephant range states and home to the second largest remaining elephant population after Botswana. The population estimate from the 2014 aerial survey stands at 82,092 elephants.

In the early 1900s the elephant population in Zimbabwe was estimated to be about 4,000. By 1980 the population had increased to an estimate of 46 426 elephants. The population continued to increase and in 1993 it was 58,185, in 2001 it was 88,123. A twenty fold increase in elephant populations was observed from the early 1900 to 2001. This increase was noted despite attempts to limit elephant population growth between 1960 and 1989 through culling exercises in tsetse control areas and state protected areas.

The number of elephants taken off during this period was approximately 45,000elephants. The primary rationale for limiting elephant numbers in protected areas was to reduce their impact on woodland habitats and the loss of plant and animal species as a result of elephant induced habitat change. Between 1990 and 2006 elephant populations grew exponentially but growth has since been limited by an escalation of illegal killing among other factors. The elephant population estimate between 2001 and 2014 has experienced a statistically insignificant change from an estimate of 88,123 to 82,092 elephants.

The human population has also increased twenty-fold between 1900 and 2000, resulting in increased demand for land for agriculture and other forms of land-use outside protected areas thereby limiting the area available for elephants with a resultant increase in human elephant conflict.

The high elephant population in some protected areas has resulted in ecological problems associated with localized overabundance which include: conversion of woodlands to scrubland and grasslands, and decrease in species diversity of both flora and fauna. Recent studies indicate that elephant densities that are as low as 0.27 elephants per km^2, elephants will convert the woodland into coppice in 120 years due to the massive declines of large trees (Mapaure, 2013). The same result is achieved in 10 years if the density is at 2 elephants per km^2; however other factors such as fire also have a huge influence on woodlands. It is generally accepted that the elephant density that can allow for the recovery of woody species is 0.5 elephant per km^2 in less than 100 years.

Zimbabwe subscribes to the principle of sustainable utilization of all wildlife resources including elephants. Sport hunting is the principal form of wildlife utilization whereby off takes are adaptively managed and monitored through a participatory and science based process. This process allows for sustainable off takes, and rigorous resource monitoring programmes that allow recruitment within a population to ensure the continued survival of the population in the wild. The high economic value conferred to the elephant through consumptive utilization has also resulted in increased tolerance by local communities.

1. Management Plan

What is Zimbabwe's target elephant population, both nationally and by sub-regions (e.g., how many individuals and/or populations or what percentage of land with elephants)?

Zimbabwe's major elephant range which is the basis for all national surveys is 67,898km^{2}covering approximately17% of the country's total land area. The major elephant range comprises of South East Lowveld (10,409km^2), Sebungwe (15,527km^2) North West Matabeleland (24,959km^2) and Zambezi Valley (17,003km^2) as shown in Figure 1 below.

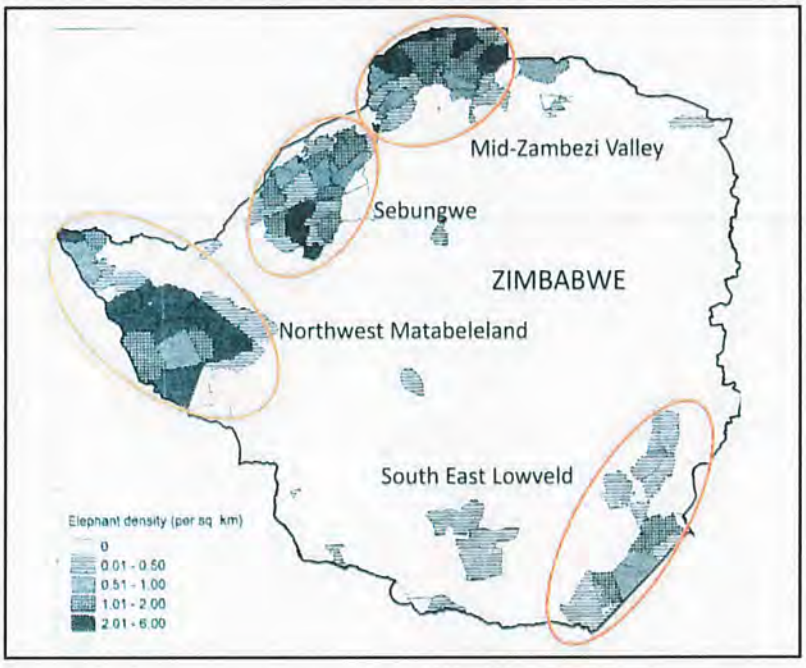


Figure 1.Distribution of the four major and minor elephant ranges in Zimbabwe.

The range covers all land categories which include protected areas, private, forest and some communal lands. The map above shows the four major elephant range in Zimbabwe. According to the 2014 National Elephant population aerial survey, Northwest Matabeleland had the highest population of elephants (53,991) followed by South East Lowveld (13,037), Zambezi Valley (11,657) and Sebungwe (3,407).

As discussed below, ZPWMA has set a preferred density, but most of the ranges already exceed this density at varying degrees. As such it has become apparent to develop range based Elephant Conservation plans to factor in the special variations in management interventions required for

each range area. Accordingly, population targets for each major range, which take into account the preferred density and other factors, have been or will be set at participatory workshops for each area. Generally, Zimbabwe's target is to maintain essentially the same range (or perhaps expand the range), which is at least 17% of land as elephant habitat.

At the strategic level the in the Elephant Conservation and Management Plan the following three targets are outlined:

- To maintain at least four demographically and genetically viable elephant populations in Zimbabwe
- To maintain or increase the elephant range in Zimbabwe
- To maintain numbers /densities of elephant at levels that do not adversely impact on biodiversity conservation goals while contributing to economically viable and sustainable land uses

At an operational level the following targets have been set following a series of workshops to develop sub-regional action plans:

A target of 5,000 elephants has been set as a minimum viable population (MVP) for the Sebungwe region. The 2014 aerial surveys established a population estimate of 3,407elephants in approximately 7,000km^2 of available habitat. The objectives for the sub-region therefore are to increase the elephant population to international standards for minimum viable elephant populations. This target was set during the Sebungwe Elephant Management Plan Workshop held at the Musango Safari Camp in May 2015.

The MVP is the population size that is required for a high probability of survival of a population over a given period of time. The MVP is the minimum population size that is considered large enough to avoid inbreeding depression, with sufficient genetic diversity for adaptive change to occur and large enough to avoid new deleterious mutations to occur. The MVP however is also largely depends on habitat quality, law enforcement effort, social factors and other key variables including stochastic events therefore is cautiously used as a target.

For the remaining 3 regions namely North West Matabeleland, Zambezi Valley and South East Lowveld target populations will be developed through participatory Elephant Management Planning Workshops. A workshop for Mana Pools National Park / Zambezi Valley was held 30 March – 2 April 2015 while that for South East Lowveld is scheduled for to run between 2nd and 4th of September 2015. Workshops for the other ranges are in final planning stages and the dates will be announced once they have been finalized.

- One of the major targets at the strategic level is to maintain the elephant range at the 1996 level through enforcement of legislation

- To increase the range and habitat availability for elephants through initiatives such as Trans-frontier Conservation Areas which include Great Limpopo Transfrontier Park (GLTP) / Great Limpopo Transfrontier Conservation Area (GLTFCA); Kavango-Zambezi (KAZA) TFCA; Lower Zambezi-Mana Pools LZMP (TFCA) and Zimbabwe-Mozambique-Zambia (ZIMOZA) TFCAs. In addition to the TFCAs new conservancies have been formed thus increasing the size of the range available to elephants.
- To increase connectivity between sub-populations through the creation of wildlife migration corridors such as Hwange Sanyati Biological corridor project linking North West Matabeleland and Sebungwe.

A copy of Draft Zimbabwe's Elephant Conservation and Management Plan will be provided shortly. Certain Key Activities, Key Performance Indicators (KPIs), and Means of Verifying KPIs have been included here in response to questions.

How have these targets been set (e.g., ecological carrying capacity estimate, historic numbers)?

The target for Sebungwe has been set using the MVP size of 5,000 elephants which is considered genetically viable internationally (Armbruster andLande1993). In setting the MVP target for Sebungwe, population viability analyses and simulation models to predict the impacts of elephants on habitat among other variables as well as thorough analyses of habitat quality and other factors were used.

The targets for the following sub regions North West Matabeleland, Zambezi Valley and the South East Lowveld will be set using preferred densities and ecological carrying capacity, geographical distribution and habitat connectivity, and also take into account historic numbers and the economic viability for wildlife based tourism as well as genetically viability. It should be noted that Zimbabwe's elephant population exceeds preferred densities in every range except Sebungwe, but preferred density is only one factor among many taken into account.

Within the framework of the National Elephant Conservation and Management Plan, the setting of targets is incorporated the setting of targets is incorporated under each of the five key components as shown in the table1below:

Table 1. Strategic Objectives in Elephant Management Plans

Key Component	Strategic Objective
Protection & law enforcement	Ensure effective protection of all population of elephant in Zimbabwe
Biological monitoring & management	Implement effective biological, ecological management to achieve populations that are within upper and lower acceptable limits to change in numbers and distribution
Social, economic & cultural framework	Implement strategies that enhance the contribution of elephants to rural livelihoods and national development
Building conservation capacity	Ensure that sufficiently and appropriately trained personnel, equipment, infrastructure and financing are mobilized, available and used efficiently and effectively
Coordination, collaboration& programme management	Ensure effective coordination and collaboration with national and international stakeholders

Under biological monitoring and management, "targets will be set based on results of extensive long term monitoring as well as on-going research on elephant-vegetation dynamics. Thresholds of potential concern will be established, spatial data on geographical distribution mapped and wildlife based land uses promoted in connectivity areas and biological corridors."

Due to the high elephant population in some protected areas, localized over-abundance and associated problems are being experienced, for example the threat to *Colophospermum mopane*. In some areas human population growth and settlements in buffer zones has led to elephant population compression in protected areas, which poses a high risk to woodland persistence. However, the Zimbabwe Parks and Wildlife Management Authority (ZPWMA or the Authority) seeks to balance protection of biodiversity and woodland cover with concerns over the declining elephant populations in some countries and international focus on the elephant as a species under severe threat from poaching. Accordingly, ZPWMA would prefer to maintain a density of 0.5 or 0.25 elephant per sq. km. Density levels are however determined at a local level in accordance with the objectives of the Park or habitat area. Whilst there are no formulas to determine definite density levels to maintain biodiversity, available literature, (G. C, Craig unpublished, 1997) suggest that tree canopy cover only exceeds 50% at elephant densities of between of between 0.1 – 0.5 per sq.km. As such, a precautionary principle, Zimbabwe would want to maintain elephant densities within the afore-mentioned acceptable levels. However, variation to this exists where tourism objectives have been met and public opinion is saying otherwise (e.g. the international lobby against culling)

While the Sebungwe Action Plan is ready and one for the Zambezi Valley is being drafted, there are two regional stakeholder workshops in advanced stages of planning, for North West Matabeleland and South East Lowveld. These workshops will set targets for the sub-regional populations as well as measurable action items and indicators.

However, ZPWMA seeks to balance protection of biodiversity and woodland cover with concerns over the declining elephant populations in some countries and international focus on elephant as a species under severe threat from poaching and human encroachment.

How are current human settlements, as well as anticipated growth of these settlements, factored into these targets?

It should be borne in mind that the human population of Zimbabwe also increased twenty-fold between 1900 and 2000, with the result the range available to elephants accordingly under increasing threat. Zimbabwe's human population growth has led to increasing demand for agricultural land especially in the Sebungwe region thus putting pressure on some previously unsettled areas mainly in the Sebungwe Region. For this area the target population has been set at the minimum viable population level of 5,000 elephants.

There is currently effort through the Hwange-Sanyati Biological Corridor project to sustain movement of wildlife through from North-West Matabeleland (areas with high elephant densities) to the Sebungwe Region. This is envisaged to ensure the free movement of elephants, reducing some of the population pressures in North-West Matabeleland while populating the Sebungwe region to the targeted minimum sustainable population level of 5,000 elephants.

Current human settlements as well as anticipated growth of these settlements have been factored in the Action Plan for Elephant Conservation and Management in Zimbabwe through various initiatives which include increasing habitat connectivity. In some populations such as North-West Matabeleland the TFCA concept is being implemented to ensure connectivity of range areas at the national level with neighbouring Range States (Botswana, Zambia, Namibia and Angola). TFCA initiatives like the Great Limpopo Transfrontier Park (GLTP) / Great Limpopo Transfrontier Conservation Area (GLTFCA); Kavango-Zambezi (KAZA) TFCA; Lower Zambezi-Mana Pools LZMP (TFCA) and Zimbabwe-Mozambique-Zambia (ZIMOZA) TFCAs help in maintaining a demographically and genetically viable population, creating landscapes for ecosystem processes suitable for elephants. There is a lot of research work being undertaken by ZPWMA researchers in collaboration with external researchers on elephant population dynamics, spatial distribution, impacts on vegetation and human wildlife conflict, etc. The research outputs have been published in peer reviewed international journals.

In areas where the human population has grown substantially, sustainable livelihood options are currently being explored so as to diversify income from wildlife, thus sustaining a wildlife based land-use which is critical in sustaining Wildlife Areas. Currently the Government is reviewing

the CAMPFIRE concept so as to present it as an efficient Community Based Natural Resources Management program. This is envisaged to ensure sustainable coexistence's-management of wildlife resources is vitally important as it instils value attachment to wildlife and hence increases its protection by communities.

Maintaining the integrity of protected areas in the range through enforcement of legislation is another way the targets are being met. The country is enforcing legislation that prevents human settlements within the state protected areas which form the bulk of the National Elephant Range. Zimbabwe is also a signatory to Regional and International legal and policy frameworks that enhance cooperation in curbing wildlife crimes across borders such as Interpol. Also within the protected areas any proposed developments that occur are supposed to have Environmental Impact Assessments to determine the effect of any such proposed developments will have on the environment and the biological resource. These measures as well as anticipated growth of settlements are factored into the targets in the Action Plan for Elephant Conservation and Management in Zimbabwe.

The implementation of integrated land-use planning as well as the review of the CAMPFIRE model will promote the development of buffer zones between the protected areas and human settlements. These buffer zones will have minimal developments and will be used as wildlife areas. Monitoring plans as well as regular assessment through land use planning will be used to ensure that buffer zones and biological corridors are maintained. Development of joint management plans and joint implementation of activity plans at the local level are factored into the development of targets.

Targets to ensure that viable elephant populations, geographical distribution and habitat connectivity are achieved and maintained are included in the Action Plan. Wildlife based land use systems as well as the promotion of the establishment of community conservancies are among the activities for areas within the elephant range with high human population densities and human settlements. Anticipated growth of human settlements factored into the targets through implementation of integrated land use planning.

In areas where human populations have grown substantially, sustainable livelihood options are currently being explored so as to diversify income from wildlife, thus sustaining a wildlife based land-use which is critical in sustaining Wildlife Areas. Currently Zimbabwe is reviewing the CAMPFIRE concept so as to present it as an efficient Community Based Natural Resources Management program. This is envisaged to ensure sustainable coexistence.

What mechanisms will be utilized to reach these targets?

The mechanisms that will be utilized to reach the targets include key activities that will be implemented in order to achieve the desired outputs in the Action Plan for Elephant Conservation and Management in Zimbabwe. The activities under each component are outlined below:

Protection and law enforcement:

- For each key population establish a highly trained rapid response anti-poaching unit for deployment to areas under threat
- Enhance international and trans-boundary collaboration in law enforcement
- Enhance social (community) involvement in law enforcement
- Reduce illegal settlements
- Revisit the appointment of Honorary Officers to assist in law enforcement
- Ensure full compliance with hunting regulations and quotas set
- Adopt, adapt and apply new technology (including aerial) for area surveillance
- Appropriate informer systems established
- Improve investigation and prosecution of crimes
- Set up national and local intelligence databases

Biological monitoring and management:

- Monitor elephant population trends and elephant impacts on biodiversity through aerial, ground and ranger-based methods, among others
- Use research findings, expert opinion and informed public opinion to establish thresholds of potential concern (TPCs) to initiate management action in respect of elephant impacts for protected areas
- Monitor trophy quality and adjust quotas to maintain desired levels of trophy quality
- Carry out appropriate management actions when populations exceed TPCs
- Monitor trophy quality and adjust quotas to maintain desired levels of trophy quality
- Define current elephant range and explore options for extending range and maintaining connectivity
- Recognizing the long response time of elephants to management interventions, use modelling to project alternative outcomes or scenarios of management

Social, economic and cultural:

- Facilitate the transparent distribution of the benefits and costs of elephant management and conservation
- Implement effective techniques and land-use strategies to mitigate human-elephant conflict.
- Develop and implement an effective communication strategy for local, regional and international audiences
- Provide incentives and promote partnerships and joint venture opportunities
- Explore additional elephant-based tourism and sustainable utilization opportunities
- Information on elephants and their conservation in academic institutions
- [Further develop sustainable use opportunities for elephant]

Building conservation capacity:

- Secure funding to initiate the implementation of the elephant management plan
- Establish sustainable funding programs to build and maintain necessary human resources and strengthen elephant conservation and management capacity
- Strive to achieve best standards for elephant management, including any forms of utilization
- Engage available expertise and capacity within Zimbabwe
- Unlock value in elephants and their products
- Analyse current capacity and identify needs
- Initiate and/or maintain continuity in research and monitoring
- Strengthen research capacity in ZPWMA
- Establish training and in-service retraining

Coordination and collaboration:

- Establish a national elephant conservation and management taskforce/steering committee that includes stakeholders meetings at least bi-annually to review progress and to develop an annual implementation plan
- Complete regional planning and population target setting
- Establish four regional management committees to meet at least twice each year and implement regional plans
- Strengthen coordination between the hunting industry and the elephant

management program

- Implement an effective information dissemination and communication strategy, including regular progress reports on the implementation of the plan
- Strengthen links with neighbouring states to confer on the management of shared elephant populations
- Establish a full-time elephant manager

What monitoring will be conducted to measure progress toward these targets?

Monitoring is being and will be performed through Key Performance Indicators (KPIs) and means of verification. These indicators are included in the draft framework developed at the National Elephant Conservation and Management Planning workshop and will be included in the final National Elephant Management Action Plan, which will be made available shortly.

Monitoring and analysis of data from surveys such as water hole censuses, road strip counts and aerial surveys expected to be conducted in 2017, if funds permit, ranger-based monitoring and reporting of carcasses and carcass trend analysis; tracking of anti-poaching efforts and prosecutions; tracking of land resettlements or removal of illegal settlements.

Monitoring to measure progress towards the targets will be conducted through consideration of the following:

Protection and law enforcement

- Reports on results of law enforcement effort in various categories recorded at field stations, conservancies, and CAMPFIRE District Offices, compiled at regional and national levels and presented to the Regional and National Coordinating Committees (R&NCC) bi-annually
- Reports on Hunting regulation infringements derived from SOAZ/ZPHGA reports and from field station reports compiled and presented to R&NCC
- Consolidated record of number of field personnel and days operational (law enforcement, research &monitoring, elephant management) for each area in the elephant range compiled and reported on at annual planning meetings
- Research reports and papers on elephant conservation and management
- Training on new technologies
- Legislation (e.g. tracking illegal financial flow sand deterrent sentences)

Biological monitoring and management

- Reports on elephant surveys
- Elephant distribution maps
- Database on elephant mortality
- Assessment report on Thresholds of Potential Concern in elephant ranges
- Report on trophy quality trends
- Reports to international monitoring systems as required (e.g.AED,ETISand MIKE)
- Reports and maps of active corridors.
- Report on trend in trophy quality
- Hunting as a management tool (dispersal/containment)
- Capture and translocation
- Fire management protecting elephant habitats

Social, economic and cultural

- Record of beneficiaries and benefits availed
- Report on costs associated with elephant censuses, protection outside protected areas
- Database on HEC
- Documented policies and list of operating partnerships/joint ventures that promote elephant conservation and management
- Record of investments in elephant conservation measures assembled by elephant program manager/coordinator
- Records and annual summary of arrests and poaching incidents intercepted based on leads provided by communities
- Hunting/live sales to generate revenue incentivize, HEC

Building conservation capacity

- Record of funds available (USD) and investment by ZPWMA, Private sector, NGOS, and CAMPFIRE in elephant conservation measures (Compiled annually by the Authority's Elephant Manager/Coordinator)
- Record of funds generated from elephants and their products

Coordination and collaboration

- Record of meetings, minutes, actions completed, attendance at national and regional committee meetings
- Record of when minutes of meetings were completed and circulated
- Record of reports by the person in the elephant management position

What actions are authorized to ensure progress towards these targets?

The government of Zimbabwe has developed and institutionalized pieces of legislation and is party to regional and international conservation initiatives to ensure effective biodiversity conservation. Actions that are authorized to ensure progress towards these targets are summarised in Table 2below;

Table 2: Actions authorized to ensure elephant population protection

Authorised action	**Enabling legislation, policy and treaties**
Protection and law enforcement Protection and law enforcement regarding wildlife and habitats is augmented by a rigorous array of legislative instruments.	• Parks and Wildlife Act 1996(amended) • Criminal Law Codification and Reform of 2013Act Chapter 19:23 • Protection of Wildlife (Indemnity) Act of1999 Chapter 20:15 • Environmental Management Act of 2002 Chapter 20:27 • Statutory Instrument 26 of 1998 • The Parks and Wild Life General Laws Amendment number 5 of 2011 • Statutory Instrument 45 of 2014 • Parks and Wildlife Management Authority (Tariff of Fees) By-laws, 2015 • Elephant Conservation and Management Action Plan, 2015 -2020 (Draft) • Sebungwe Region Elephant Management Plan, 2015 to

	2020 (Draft) • Environmental Management Act of 2002, Chapter 20:20 • Forestry Act Chapter of 1990, Chapter 19:05 • Statutory Instrument 57 of 2012 Parks and Wildlife (Payment for Trapping of Wild Animals) Notice, 2012 • Statutory Instrument 56 of 2012 Parks and Wildlife (Payment for hunting of animals) Notice, 2012 • Firearms Act • The Customs and Excise Act • Urgent Measures (African Elephant Summit on 2- 4 December 2013 • Interpol • Prevention of Cruelty to Animals 19:09 • Zimbabwe Policy on Wildlife • Policy and plan for elephant management in Zimbabwe 1997 • ETIS Programme
Biological monitoring and management Monitoring and management of elephants in Zimbabwe conforms to the requirements of locally and internationally adopted standards and guidelines.	• National Elephant Management and Conservation Action Plan(Draft) 2015/2016-2020/2021 • Sebungwe Region Elephant Management and Conservation Plan 2015 – 2020 (Draft) • MIKE Programme

	• WWF Quota Setting Manual • IUCN Guidelines on introductions and reintroductions
Social, economic and cultural Elephant management takes into account the enables derivation of economic benefits to local communities and the country at large, by conferring elephants with an economic value. Co-existence between wildlife by local and elephants is enhanced by mitigating human and elephant conflict.	• CAMPFIRE • Wildlife Based Land Reform Policy of 2008, • Statutory Instrument 26 of 1998 • Traditional Leaders Act No. 25 of 1998 as amended last by Act No. 22 of 2001.
Coordination and collaboration Zimbabwe collaborates with local, regional and international organisations in elephant conservation. It is also a party and signatory to various regional and international treaties.	• Trans-frontier Initiatives • SADC Protocol on Wildlife Conservation and Law and Enforcement • MOU's with Tertiary Education Institutes • Interpol • Zimbabwe's National Joint Operations Command (JOC) • Southern African Wildlife Enforcement Network (SAWEN) • CITES • CBD • CMS • African Elephant Action Plan of 2010

	• SADC Regional Elephant Management Strategy of 2007 • IUCN African Elephant Specialist Group

Biological monitoring and management

- Monitor elephant population trends and elephant impacts on biodiversity through aerial, ground and ranger-based methods, among others
- Use research findings, expert opinion and informed public opinion to establish thresholds of potential concern (TPCs) to initiate management action in respect of elephant impacts for protected areas
- Monitor trophy quality and adjust quotas to maintain desired levels of trophy quality

Social, economic and cultural

- Facilitate the transparent distribution of the benefits and costs of elephant management and conservation
- Implement effective techniques and land-use strategies to mitigate human-elephant conflict
- Develop and implement an effective communication strategy for local, regional and international audiences

Building conservation capacity

- Secure funding to initiate the implementation of the elephant management plan
- Establish sustainable funding programs to build and maintain necessary human resources and strengthen elephant conservation and management capacity
- Strive to achieve best standards for elephant management, including any forms of utilization
- Engage available expertise and capacity within Zimbabwe
- Unlock value in elephants and their products

Coordination and collaboration

- Establish a national elephant conservation and management taskforce/steering committee that includes stakeholders meetings at least bi-annually to review progress and to develop an annual implementation plan
- Establish four regional management committees to meet at least twice each year and implement regional plans
- Strengthen coordination between the hunting industry and the elephant management program
- Implement an effective information dissemination and communication strategy, including regular progress reports on the implementation of the plan

What are the specific measurable of the management actions?

Specific measurables of management actions (labelled "means of verification of KPIs") are detailed in the Action Plan, a draft of which will be provided to USFWS soon.

The specific measurable of management actions under each key component include the following:

Protection and law enforcement:

- Effectiveness of law enforcement (LE), arrests, elephants killed (A/DC performance contract for KPIs
- Reports on results of law enforcement efforts in various categories recorded at field stations, conservancies, and CAMPFIRE District Offices, compiled at regional and national levels and presented to the Regional and National Coordinating Committees (R&NCC) bi-annually
- Reports on Hunting regulation infringements derived from SOAZ/ZPHGA reports and from field station reports compiled and presented to R&NCC
- Consolidated record of number of field personnel and days operational (law enforcement, research &monitoring, elephant management) for each area in the elephant range compiled and reported on at annual planning meetings
- Research reports and papers on elephant conservation and management

Biological monitoring and management:

- Reports on elephant surveys
- Elephant distribution maps
- Database on elephant mortality
- Assessment report on Thresholds of Potential Concern in elephant ranges
- Report on trophy quality trends
- Reports to international monitoring systems as required (e.g.AED,ETIS andMIKE)
- Reports and maps of active corridors
- Reports on trends in trophy quality

Social, economic and cultural:

- Records of beneficiaries and benefits availed
- Reports on costs associated with elephant censuses, protection outside protected areas.

- Database on Human Elephant Conflict
- Documented policies and list of operating partnerships/joint ventures that promote elephant conservation and management
- Record of investments in elephant conservation measures
- Records and annual summary of arrests and poaching incidents intercepted based on leads provided by communities

Building conservation capacity:

- Record of funds available (USD) and investment by ZPWMA, Private sector, NGOS, and CAMPFIRE in elephant conservation measures (Compiled annually by Elephant Manager/Coordinator)
- Record of funds generated from elephants and their products

Coordination and collaboration:

- Record of meetings,minutes,actions completed, attendance at national and regional committee meetings
- Record of when minutes of meetings were completed and circulated
- Record of reports by the elephant coordinator / manager

2. Population Status

2014 aerial survey reports, including details on how the surveys were conducted (i.e., methodology) and coverage, including maps of elephant observations, herd size and distribution, carcass observations, and distribution.

Any additional data on carcasses, including carcass class and proportion of illegally killed elephants [PIKE].

In the dry season of 2014, elephants and other large herbivores were counted from the air during the period 27 June-14 July (block counts) and 21 August to 1 November 2014 (transect counts). Transects were used over the major part of the area. The area surveyed totalled 60 392km^2 (15 430 km^2 covering the Zambezi Valley, 14 818km^2 covering the Sebungwe Region, 25073 km^2 North West Matabeleland and 5071km^2 for Gonarezhou National Park and Mahenye Communal Lands). Some of the surveyed areas include Mana Pools National Park, Mudungwe, Chewore, Matusadonha National Park, Chizarira National Park, Gonarezhou National Park and Hwange National Park, Matetsi Safari Area, Forest Areas and parts of the communal lands of Tsholotsho, Mudungwe, Mbire and Guruve Districts and Mahenye where elephants are resident.

The principal objective of the survey was to provide relatively precise and accurate estimates of the number of elephants and other large herbivores including their spatial in the survey area as a whole, using a technique that could be executed within a reasonable time and at a reasonable cost. The methods used were repeatable and technically robust and similar to those used during the 2001 serial survey to allow for direct comparison between the years.

The procedures used followed those well established for aerial surveys of large African herbivores and livestock and utilized during earlier surveys of large herbivores in Zimbabwe. The survey was designed using WWF-SARPO's custom software (AIRDESW, version dated 29/05/97).

Overall sampling intensity in this areas was planned to be 15%, with a transect width (i.e. combined width of the two search strips) of 300 m. The planned sampling intensity in each stratum was determined by using the mean of the elephant densities in each stratum during previous surveys (Mackie, 2001; Dunham, 2004) as the predicted elephant densities in equation 1 of Gibson (1992). The population survey result is summarized in Table 3a to 3h below:

Table 3a.Summary of Aerial Survey Results for Elephant in Zimbabwe 2014

Region	**Estimate**	**No. Seen**	**Variance**	**% CI**	**Lower CL**	**Upper CL**	**Density (Km^2)**
Save Valley Conservancy	1585	118	436828	84.9	239	2931	0.45
Gonarezhou	11452	1571	1960565	24.3	8664	14240	2.14
NW Matabeleland	53991	4926	15140043	14.3	46280	61702	2.16
Zambezi Valley	11657	1094	1292716	19.4	9398	13915	0.69
Sebungwe	3407	583	372110	35.6	2193	4622	0.22
Totals	**82092**	**8292**	**19202261**	**10.5**	**73442**	**90742**	**1.21**

Table 3b. Population estimates and statistics for elephant bulls in the aerial surveyNational Regions of Zimbabwe during 2014

Region	**Estimate**	**No. Seen**	**Variance**	**% CI**	**Lower CL**	**Upper CL**	**Density (Km^2)**
Save Valley Conservancy	55	4	1825	166.3	4	147	0.02
Gonarezhou	1198	157	33604	30.9	828	1569	0.22
NW Matabeleland	6231	607	370290	19.4	5022	7439	0.25
Zambezi Valley	2560	239	144739	29.5	1804	3316	0.15
Sebungwe	776	115	30700	45.4	424	1129	0.05
Totals	**10821**	**1122**	**581158**	**13.9**	**9317**	**12324**	**0.16**

Table 3c. Population estimates and statistics for elephants in cow herds in the aerial Survey regions of Zimbabwe during 2014

Region	Estimate	No. Seen	Variance	% CI	Lower CL	Upper CL	Density (km^2)
Save Valley Conservancy	1529	114	435003	87.9	186	2873	0.44
Gonarezhou	10254	1414	1926961	27.0	7490	13018	1.92
NW Matabeleland	47761	4319	14769753	15.9	40143	55378	1.91
Zambezi Valley	9098	855	1147977	23.4	6965	11231	0.54
Sebungwe	2633	468	341410	44.3	1468	3799	0.17
Totals	71275	7170	18621103	12.0	62755	79795	1.05

Table 3d. Population estimates and statistics for elephant carcass 1 in the aerial Survey regions of Zimbabwe during 2014

Survey Region	Estimate	No. Seen	Variance	% CI	Lower CL	Upper CL	Density (km)^2
Save Valley Conservancy	0	0	0	0	0	0	0.00
Gonarezhou	0	0	0	0.0	0	0	0.00
NW Matabeleland	42	4	1111	165.2	4	112	0.002
Zambezi Valley	0	0	0	0.0	0	0	0.00
Sebungwe	12	2	69	141.1	2	29	0.001
Totals	**55**	**6**	**1180**	**131.3**	**6**	**126**	**0.001**

Table 3e. Population estimates and statistics for elephant carcass 2 in the aerial survey Regions of Zimbabwe during 2014

Survey Region	Estimate	No. Seen	Variance	% CI	Lower CL	Upper CL	Density (km)^2
Save Valley Conservancy	0	0	0	0.0	0	0	0.00
Gonarezhou	0	0	0	0.0	0	0	0.00
NW Matabeleland	149	9	2897	73.9	39	259	0.01
Zambezi Valley	13	1	182	236.5	1	45	0.001
Sebungwe	64	11	459	69.2	20	107	0.004
Totals	**235**	**22**	**3620**	**51.5**	**114**	**356**	**0.003**

Table 3f. Population estimates and statistics for elephant carcass 3 in the aerial Survey regions of Zimbabwe during 2014

Survey Region	Estimate	No. Seen	Variance	% CI	Lower CL	Upper CL	Density (km)^2
Save Valley Conservancy	27	2	337	140.3	2	65	0.01
Gonarezhou	90	10	759	62.3	34	146	0.02
NW Matabeleland	1001	80	24826	31.6	685	1318	0.04
Zambezi Valley	18	2	166	150.6	2	44	0.001
Sebungwe	259	41	2130	35.7	166	351	0.02
Totals	**1435**	**139**	**28732**	**23.6**	**1096**	**1773**	**0.02**

Table 3g. Population estimates and statistics for elephant carcass4 in the aerial Survey regions of Zimbabwe during 2014

Survey Region	Estimate	No. Seen	Variance	% CI	Lower CL	Upper CL	Density (km²)
Save Valley Conservancy	40	3	457	110.9	3	85	0.01
Gonarezhou	430	54	3879	28.8	307	554	0.08
NW Matabeleland	2940	251	50506	15.1	2495	3385	0.12
Zambezi Valley	693	55	9689	28.2	497	888	0.04
Sebungwe	1141	165	12811	19.7	916	1366	0.07
Totals	**5305**	**534**	**78337**	**10.4**	**4753**	**5856**	**0.08**

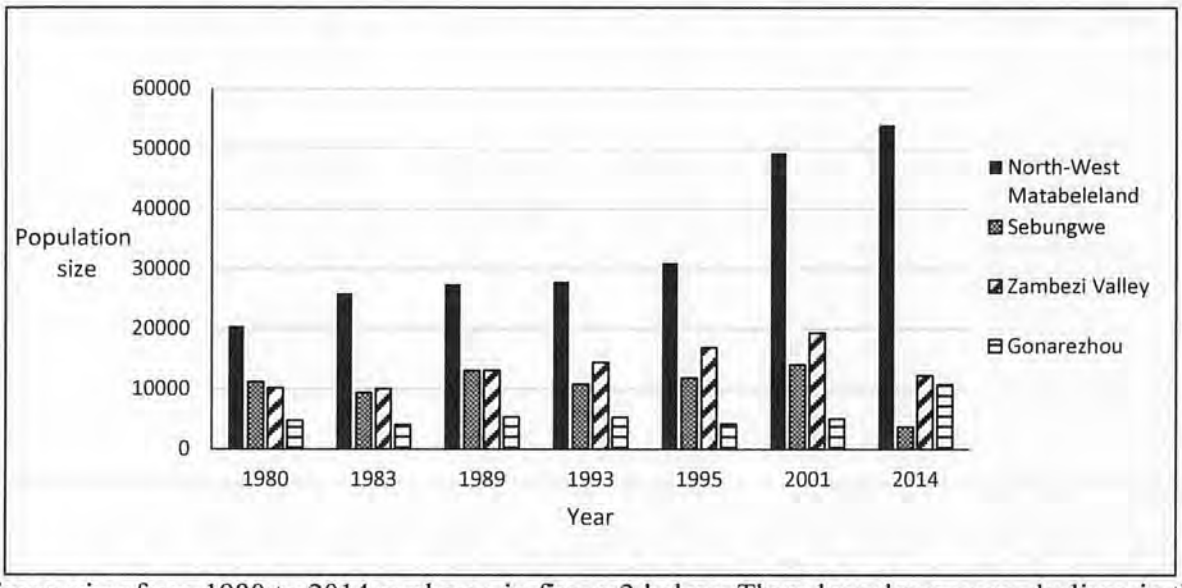
Table 3h. Elephant carcass ratios in the aerial survey regions of Zimbabwe during 2014

Survey Region	1+2 carcass ratio (elephant carcasses in Age category 1 or 2)	All-carcass ratio (all elephant carcasses)	All-carcass ratio (all elephant carcasses and unidentified carcasses)
Save Valley Conservancy	0.00	4.1	22.6
Gonarezhou	0.00	4.3	6.6
NW Matabeleland	0.35	7.1	8.3
Zambezi Valley	0.12	5.8	6.1
Sebungwe	2.17	30.2	38.9

Any demographic analysis of populations by site (e.g., sex and age class, population histograms, projected growth rates).

Please see above gender analysis.

The elephant population in North West Matabeleland and South East Lowveld has been



increasing from 1980 to 2014 as shown in figure 2 below. There have been some declines in the other regions over the same period, although as a whole the country's population has remained relatively stable.

Figure 2. Elephant population trends 1980 to 2014

2. Poaching levels and prevention

A table summarizing Mike and PIKE information from the major populations in Zimbabwe, since recording started in 1999.

Zimbabwe is implementing the MIKE program in the two sites of Nyaminyami and Chewore. Nyaminyami is administered through the CAMPFIRE model while Chewore is a Safari Area managed by the Zimbabwe Parks and Wildlife Management Authority. Zimbabwe has secured funding to establish Mana-Pools as an additional MIKE site.

Table 4a and 4b summaries MIKE and PIKE information from the major populations in Zimbabwe, since recording started in 2000.

Table 4a: Elephant carcasses recorded in Chewore 2000 to 2014

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Carcasses	2	14	19	10	14	20	17	14	13	26	29	51	43	91	52
# Illegally Killed	0	0	7	3	3	0	2	11	1	10	4	34	34	36	9
PIKE	0.00	0.00	0.37	0.30	0.21	0.00	0.12	0.79	0.08	0.38	0.14	0.67	0.79	0.40	0.17

Table 4b: Elephant Carcasses recorded Nyaminyami 2000 to 2014

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Carcasses	13	10	3	7	11	6	3	10	20	52	19	16	52	36	27
# Illegally Killed	8	7	2	2	9	5	2	5	18	45	19	13	14	8	10
PIKE	0.61	0.70	0.67	0.29	0.82	0.83	0.67	0.50	0.90	0.87	1.00	0.81	0.27	0.22	0.37

Data from http://cites.org/eng/prog/mike/data_and_reports and MIKE Baseline information (SC55 Doc. 10.2 (Rev. 1), 2007). Site-level PIKE is likely subject to bias, especially where the total carcass number is less than 30.

It has to be noted that the greater part of the elephant range in Zimbabwe does not have running MIKE of PIKE monitoring regimes. North West Matabeleland, which is not a MIKE site, has the highest elephant population in the country. The poisoning incidents in Hwange in 2013 resulted in a sharp increase in the number of elephant poached. Figure 3 below shows the number of poached elephants in Zimbabwe from 2010 to 2014.

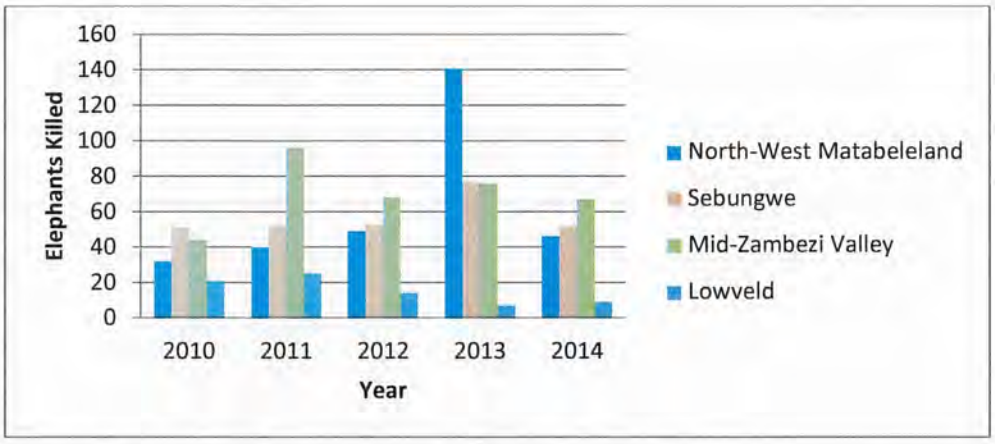


Figure3: Poached elephants Zimbabwe 2010 to 2014

National Policies to address poaching

- Parks and Wildlife Act 1996(amended)
- The Parks and Wildlife Act Chapter 20:14
- Criminal Law Codification and Reform of 2013Act Ch. 19:23
- Protection of Wildlife (Indemnity) Act of 1999 Ch. 20:15
- Environmental Management Act of 2002 Ch. 20:27
- Statutory Instrument 26 of 1998
- The Parks and Wild Life General Laws Amendment number 5 of 2011
- Statutory Instrument 45 of 2014
- Parks and Wildlife Management Authority (Tariff of Fees) By-laws, 2015
- Elephant Conservation and Management Action Plan, 2015/2016-2020/2021
- Sebungwe Region Elephant Management Plan, 2015-2020
- Environmental Management Act of 2002, Ch. 20:20
- Forestry Act Ch. of 1990, Ch. 19:05
- Statutory Instrument 57 of 2012 Parks and Wildlife (Payment for Trapping of Wild Animals) Notice, 2012
- Statutory Instrument 56 of 2012 Parks and Wildlife (Payment for hunting of animals) Notice, 2012
- Firearms Act
- The Customs and Excise Act
- Urgent Measures (African Elephant Summit on 2- 4 December 2013
- Interpol
- Prevention of Cruelty to Animals 19:09
- Zimbabwe Policy on Wildlife
- Policy and plan for elephant management in Zimbabwe 1997

Actions taken by the Zimbabwe government to protect wildlife prevent poaching and punish criminals of wildlife crimes. This should include:

- ***Anti-poaching manpower and budget for anti-poaching in protected areas overseen by ZPWMA.***
- ***Summary of serious wildlife crime cases in recent years (i.e., arrests, outcome of trials, sentences).***
-

Zimbabwe has developed a number of national policies, as well as adopting regional and international protocols to address poaching. As explained the17 April 2014 response to the USFWS poaching incidents are handled though a coordinated public-private response, including heightened law enforcement, severe deterrent sentencing, awareness campaigns, and substantial donations from the private sector to boost ranger and equipment capacity. Steps were also, taken after the Hwange poisoning incidents to improve radio communications in that area, as well as establishing a new station with 15 rangers, to increase law enforcement coverage. Aerial surveillance in Hwange and other areas has been intensified.

It is one of the ZPWMA's policies to cooperate with safari operators, who provide significant assistance by alerting ZPWMA rangers to poaching threats; providing equipment, training and transport; and conducting their own anti-poaching patrols among other things.

Among other things, Zimbabwe has adopted "Urgent Measures" and policies to combat poaching and wildlife trafficking. Following the adoption of the Urgent Measures to halt and reverse the trends in illegal killing of elephant at the high level African Elephant Summit held from 2-4 December 2013 in Gaborone, Botswana, the government of Zimbabwe has implemented the following Urgent Measures;

Urgent Measure 1

a) Zimbabwe has adopted a zero tolerance initiative to poaching, illegal ivory trade and trafficking. The Parks and Wild Life General Laws Amendment number 5 of 2011 provides for a nine year jail term for anyone found in possession of elephant ivory or for the illegal killing of an elephant through whatever means. On a second and subsequent conviction the law provides for an eleven years jail term up to a maximum of twenty years in prison to the offender.
b) Statutory instrument 45 of 2014, Parks and Wildlife Management Authority (Tariff of Fees) By-laws, 2014 provides for the value of raw elephant ivory pegged at US$180 per kilogram and such value is used in the preparation of expert assessment the value of the recovered or intercepted ivory. This assessment forms the basis of docket preparation and will assist in determination by the courts as the offence will already be classified as serious.

c) Statutory Instrument 57 of 2012 Parks and Wildlife (Payment for Trapping of Wild Animals) Notice, 2012, place the value of a live elephant at US$50 000 which value will form the compensation that a sitting magistrate will recover from the accused person in the event of a successful trial and subsequent conviction.
d) Statutory Instrument 56 of 2012 Parks and Wildlife (Payment for hunting of animals) Notice, 2012, place the value of an elephant at US$50 000 which forms the value of compensation which will be paid out by the accused to the complainant in the event of a successful trial and subsequent conviction.
e) The three legal instruments cited in b, c, and d above are legislative efforts to ensure that there are no loopholes depending on the circumstance that are available for an offender will to escape prosecution under the circumstances.
f) The Criminal Law Codification and Reform Act Chapter provides for the charge of criminal abuse of office by law enforcement or public officials involved in corrupt practices related to poaching and trafficking.
g) The Firearms Act criminalizes the use of automatic weapons such as AK47 assault rifles that are currently utilized by poachers to further their illegal activities. The same Act further criminalizes a person for mere possession of ammunition and arms of war which effectively attracts a jail term of up to 5 years in prison for such related offences.
h) The Customs and Excise Act makes it an offence to anyone caught smuggling elephant ivory out of Zimbabwe and import of such into Zimbabwe.

Urgent Measure 2

a) The Zimbabwe Environmental Management Act Chapter 20:27 of 2002 criminalizes the administration of poison such as cyanide which is used by poachers to kill elephants. Through the Environmental Management Agency of the Zimbabwe Government, sample collection from poisoned sites is being handled by professionals in this unit who have laboratories for testing such poisons and hazardous substances which results are used in any trial that is related to elephant poisoning. The Act was implemented during trial of accused persons involved in elephant poisoning leading to the conviction of poachers who poisoned elephants in Hwange National Park in 2013. Most of the offenders were given sentences of up to 18 years in prison.
b) Awareness workshops that targeted the judiciary, the prosecutors, law-enforcement agencies and other stakeholders involved in the fight against elephant poaching were held and this resulted in significant improvements in the expeditious preparation of dockets and finalization of cases with a marked improved in convictions in the various courts around the country.
c) Task force teams at all level of Government in the law enforcement units have been put in place at national, provincial as well as district level. These units deal with poaching related matters in their areas of policing. Stakeholders in the private sector are assisting

with the provision of scarce resources that are needed to combat poaching and ivory trafficking.

d) The use of helicopters and other aircrafts in the fight against poaching has also increased and this has assisted with deployments and detection of poachers in the field.

e) Cross border collaboration with law-enforcement agencies with neighbouring countries such as Botswana, South Africa, Zambia and Mozambique in information sharing on poacher movements and dealing with immediate incursions has tremendously helped in detection of cross-border poaching and trafficking incidents.

Urgent Measure 3

a) Elephant poaching has been elevated to the level of National Security in the Government of Zimbabwe. All security organs of the state are now playing a role in the fight of elephant poaching.

b) The Zimbabwe Republic Police Support Unit in collaboration with the Zimbabwe Parks and Wildlife Management Authority carries out anti-poaching activities at all levels. The Minerals and Border Control Unit of Zimbabwe Republic Police Criminal Investigations Department is a specialized unit that investigates and prepares wildlife cases for court.

c) The Air-force of Zimbabwe plays a major role upon request in the provision of services and equipment in the fight against poaching.

Urgent Measure 4

a) Within the Zimbabwe's National Joint Operations Command (JOC) structure, elephant and rhino poaching have been elevated to a higher level of National Security Threat thereby making it a priority area of focus.

b) The same structures of the JOC committees have been activated both at national, provincial and district levels for effective monitoring of poaching situation on the ground.

Urgent Measure 5

a) Information of illegal killing of elephants is being submitted to the CITES MIKE Programme.

b) The ETIS data on illegal trade is also submitted to TRAFFIC.

Urgent Measure 6

Zimbabwe is participating in various law-enforcement activities involving neighbouring states, countries in the SADC region. Officers from Zimbabwe have also attended a number of workshops and training on anti-poaching and wildlife trafficking including the execution of controlled deliveries. Valuable expertise has been imparted to the officers and this has assisted in the carrying out of joint cross-border operations.

Urgent Measure 7

Zimbabwe is a member of the regional wildlife enforcement network, SAWEN, and has assisted in information sharing and information sharing and intelligence gathering on the latest techniques in the fight against elephant poaching and ivory trade.

Urgent Measure 8

a) The Zimbabwe Government established the Wildlife Ecological Trust whose mandate is to mobilize resources for the fight against elephant poaching through whatever means. Its thrust is to source for funds and material resources that are allocated to needy areas according to the nature of threat and threat levels in each particular area.
b) Resources in the form of funds, vehicles and field equipment have been raised for Hwange National Park.

Urgent Measure 9

a) Public awareness campaigns for local communities are being carried out in affected areas. The awareness and outreach programmes also target school children.

Urgent Measure 10

a) Zimbabwe has secure facilities for elephant ivory storage at the Central Ivory Stores and also a good registration and database system. The security systems have recently been upgraded to minimize risk.

Urgent Measure 11

a) The principal law and Act which governs and regulates the purchasing, selling and exporting of worked elephant ivory and ivory products for non-commercial purposes is the Parks and Wildlife Act Chapter 20:14. The Act prohibits the hunting of any animal and removal of parts of animals in any from any land without authority. The Act provides for the protection of animals in the following designated arrears, National Parks, Parks and Wild life Estates, Parks and Wild life land, Sanctuaries and Safari Areas. The Act further provides for categorization of animals into protected and specially protected animals. Of particular interest in this case is Part XII which prohibits the hunting, removal and sale of live animals and animal products.
b) From the enabling provisions in the Act, the Minister has issued Statutory Instrument 362 of 1990 Parks and Wild Life (General) Regulations which provides in sections 66-75 for the regulation of manufacture and dealing in trophies to include worked elephant ivory.
c) In addition there is Statutory Instrument number76 of 1998, Parks and Wild Life (Import and Export) (Wild Life) Regulations which specifically deals with Import and Export of wildlife products.

Urgent Measure 12

a) Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) is currently under review. Several community empowerment strategies are also being implemented in areas adjacent to protected areas.

Urgent Measure 13

a) Zimbabwe is collaborating with Interpol at national and international levels. Elephant poaching is categorized as a serious crime attracting a heavy penalty in Zimbabwe.

Urgent Measure 14

a) The Government is collaborating with the Government of South Africa through a bilateral arrangement with the University of Pretoria whereby rhino samples are submitted through the RHODIS system for DNA analysis. It is hoped that the same process will be initiated and undertaken in the near future for African Elephant samples

Legislation

All activities allowable in a protected area are governed by relevant legislation. The primary legislation dictating how parks operate is the Parks and Wildlife Act and accompanying statutory instruments. The legislation is obviously not static but can be adjusted to meet desired outputs.

Park management plans

It is the organization's policy that every protected wildlife area is run in accordance with a management plan. It however has to be noted that some of the plans are outdated. To rectify this problem, ZPWMA is in the process of updating protected area management plans. Recently the Authority completed plans for Gonarezhou and Mana Pools National Parks and the plan for Hwange National Park is in the final stages of drafting. The planning process is done in phases and all relevant stakeholders, government and private, are invited to partake. The plans usually cover all facets of the management of the respective area including tourism, infrastructure, and biodiversity management and recommended staffing levels.

Elephant management policy

The elephant's life cycle and longevity requires means that it needs to be managed through a long term management plan. The country's elephant management policy is in its drafting stage and will replace one which expired in 2007. The planning process relied on a number of experts from various fields and also sought input from other stakeholders within the region.

Commercial exploitation of wildlife

It is a government's policy that Zimbabwe should benefit from her natural resources. In addition to non-consumptive tourism, the elephant is also one of the key species in the hunting industry.

This form of exploitation is strictly governed by the Parks' Act and quotas are allocated through a quota setting process described in subsequent sections.

Community Based Natural Resources Management

The government also recognizes that the elephant shares some of its home range with local communities and these communities benefit through the CAMPFIRE program. This apportioning of benefits, is hoped, should translate to a community more tolerant to wildlife.

How ZPWMA is addressing these challenges:

Review of CAMPFIRE

It is now acknowledged that the current CAMPFIRE model has been overtaken by events. The government is therefore in the process of reviewing the concept so that is produces tangible benefits to local communities living with wildlife, especially elephants and large carnivores. This should make locals more cooperative in fostering the country's conservation goals.

Set a board to source donations for the biggest elephant home range in Zimbabwe

The Hwange poisoning incident made clear that poachers are using new and dangerous methods to illegally kill elephant, and ZPWMA must have adequate, additional resources to combat this threat. In trying to address that, the country through the Ministry of Environment water established a board to source funds for the country' conservation programmes. The board, called the Wildlife and Ecological Trust, was instrumental in sourcing 10 vehicles for Hwange National Park.

Increased men on the ground

High levels of staffing are needed to sufficiently control poaching. Zimbabwe, like other African range states, faces significant resource constraints. In key elephant range areas, this challenge has been addressed through a number of strategies:

- ***Ranger call up system*:** The poaching pressure is not the same in all areas under the management of ZPWMA. There is now a working system were rangers from low threat areas are temporarily deployed to high threat areas like the Zambezi Valley and Hwange.
- ***Joint anti-poaching patrols*:** The ranger compliment in high threat areas has been augmented by enlisting the services of other law enforcing arms of the state, the Zimbabwe Republic police and the Zimbabwe National Army. The police now have almost permanent presence in North West Matabeleland wildlife estates whilst the army is called in when needed.
- ***Recruitment of rangers:*** The Authority has a staff complement of 1,504 active field rangers. This translatesto ground coverage of more than 100 km^2/ranger against an ideal

staffing level of 20km^2/ ranger. Though the Authority is constrained with regards to resources to pay and kit existing rangers, it employed and trained 50 rangers in 2014. It also recalled 50 more rangers who had left the organization as a way of reducing its training budget. Most of the employed rangers were deployed in the Zambezi Valley (see attached annual reports). These measures have resulted in improved patrol effort (see figure 4below).

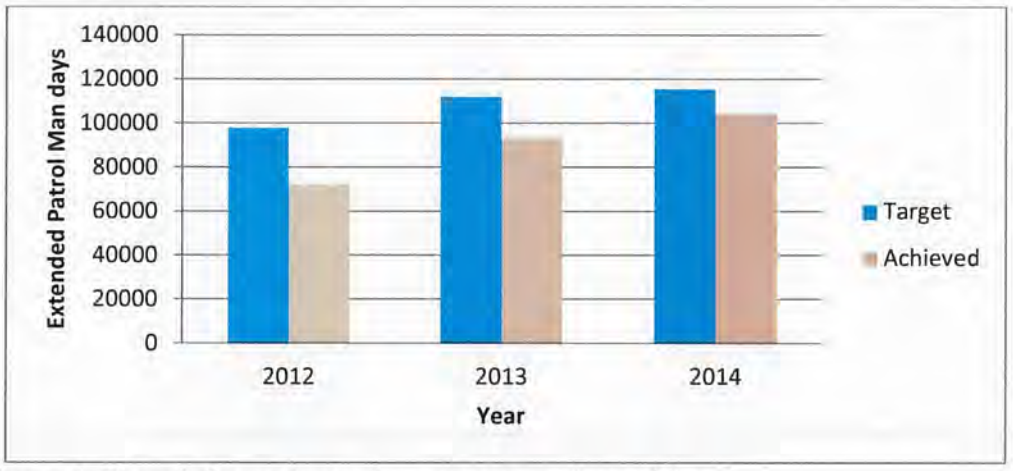


Figure 4: Extended patrol man days, targets against achieved

As seen from the graph, patrol man-days increased from 2013 as a reaction to increased poaching pressure. This was also boosted by the bringing in of details from other law enforcement agents.

Result Based Management (RBM) System for performance management

Poaching of wildlife, especially elephant, is a problem that it acknowledged by the Authority. It has therefore been realized that all Parks employees should give their best efforts in trying to address this scourge. It is with this background that the Authority has instituted performance based contracts for all its employees. These contracts are result oriented and it is expected that all the employees will work to meet targets set in the contracts.

Engagement of the private sector to support conservation initiatives

Conservation is always an expensive undertaking and is always evolving. The Authority on its own can be overwhelmed and as such is always ready to engage private or nongovernmental players in the industry. In the Hwange – Sanyati area, the Authority has enlisted the assistance of WWF Zimbabwe for the implementation of the Hwange–Sanyati Biological Corridor project. This project has a number of components which include improved management of Hwange National Park and neighbouring areas under the management of Forestry Commission of Zimbabwe as well as a component on improving livelihoods of the people in the Hwange Communal Area through the CAMPFIRE program (see attached Project Appraisal Document).

This project, if successful, will result in a more tolerant human population as well as a viable source of wildlife used in hunting areas around Hwange.

The Authority also works with the safari industry, which already conducts anti-poaching operations, to formalize anti-poaching requirement in new concession leases. Further, part of the review of CAMPFIRE will address how to better engage communities in anti-poaching support.

Research is also a vital component of wildlife management. The Authority has a deliberate policy to encourage research within its estate. The permit application process is easy and streamlined for efficiency. Some of the researchers working on elephant related projects include CIRAD, CNRS, Chinhoyi University of Technology and National University of Science and Technology.

Awareness and education

Extensive awareness programmes targeting local communities and schools are carried out throughout the country. Strategies include translating some of the key issues in the Elephant Management Action Plan into appropriate formats such as popular articles, radio programmes, online content, and drama as well as other formats targeting specific groups. Some local NGOs are assisting with the development and distribution of some of the materials. Awareness programmes that target the judiciary on wildlife crime have also been implemented.

Awareness workshops for the judiciary

Though there is legislation guiding how wildlife crimes are to be handled by the courts, it was realized that some provisions of the law were not being fully implemented and some offenders were getting away with light sentences. It is with this background that a national workshop was held with the law enforcement agents and the judiciary in 2011 in Hwange to make them aware of these challenges. This has resulted in stiff sentences being handed down to offenders. Table 6 below shows a summary of cases handled by the authority's investigations department.

Anti-poaching manpower and budget for anti-poaching in protected areas overseen by ZPWMA.

ZPWMA has a staff complement of 1,500 field rangers whose core mandate is anti-poaching activities. Table 5 below is an indicative budget for effective protection of the Parks and Wildlife Estates.

Table 5. Budget for anti-poaching activities

Budget item	Cost (US$)
Staff Costs	14,130,000
Field allowances	971,889
Patrol provisions	1,244,612
Fuels and lubricants	698,977
Vehicles	272,000
Communication	20,000
Air craft hire	120, 000
Drone	60, 000

Summary of serious wildlife crime cases in recent years (i.e., arrests, outcome of trials, sentences).

In 2013, cyanide poisoning led to the death of 105 elephants in Hwange National Park. Following the increase in poaching and trafficking of wildlife products, Zimbabwe adopted zero tolerance to poaching. Thirty-five (35) poachers were convicted for the poisoning incidents and they received between nine (9) and sixteen (16) years jail terms. A summary of serious wildlife crimes is detailed in table 6 below:

Table 6: Summary of Serious Wildlife Crime Cases recorded in Zimbabwe.

	2009	2010	2011	2012	2013	2014	2015 (Jan – Apr.)	Total
Cases investigated	45	66	45	57	76	48	17	354
Cases finalized	20	20	29	30	40	15	4	158
Local poachers arrested	81	55	121	137	109	41	12	556
Poachers	9	5	6	4	3	10	1	38

killed								
Accused prosecuted	65	79	86	83	72	50	15	450
Accused acquitted	4	4	4	6	3	1	0	22
Foreigners arrested	6	19	3	5	13	6	4	56
Tusks recovered	163	118	122	158	197	265	56	1079
Firearms recovered	13	32	29	25	16	15	2	132
Ammunition recovered	261	226	195	454	133	229	51	1549

4. Regulations and Enforcement

The current operating budget for ZPWMA, including sources of funding (e.g., allocated by Parliament, obtained through hunting permits or concessions, conservation fees, donations, etc.).

The budget for ZPWMA is premised on a Results Based Management System where allocation of funds is predicated on projected operational activities and a review of previous operation performance. The budget include sources of funding (e.g., allocated by Parliament, obtained through hunting permits or concessions, conservation fees, donations, etc.).The major sources of funds are conservation fees (land and river) constituting a total of US$9 898 695 and hunting constituting a total of US$ 4 032 733 for 2014. The bulk of the revenue generated in ZPWMA goes towards staff costs (69%) and operation costs (18%) which translated toUS$17,751,988and US$ 4,706,787 respectively for 2014. See Tables7a and 7b below. Full details are specified in the attached approved budgets for the year 2015.

Table 7a:ZPWMA Actual and projected Budgets for 2014 and 2015 in US$

Revenue	**2014 Actual**	**2015 Budget**
Conservation fees-land	8,457,106	9,595,000
Conservation fees-river	1,441,589	1,650,000
Accommodation	2,234,281	3,516,000
Annual registration fees	360,616	794,000
Permit fees	1,489,154	2,067,400
Services & facilities	140,369	347,700
Law enforcement	219,473	257,300
Hunting	5,072,493	6,220,000
Fishing permits	948,491	1,236,000
Leases and rentals	2,298,781	3,513,000
Sale of park products	976,678	2,177,000
Examinations	32,481	52,900
Projects	131,487	1,492,100
Other income (Donations)	957,634	1,909,200
Government grants	1,600,000	716,000
Total	**26,360,633**	**35,543,600**

Table 7b: Expenditure for ZPWMA

EXPENDITURE	**2014 Actual**	**2015 Budgeted**
Staff costs	17,751,988	20,943,500
Operational costs	4,706,787	8,235,700
Administration costs	3,100,758	3,815,800
Marketing costs	184,879	1,060,000
Total	**25,744,412**	**34,055,000**
Net surplus/(deficit)	**616,221**	**1,488,600**

Note the surplus for 2014 is a result of a 1,600,000 US$ government grant and spending cuts that have reduced manpower levels for ground patrols despite the shortages in manpower.

Revenue Streams

Conservation fees (Park entry and fishing permits) and hunting revenue constitute the bulk of the sources of revenue for ZPWMA, with a contribution of 42% and 17% respectively. See Figure 5a and b below for the categories of revenue streams and the percentages contributed.

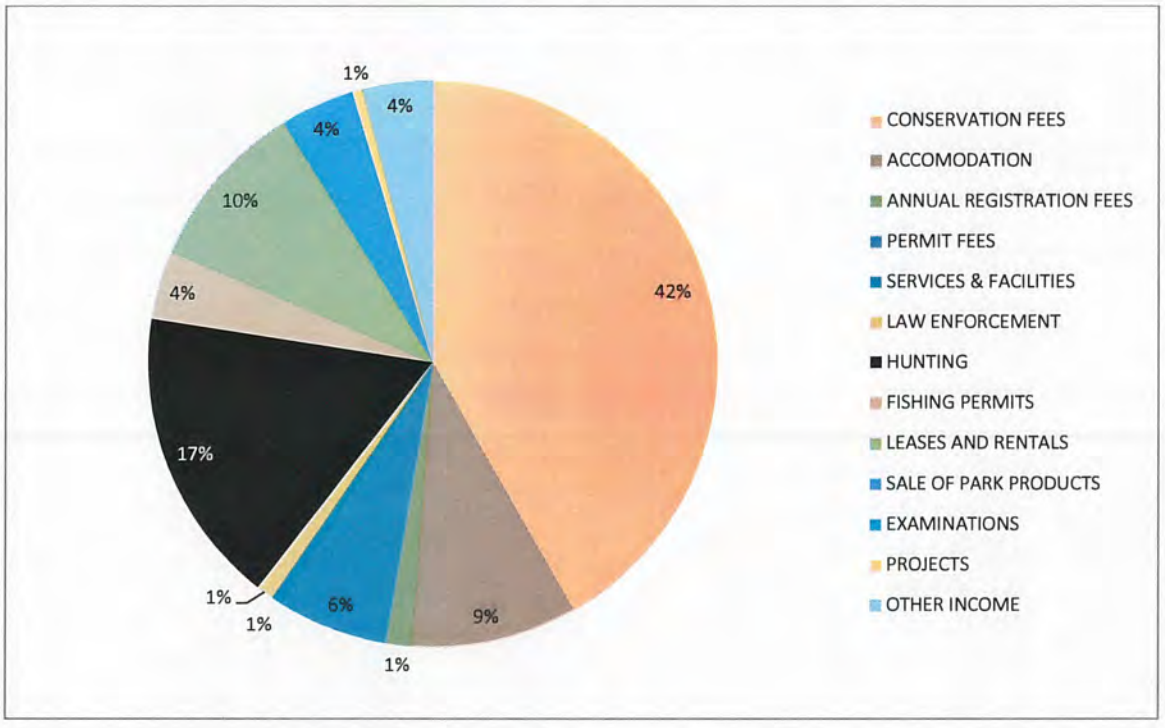


Figure 5a: Main Sources of Revenue for 2014

Expenditure:

Most of the expenditure for ZPWMA (69%) goes to staff and operational costs (18%) (See Figure 5b for the breakdown of the costs).

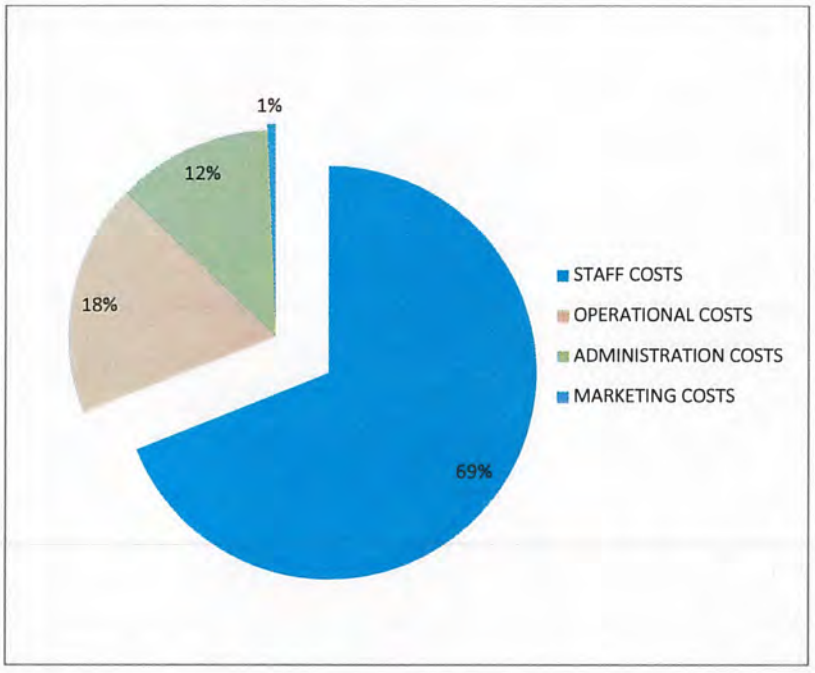


Figure5b: Itemized costs for ZPWMA.

Note: See attached approved budget for 2015 for budget details.

The amount of revenue generated from elephant hunting by U.S .hunters and how those funds are distributed?

The US hunting market constituted 51% and 54% of the elephant trophy hunting in Zimbabwe for the years 2013 and 2014 respectively. See figures6a and 6b below.

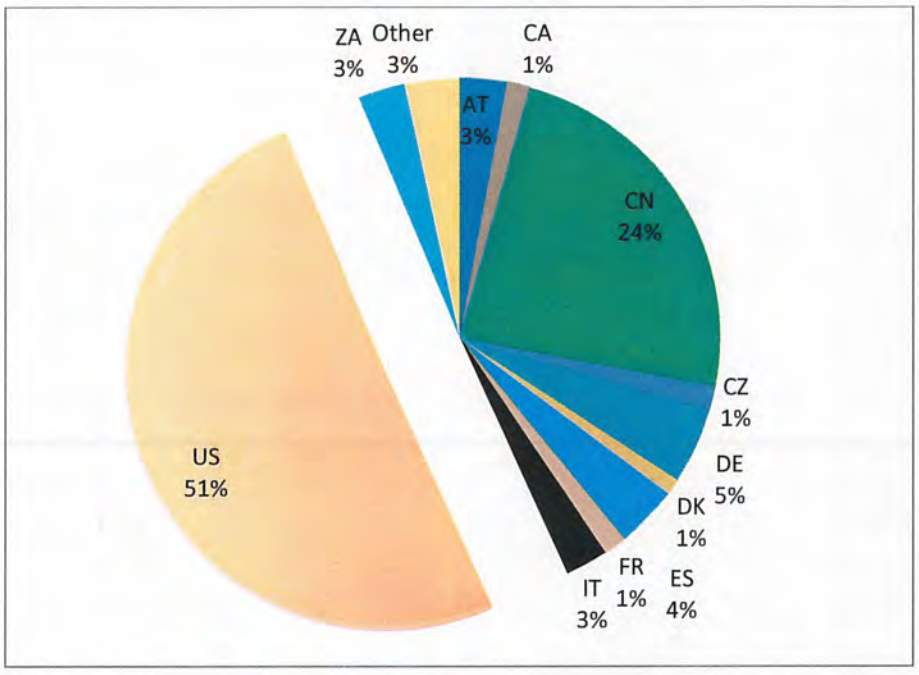


Figure 6a: Source markets for Safari Hunting in Zimbabwe in 2013 from ZPWMA Database

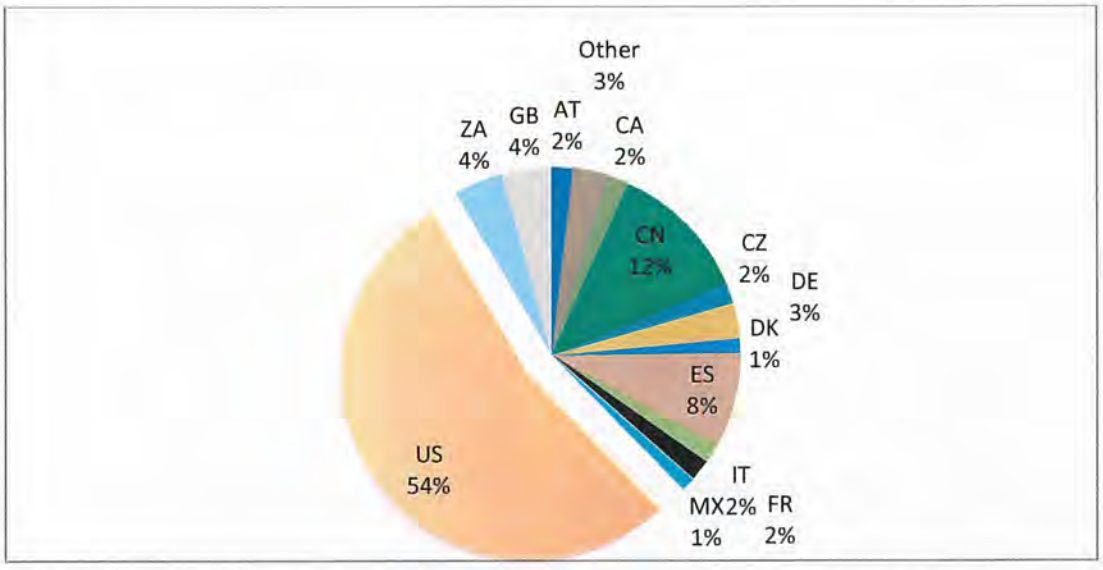


Figure7: Source markets for Sport Hunting in Zimbabwe in 2014 from ZPWMA Database

Hunting revenue is distributed by land-use categories as to sustain the upkeep of the land area where it is accrued. These land areas administered by different authorities with the ZPWMA having the overall authority to oversee wildlife use on these areas. These areas are grouped into the following categories namely National Parks Areas, Forestry areas, CAMPFIRE areas and Private lands (Conservancies and private farms). Hence the accounts are managed separately and will be presented separately.

Over a four year period revenue collected from hunting contributed a total of US$ 21,339,609. There was an11.9% decrease in revenue collection from hunting in 2014 compared to 2013. Table 8abelow summarizes the revenue generated from hunting from 2011 to 2014.

Table 8a: Revenue collected from hunting within the parks Estate 2011 to 2014.

	2011	**2012**	**2013**	**2014**	**Totals**
Total hunting revenue	5,362,198	5,144,579	5,760,339	5,072,493	21,339,609

Of all the hunting received the American market is estimated to 54% and is inclusive of concession fees and trophy fees,

Hunting outside protected areas is also conducted in other land categories. The revenue from direct elephant hunts is categorized and shared according to land use as specified in Table 8b below. This revenue is mainly generated through trophy fees.

Table 8b: Revenue Distribution from Elephant Hunt by USA citizens in Zimbabwe on other land areas.

Land Category	Revenue 2013 (US$)	Revenue 2014 (US$)
CAMPFIRE	1,783,928	1,419,384
Forest Land	240,000	101,500
Private Sector	5,5-6 000,000	1.8-2.3 000,000

Source: Forestry, ZPWMA, SOAZ

It is important to note that CAMPFIRE revenue has been sustained by USAID funding over the period 1989 to 1994 (see the attached budget).

5. Sustainable Use

The number of elephant taken per year in each of these categories [sport-hunting, cropping, live animal sale and capture, natural mortality, accidents, poaching, problem animals, management off-takes

Elephant mortalities were recorded under various categories as shown in Table 9 below. The major causes of mortalities over the five year period are natural, poaching and sport hunting.

Table 9: Causes of elephant death from 2010 to 2015

Year	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Sport Hunting	134	274	247	258	162	75
Cropping	57	23	0	0	0	0
Live Sales	0	0	4	0	7	0
Natural Mortalities	208	1015	1373	124	1981	455
Accidents (Train)	6	8	38	13	9	6
Poaching	77	223	212	293	194	70
PAC	61	53	173	44	49	52
Other Management	65	53	172	44	47	0
TOTALS	**608**	**1649**	**2219**	**776**	**2449**	**658**

It should be noted that other management off-takes entail ration and training quotas which were set at about 95 animals nationally for ZPWMA run areas. While cropping was carried out in the Save Valley Conservancy between 2012 and 2013 during which a total of 11 elephants were removed.

Details on how the number of elephants to be hunted in each area is decided (i.e., quota setting).

ZPWMA subscribes to the concept of adaptive wildlife management and this also applies to setting national hunting off-takes. One example being a hunting moratorium that was placed on the hunting of lions in the Gwayi area adjacent Hwange National Park after it was realized that the trophy quality was getting poorer and poorer. This also led to the setting up of a point based system for allocating quotas which resulted in some areas getting no lions on quota from four in 2014.

Trophy hunting of elephants, or any wildlife species in Zimbabwe, is undertaken through a strictly regulated quota setting system. Quotas are issued each year to approved landholders by ZPWMA and this is done through national quota setting workshops. These workshops rely on

information supplied by landholders as well as ecological reports submitted by Parks' ecologists and independent wildlife consultants.

Analysis of trophy quality trends from major hunting areas have indicated that we are still finding mature bulls. It can therefore be assumed that current off-takes are sustainable. It however has to be noted that adjustments to quotas will definitely be made in light of recent upsurges in poaching in areas like Sebungwe and the Zambezi valley. It is also acknowledged that blanket cuts may be detrimental for the species since most of the wildlife farmers depend on income from elephants to fund activities in their areas.

All offtakes for the African elephant in Zimbabwe are sustainable. Key factors that Zimbabwe considers when setting quotas are shown in the Table 10.

Table 10:- Quota allocation for 2014 by major range

Area	Population estimate	Population proportion	Off-takes for 2016	
Zambezi Valley	11657	0.23	69	
Sebungwe	3407	0.07	21	
North West Matabeleland	53991	0.58	174	
South East Lowveld	13037	0.11	33	
Total	82092	0.99	297	

Table 11: Factors considered in quota setting

Factor	**Comments**
Environment	Effects of droughts and other environmental factors are considered when setting quotas (for example die-offs in an area).
Population estimates and indices of abundance	Population estimates for African Elephants are determined using aerial surveys, waterhole counts, road strip counts and field based ranger monitoring. Population estimates are used to determine annual quotas including the 2014 aerial survey

	results.
Trophy size and quality	Data on hunt returns is captured into a database that is analysed to determine future off takes basing on trophy quality and trends (i.e. the lower the trophy quality, the quota is adjusted accordingly). Hunting success rate is also required to determine quotas. A hunting moratorium can be imposed in an area with declining trophy quality.
CITES National Export Quotas	Zimbabwe has an Annual CITES National Quota of 1000 tusks of 500 sport hunted elephants. Allocation of quotas at the national level does not exceed this limit.
Size of hunting area	Hunting quotas are allocated according to the size of any given property.
Management Systems in place in hunting areas	The following factors are also considered when setting quotas: • Existence of game fences or open access systems • Anti-poaching efforts • Game water supply • Translocations and reintroductions
Illegal off takes	Illegal off takes from poaching are also considered when setting quotas in an area. Quotas are adjusted accordingly in order to ensure that harvests are sustainable. Quotas are set on a localized basis.
Trade	Very strict export and import regulations and trade monitoring systems are in place. Analysis of export data is used to set annual quotas.
Monitoring	The Scientific Authority through an adaptive management process and ongoing rigorous resource monitoring programmes uses all the data and information to ensure that quotas are sustainable. The monitoring programmes include the following: Off takes/Harvests, Legal and Illegal Harvest and Trade; Ranger based Monitoring, Hunt Returns, Live Sales and Translocations; Natural Mortalities, Trophy Quality, Hunting Regulations,

	Biological: Population Estimates and Densities, Distribution Patterns, Habitat Quality, Local Ground Counts, Hunting Success Rate,

Sustainable quotas are established and monitored through a participatory and adaptive management process (Fig 5) involving private landowners, ZPWMA personnel and CAMPFIRE or local community wildlife managers. Quotas are set so as to have a representative number of animals that can be safely removed during a hunting season without inflicting biological damage to the population. The aim of quotas is to ensure that the utilization of wildlife is sustainable. Data on genetic drift, estimated population, disease outbreak, trophy size, age of animal hunted, habitat status and illegal off take is used to safeguard sustainable quotas. On average, quotas are set based on current data at approximately. The quota for 2016 is set at 400 elephant which is 0.49% of the national population. This is considered a conservative figure according to WWF guidelines and also the population changes in sections of Sebungwe and the Zambezi Valley. Taking into consideration the 2014 survey results the sustainable off take for trophy hunting in Zimbabwe would be 615 individuals. The thrust of wildlife management in Parks Estates is an adaptive management approach which emphasizes scientific research and monitoring. Quotas are set regionally during participatory quota setting workshops (see attached press invitations).

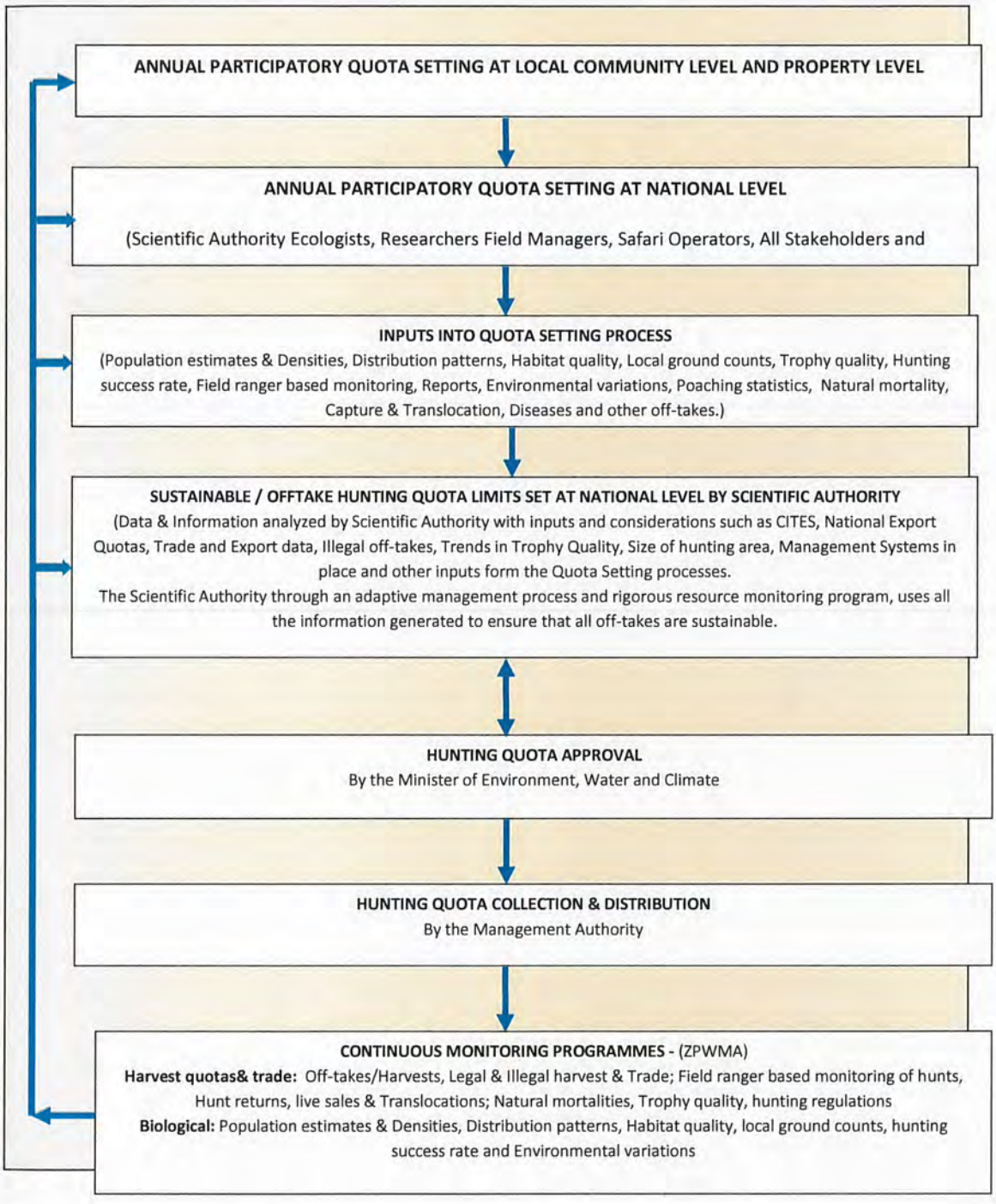


Figure 8: Multi stakeholder participatory quota setting

6. Revenue

Please provide information on: elephant populations on the four aforementioned land types, the number of elephants hunted on each land type, and the fees paid or the revenues earned from elephant hunts each land type.

Of the four land use types (Safari Areas, Communal Land, Forest Estates and Private Land) where safari hunting is carried out, Safari areas have the highest elephant population, although CAMPFIRE areas have the largest percentage of elephants hunted. Across all land categories, the elephant, even in the private land category where only a small proportion of properties have elephants, accounts for the highest proportion of revenue. Table 12below highlights elephant populations and revenue generated in the four land use categories in terms of trophy fees.

For each of the land uses, on which elephant hunting occurs, please provide the total number of elephant hunts, the total revenue, and a summary for each of management on how the revenues are spent.

Table12: Elephant populations and revenue generated from elephant hunts in four land use types.

Land Use	**Elephant population Estimate (2014)**	**Number of hunts**	**Number shot**	**Revenue generated US$ (Trophy fees)**
Safari Area	9824	58	49	5,072,493 the total includes trophy fees and concession fees for all hunted wildlife on ZPWMA land.
Communal land	6041	69	55	550,000,00
Private land	1585	61	19	190,000.00
Forestry Land	1117	43	39	390,000.00
Totals	**18 567**	**231**	**162**	**6,202,493.00**

Note: - These are population estimates for the major range areas surveyed in 2014. Source ZPWMA records

As shown in Table 12above, a total of 18 567 elephants occur within surveyed wildlife areas where elephant hunting takes place. The most important form of revenue is the trophy fees, which average US$10,000 per trophy elephant. Other forms of revenue include hunting daily rates and incidental revenue which can raise the value of an elephant hunt up to $25,000.00. In the ZPWMA run Safari Areas, most of the revenue is from trophy fees, although from the concessions, in which the Authority actually carries out hunts daily rates also accrue, significantly raising the value of a single elephant hunts.

How revenue generated is spent

ZPWMA safari areas

Safari Areas mentioned herewith are hunting concessions under the ZPWMA and are allocated to Zimbabwean private operators through an auction system. The total value of safari hunting in this category accruing to the ZPWMA is obtained from right to hunt fees, trophy fees and concession fees. It should be noted that in cases where Safari Areas are leased to private operators, ZPWMA does not benefit from daily rate fees, as these accrue to the operator.

The revenue accrued from these areas is paid directly to ZPWMA and contributes wholly to the conservation budget of ZPWMA. It has to be noted that ZPWMA has a mandate to conserve wildlife in the whole country and as such some of the revenue generated from the safari areas is used for the upkeep of other areas which do not generate revenue but are important wildlife habitats. ZPWMA requires about 200 /km^2 /year to effectively run all the areas under its estate.

Specifically for safari areas, cost centres include paying for staff salaries (a key anti-poaching tool), upkeep of facilities, habitat protection (roads and fireguards), fuels and game water supply. The total staff complement of field rangers in safari areas in the state hunting areas stands at 325 Rangers, and Table12 shows the salary bill for manpower in all safari areas under ZPWMA.

Table13: Staff costs incurred in Safari Areas

Grade	Number	Unit cost	Yearly total
Wildlife officer	11	1,043.75/month	137,775.00
Senior ranger	13	872.03/month	136,036.68
Ranger 1	61	785.87/month	575,256.84
Ranger II	138	749.67/month	1,241,453.52
Ranger III	102	714.51/month	874,560.24
Field allowances	39 912 man days	$5/day	199,560.00
Total			3,164,642.28

As shown on the table above, the bulk of the money generated goes in safari areas to meeting staff / labour costs in those areas. Field allowance refers to daily allowances given to rangers when they spend time out in the field doing extended patrols. Other cost centres include fuel and

in 2014 a total of 149,760 litres of diesel worth US$ 209,664.00 (about 30% of total fuel used within the whole Parks Estate) diesel was used was used in ZPWMA safari areas.

Communal areas

The communal areas benefits from wildlife through the CAMPFIRE program. This program is key in that it helps to encourage the communities to co-existence with wildlife. Communities are key ally in the country's fight against poaching and we believe that the off-takes from communal areas are sustainable. It therefore follows that legal elephant hunt is a sustainable way of incentivizing locals to help in conservation and is obviously more sustainable than cash hand-outs through donors. The CAMPFIRE program covers a total of 58 districts, covering 50 000 km^2 and more than 777 000 households. Figure 10 is a map showing CAMPFIRE areas in Zimbabwe, which is roughly equivalent to the Parks Estate.

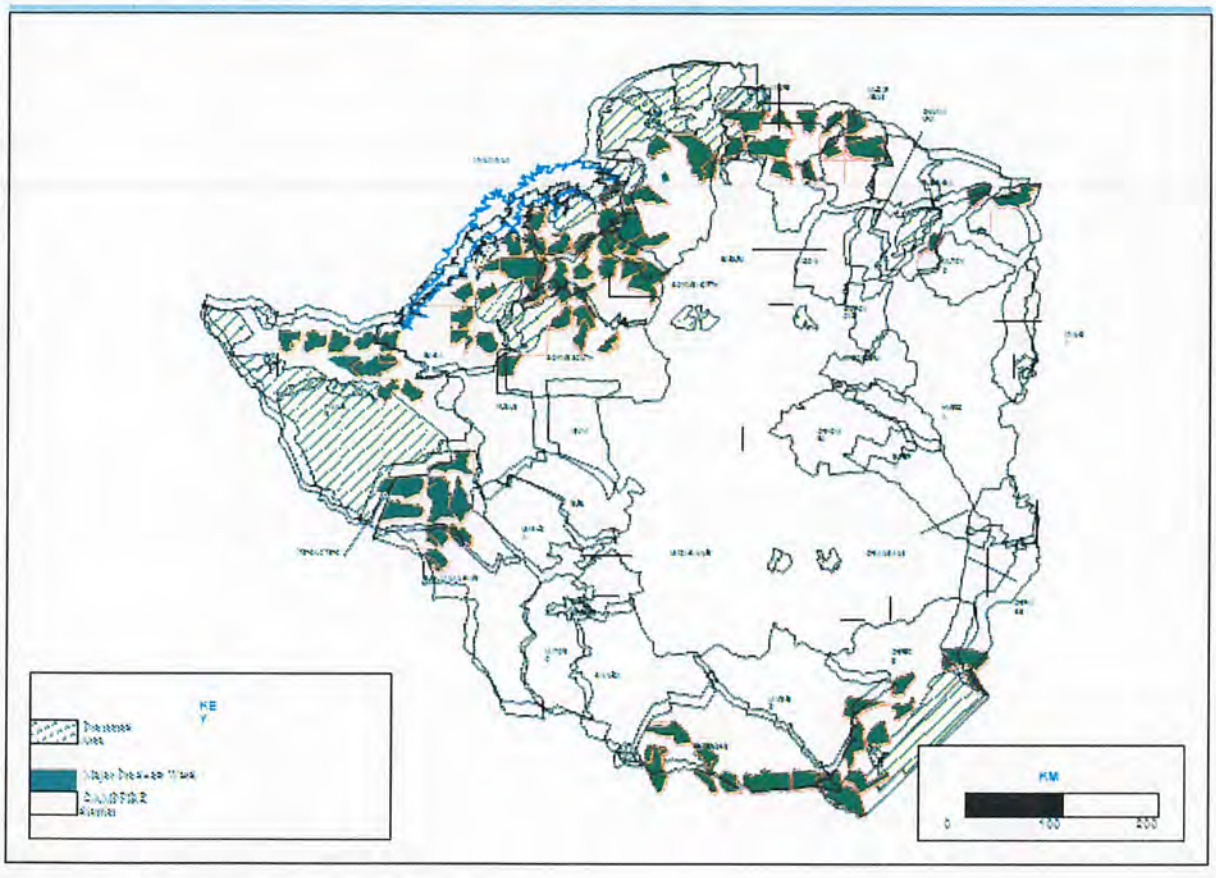


Figure9: CAMPFIRE Areas of Zimbabwe

The most common and lucrative wildlife based activity is sport hunting and the elephant provides the bulk (up to 80%) of revenue generated from wildlife based land use to the communities and the RDC's overseeing the CAMPFIRE program. During the 2014 hunting

season, a total of about US$1,419,384.00 (costs including trophy fees, daily rates and concession fees) was realized as revenue from elephant hunts under the CAMPFIRE program. Revenue generated from the CAMPFIRE program is ploughed back into managing and protecting the wildlife resource through activities such as anti-poaching patrols, wildlife censuses and problem animal control (PAC), and wildlife surveys. The distribution and use of CAMPFIRE revenue is done in accordance with the CAMPFIRE constitution developed in 1991 according to guidelines developed by the Government of Zimbabwe. The constitution was amended in 2007 with a view to increase the percentage of revenue for the local communities. The distribution of revenue between the Communities, RDC and CAMPFIRE Association is summarized in Table 14.

Table 14: Distribution of Revenue between Communities, RDC and CAMPFIRE Association.

Community	**RDC**	**CAMPFIRE Association**
55%	41%	4%

All major RDCs use CAMPFIRE revenue sharing guidelines, and in these districts revenue is paid directly into community controlled bank accounts by safari operators. Table 15 is a summary of how revenue allocated to communities is utilized based on the CAMPFIRE constitution.

Table 15: The Distribution of CAMPFIRE Revenue by Communities.

Project	**Percentage allocation**
Resource management	26%
Households	22%
Community projects	52%

It is apparent, however, that certain perceptions exist among some communities and observers that the sharing model is no longer being religiously adhered to, raising concerns regarding transparency over the revenue distribution system in CAMPFIRE areas. Some communities feel they are not benefiting adequately from the utilization of the wildlife resource. To this end, a review of the CAMPFIRE concept is being undertaken by the Government of Zimbabwe through the Ministry of Environment, Water and Climate. A funding proposal has been submitted to the European Union (EU) and if approved, the initial workshops will be held in August 2015.

The communities within CAMFIRE areas also benefit from elephant hunting revenue through community development projects as shown in Table 16.

Table 16.Some of the community development projects funded by hunting revenue in selected CAMPFIRE districts.

District	Project
Beitbridge	Rehabilitation of schools, clinics and irrigation schemes
Bililima	Rehabilitation of 3 clinics and 3 primary schools, hall, fencing field and rehabilitation of lodge
Binga	Schools, clinics and sub offices, rudimentary elephant dung paper making and tanning
Chipinge	3 grinding mills, lorry, teachers houses, community office, shop
Chiredzi	Clinic, teachers' houses, primary school, community-grinding mill, Police sub-office, piped water and electrification of clinic.
Gokwe North	6 grinding mills
Hurungwe RDC	Tillage tractors
Hwange	Agricultural inputs, goats restocking
Matobo	Organic farming gardens
Mbire	Clinic, nurses houses, office, storerooms, 14 classrooms, 7 teachers houses, grinding mill, school office, wildlife administration offices, 2 hand pump bore holes, water pipes, toilet, water storage tanks, 2 tractors, a tourist camp with 4 chalets;
Mudzi	Construction of Chingamuka primary and Chori pre-school
Nyaminyami	Tillage tractors, renovation of dispensary at clinic, nurse's house. Construction of Mayovhe classroom block, 3 grinding mills, Teacher's house, Jongola school. School bursaries x 3 students at Seke Teacher's College. Renovation of pre-schools x 2. Negande: Rehabilitation of water pipeline, grinding mill. Nebiri: Chikuro primary block, rehabilitation of Harudziva water pipeline. Kasvisva: Rehabilitation of water pipeline to supply water to Kasvisva clinic, Kasvisva Secondary school block. Msampa: Teacher's house, Majazu pry, renovation of ward warehouse; Kanyati: Cement for teacher's house renovation.
Tsholotsho	6 classroom blocks, clinic, 10 water engines, 2 F14 cottages
Umguza	Mlandwa secondary school
Vungu	Construction of primary school, borehole, dip tank

The CAMPFIRE program has managed to bring some important infrastructural development in some communities in Zimbabwe. It is important to note that most of the districts that have significant wildlife and in particular elephant populations are remote and generally underdeveloped, thus the proceeds from CAMPFIRE and the resulting developments go a long way in uplifting communities.

Private land

Revenue generated from these areas accrues to the respective land holders. Ideally ZPWMA, as the custodian of wildlife expects that some of the revenue is ploughed back to conservation. This money will be used for resource protection that is anti-poaching, fire management and water provision. Annually, ZPWMA carries out assessments in all wildlife farms to have an idea of the status of the infrastructure on respective properties.

Forestry commission

The forestry commission, to an extent, is like ZPWMA. They have to raise money for their operation. The revenue generated from elephant hunts is used for funding general activities in their concessions. Some of their major activities are anti-poaching, fire suppression and game water provision.

CONCLUSION

Zimbabwe still has a significant and healthy elephant population, which is the second largest in Africa, with most protected areas having a density of more than 1.5 elephants/km^2. The country has also experienced an increase in human population and the attendant increase in demand for land and natural resources. As such, habitat loss and modification remain as the most serious threat to viability of elephants in Zimbabwe, and also throughout Africa. Elephant management is based on the adaptive management approach which has resulted in the evolution of management strategies to cope with emerging and new methods of poaching. The ZPWMA also realizes the need for consistent and regular monitoring and emphasis has been placed on carrying out more frequent and regular aerial surveys, as well as routine ranger based monitoring of the elephant and other wildlife species populations. This will allow timely management interventions should the elephant population rise above, or fall below set TPCs. Elephants, despite being a constant source of problems for some communities, are an important source of revenue to these same communities, especially through their consumptive utilization. It is an accepted philosophy that wildlife can and should play a significant role in paying for its conservation. There is no doubt that elephant populations without direct economic value are at peril through lack of funding for conservation and also conflict with humans. It is apparent that despite Zimbabwe

deriving substantial benefits from utilization of elephants, this revenue is not sufficient to support conservation programmes. Considering that the elephant is an internationally recognized iconic species, it follows that local, regional and international efforts need to be initiated and maintained in order to secure the viability of elephant populations. Instead of restrictions being imposed on Zimbabwe in terms of sustainably utilizing elephants, international co-financing of management/protection of Zimbabwe's elephant population can go a long way in sustaining the elephant population. Given the global iconic status of the elephant, and that Zimbabwe has the second largest population of the African elephant, Zimbabwe must not be left to bear the sole burden of conserving the African elephant population.

List of attachments

1. Draft Elephant Conservation and Management Plan for Zimbabwe (2015-2019)
2. Aerial survey of Elephants and other large Herbivores in Gonarezhou National Park and Save Valley Conservancy(Zimbabwe):2014
3. Aerial Survey of Elephants and other Large Herbivores in Zambezi Valley(Zimbabwe):2014
4. Aerial Survey of Elephants and other Large Herbivores in Sebungwe (Zimbabwe):2014
5. Aerial Survey of Elephants and other Large Herbivores in north-west Matabeleland (Zimbabwe):2014
6. National Summary of Aerial Survey Results for Elephant in Zimbabwe:2014
7. Umfurudzi Park budget for 2015
8. Gonarezhou National Park Budget for 2015
9. CAMPFIRE association budget during USAID
10. Approved ZPWMA budget for 2015

THE ZIMBABWE NATIONAL ELEPHANT SUPPLEMENTARY MANAGEMENT PLAN (2015 – 2020)

Introduction and Background

The supplementary Elephant Management Plan (EMP) is a supplement that has been developed from the Zimbabwe National Elephant Management Plan (2015 – 2020). This supplementary plan looks at all the deliverables from this plan and highlights the priorities for the successful implementation of the plan. The supplement also highlights the progress that has been made towards the successful implementation of the EMP from the time it was adopted in 2015.

It was noted that the EMP was an ambitious plan and it required the cooperation of all internal and external stakeholders in order to achieve its obligations. The urgency that was placed upon well-equipped men on the ground to combat illegal killing of elephants, improved monitoring and research, and the provision of incentives to maintain and if possible increase the elephant range, requires huge resources.

This supplementary EMP recognises that the implementation of the Zimbabwe Elephant Management Plan (2015 – 2020) requires adequate and sustainable funding and provision of other resources to effectively protect the elephant and to curb illegal trade in elephant products. Thus there is need to fully resource all the components of this plan in order to successfully manage Zimbabwe's elephant population.

Resources are being mobilized from within ZPWMA, from its own business ventures, by the private sector, and by intergovernmental and nongovernmental organizations. Partnerships between ZPWMA and other stakeholders are also in place to secure some of the resources for elephant conservation. There is a need for the Government to provide additional support to the conservation of elephants given the present poaching crisis affecting the species continentally.

This supplementary elephant management plan recognises the work and the resource allocation that has made towards full implementation of the plan, and provides detail of the milestones achieved and work covered. It also prioritises the major areas of the EMP into immediate areas that are meant to arrest poaching and illegal trade in elephants. However, it details the impressive extent to which most of the structures have been set up and some of the innovations that have been put in place to attempt to bridge the funding gap.

Resources Available

An audit has been conducted of the implementation of the EMP to date and resources have thus far been channelled into the following areas.

Table 1: Financial resources deployed up to August 2016

BUDGET (USD)					
Item	**North West Matabeleland**	**Sebungwe**	**Mid Zambezi Valley**	**South East Lowveld**	**Total Current**
Law Enforcement	158,948	113,920	244,650	318,000	835,518
Monitoring	31,000	-	8,155	15,500	54,655

Investigations	-	-	16,500	8,000	24,500
Training	12,548	-	30,124	23,000	65,672
Community Relations	4,854	-	9,770	15,000	29,624
Total (USD)	205,350	113,920	309,199	379,500	1,009,969

Table 2: Other Non-Financial Resources

Item	**North West Matabeleland**	**Sebungwe**	**Mid Zambezi Valley**	**South East Lowveld**	**Total Current**
Summary Stats					
Area (Km^2)	24,989	15,529	16,014	8,835	**65,367**
Rangers	212	90	160	77	
Rangers/Km^2	0,01	0,01	0,01	0,01	**0,01**
Total Staff	271	123	181	142	**717**
NGO/Private Sector Anti-Poaching	Painted Dog Conservation, Bhejane Trust	Matusadonha Anti Poaching P	Zambezi Society, The Tashinga Initiative	-	
Vehicles					
4 WD Parks	12	4	8	10	**34**
4 WD Other	-	2	-	-	**2**
2 WD Parks	4	-	-	-	**4**
2 WD Other	1	-	-	-	**1**
5 Ton Trucks	1	6	2	2	**11**
Tractors	9	3	3	5	**20**
Graders	5	-	2	1	**8**
Boats	2	3	1	2	**8**
Motor Cycles	-	4	-	4	**8**
Micro light			1		**1**
2 Seater Helicopter	1		1		**2**
4 Seater Helicopter	1				**1**
Communications					
Repeater station	7	2	2	3	**14**
Mobile handsets	118	53	82	60	**313**
GPS	46	-	36	60	**142**
Operating Database	10	-	1	1	**12**

Progress towards Implementation of the Elephant Management Plan (2015 – 2020)

Several milestones stated in the Elephant Management Plan have already been achieved which include the following:

a. Appointment of the Elephant Manager as in section 4.5 of the Zimbabwe Elephant Management Plan (2015 – 2020).

b. Getting a basic agreement of implementation in the 4 relevant regions.
c. Some work towards Law Enforcement, Monitoring, Investigations, Training and Community Relations. As of August 2016, more than USD 1million had been spent on these activities. Table 1 above. More detailed breakdown of how this was spent see Annexes 1.0, 2.0, 3.0 and 4.0.

Constraints and Challenges

One of the major challenges regarding implementation of the EMP is with regards to the adoption of stricter domestic measures by the United States of America. This has had the net effect of further reducing the revenue from hunting into the Authority, which therefore affects the budget allocated to resource protection, in particular the elephant in this case.

One of the key impediments towards the full and comprehensive implementation of the Elephant Management Plan is the limited resources. However, Zimbabwe is at an advanced stage in the development of resource mobilisation strategies. These strategies include partnering with both local and international institutions in resourcing and financing aspects of the programme.

Priorities

Due to the fact that Zimbabwe is experiencing some funding constraints with respect to the full implementation of the Elephant Management Plan, which means therefore that it will not be possible to fully implement every aspect of the plan at the same time, we have developed a set of priorities (all drawn from the plan), that we feel are implementable and enable the work of conservation to proceed smoothly.

1. Law Enforcement
   Law enforcement continues to be one of the most critical aspects of this strategy. From the perspective of the EMP, it has also to date been allocated the biggest budget (Table 1). While strategic gaps still exist with respect to the law enforcement capacity (the numbers of rangers on the ground are still in need of improving to effectively cover that Parks Estate, more patrol kits and equipment are still required to improve enforcement capacity). In order to effectively combat poaching and illegal trade the Law enforcement capabilities are top priority.
2. Monitoring
   Biological monitoring and management, with respect to the priorities for this plan would come in as a second priority. This enables monitoring programmes and research to support science based adaptive management of elephants in this action plan. The resource allocation to this activity needs to be dramatically improved, although innovations have had to be put in place to manage that insufficient resource allocation. Rangers on patrol also carry out significant monitoring activities which feed into the biological monitoring and management of the elephants.
3. Investigations/Intelligence
   The investigations capacity (together with training) are critical components of this action plan. To date of the available resources, allocations to investigations have been minimal. Innovations have also been developed in this area, for support from various private players, institutions and state institutions in the investigative processes.

Assistance with areas like crime scene attendance have been improved through the assistance of the Zimbabwe Republic Police involvement.

4. Appointment of Elephant Manager

   While the appointment of the National Elephant Manager has been concluded (April 2016) to enhance implementation, monitoring and evaluation of the Action Plan, funding constraints still exists. Some funding for the activities of the Elephant Manager have been unlocked through cooperation with stakeholders in the monitoring and evaluation activities of the office. This includes setting up of the Regional Elephant Management Committees and funding their activities.

ANNEX 1.0 Northwest Matabeleland Action Plan – *Status and progress report Aug - 2016*

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants documented	- Collaborations with other stakeholders (e.g. WWF, Government of the People's republic of China) in law enforcement efforts was done were equipment such as camping tents, GPSs, vehicles, road maintenance equipment (graders, tipper trucks, lorries) were sourced - Training was done in Spatial Monitoring and Reporting Tool (SMART). 4 Officers and 40 Ranger were trained - New recruitment and recruitment drive for rangers initiated - Database on elephant illegally killed is maintained and updated
1.2 Informer network, investigation and intelligence system strengthened / established and operating	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	- 5 cases based on information from intelligence were attended to. No recruitment of investigators and training done 6 calls to whistle blowing systems resulted in effective follow up 10 incursions reported on by local communities and reacted to by ZPWMA/ZRP under the joint operations initiative

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines in collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	- The SOP for Joint Operations with ZRP and other law enforcement agencies not available - 100 % proportion of arrests leading to prosecution - 95 % proportion of successful prosecutions
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	- Database is available at station levels feeding into the Regional and National levels. - Reporting protocols in place
1.5 Joint law enforcement operations within the NWM region	- Conduct joint operations - Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing)	- Number of joint operations leading to arrests and successful prosecutions - Number of meetings held per year - Number of successes from shared wildlife crime information	5 joint operations leading to arrests and successful prosecution were done 16 meetings have been done to date Have been successful on all shared information wildlife crime
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the NWM	Enhanced data collection and collation of returns for quota setting implemented
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the NWM that are settled has not increased, or has declined, from 2015 levels	There are no increases or decreases in settlements within protected areas. It should be noted however, that there is illegal grazing in Hwange National Park from the communities in the Tsholotsho area.

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	There are no agreed SOP for cross border law enforcement operations 5 cases of joint operations leading to arrests and successful prosecution

9.4.2. Biological Monitoring and Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations, forest areas, and RDCs in NWM - Introduce ranger-based monitoring across all stations in NWM - Analyze the data and report on trends - Annual water hole count continued	- Information on trends in elephant numbers, structure and mortality analysed and available	Analysis data is based on the national survey of elephants and large herbivore done in 2014, road count data and from waterhole counts which are done yearly.
2.2 Impacts of elephants on selected habitats, selected indicator plant and animal species, and water use and supplies monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands - Measure and assess water use and its sustainability	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported Sustainability of water use completed	Permanent vegetation plots are monitored regularly for the effects of elephants and the data analysed. The effect of elephants on indicator plants species is monitored. Research is ongoing on their effects on major herbivores. A study on the effects of drawing on underground water to water elephants is about to be initiated
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, and HWC in the region - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research reports completed - PCP consultation results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	A study looking at changes in vegetation has recently been completed in collaboration with WWF, data is yet to be analysed Adaptive management is exercised through adopting results from research work within the park

9.4.2. Biological Monitoring and Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	More boreholes have been drilled to ensure there is enough water for other animals and to relieve pressure on some areas.
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Age, sex and tusk sizes for all elephant killed recorded Elephant trophy quality is maintained or improved in relation to the stipulated desired age and trophy size.	A database with information on elephants killed is maintained Trophy quality is maintained through the policing of the hunting industry and record keeping and adaptive management of quotas.
2.6 Elephant range defined and managed to maintain (and/or recover) habitats and elephant populations, and connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	13% of land in Zimbabwe is maintained for wildlife Corridors are being resuscitated such as the Hwange Sanyati Biological corridor which is being maintained in collaboration with WWF.
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Done at National level. However through our normal reporting system we feed in with the related information

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in NWM adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	HSBS, KAZA, CAMPFIRE, save Australia are some of the joint venture operations adopted and being implemented in NWM
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: ○ Increase elephant revenues at the ward level. ○ Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	There is need to review the benefit-sharing frameworks of CAMPFIRE and other schemes. There is little involvement of traditional leadership in revenue sharing There are no audits and accountability is minimum for revenue from wildlife
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	There are distinct land use regimes governed through government statutes and policies. Decline on human-wildlife conflicts is evident. For example data shows that lion conflicts have reduced by 50%
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	100%

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for NWM - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in NWM - Proportion of schools within or neighbouring elephant areas receiving and using information provided	There is little information distributed on elephants to communities. Distribution is largely done by private organisations such as painted dogs The proportion is low

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- Value of funding and support in kind for conservation of elephants in NWM realised each year	There is high value in funding of elephant conservation (WWF HSBC, WEZ, Friends of Hwange and Other Stakeholders)…funding coming in in terms of drilling of boreholes, vehicles, camping equipment, solar panels, fuels radio communication, roads and fire guards
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	Was done and is being implemented through HSBC
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the NWM - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify and provide needed equipment - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for NWM developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	Research strategy is under development 1 done by University of Zimbabwe Under review n/a 3 No publications have been done

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
			None
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. of communities trained and implementing elephant management programmes d) No. of elephant management campaigns conducted	No modules developed as yet - - - About 10 elephant management campaigns were conducted.
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the NWM developed	- Rebuild / refurbish all main access and internal roads within NWM wildlife areas - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the NWM - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	- Roads, bridges, airstrips refurbished and maintained as planned - Feasibility study of required field stations completed by June 2016 - Identified infrastructure requirements prioritised and required developments undertaken and completed by 2018	2 airstrips were refurbished and 1650km of roads were graded The list has been produced and is included in the Hwange Management Plan

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the NWM (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational secure communications system in place and being maintained	The communication system has been improved, however more is required in relation to the repeater links

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	- Timely minutes of each bi-annual meeting produced and circulated - Number of committee resolutions and actionable points initiated and acted upon	N/A N/A
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA & FC	- Functional team established - Technical support provided in keeping with TORs and planned activities implemented	N/A N/A
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA and FC - Establish terms of reference and recognition as a formal entity - Establish effective engagement with RDCs, and Traditional Leaders in NWM and neighbouring communities	- Formal recognition by ZPWMA / FC achieved - Meetings held - Effective engagement with neighbours	Quarterly stakeholder meetings There is effective engagement with neighbours…working with RDCs, KAZA, communities in law enforcement, human wildlife conflicts
5.4 Links with neighbouring Botswana, Namibia and Zambia to confer on the management of shared elephant populations established / strengthened	- Establish links with Botswana, Namibia and Zambia to confer on cross border elephant management issues	- Links established and operating	The KAZA forum allows for the mentioned countries to tackle cross border management issues

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	- At least one awareness campaign conducted each year - Annual progress reports produced - Number of briefs / news releases on major developments or progress released - Funds raised to support elephant conservation	This is yet to be done

ANNEX 2.0 **Sebungwe Action Plan** - *Status and progress report Aug - 2016*

9.5.1 Protection and Law Enforcement (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1. Joint operation reaction team established and existing base renovated at Bumi Hills old ZRP Camp as primary base. Followed by 3 others (Binga, Siabuwa, Old Chizarira Lodge/ Sengwa Wildlife Research Institute) *Manpower* *Vehicles* *Aircrafts* *Communication – eg radios* *Equipment eg firearms, boats* *Training* *Central database* *Intelligence networks*	**Manpower** – Draw up 20 man reaction team from law enforcement agencies and other stakeholders from the whole Sebungwe sub-region. (Prioritise Bumi, Sengwa) **Refurbish main base** **Training** – Initial database training Refresher course **Transport and Equipment** Procurement of 3 vehicles (land cruisers) Procurement of 3 boats (speedboats – 1 mothership and 2 patrol boats) **Communications** – establish an independent inter-agency communication network	- Number of arrests - Number of cases detected - Number of recoveries made (eg ivory, firearms etc) - Number of patrols conducted - Number cases finalized (convictions) - Number of carcasses detected - Number of joint operations carried out - Number of refresher courses carried out - Number of failed cases	The Sebungwe Region whose greater part is under the jurisdiction of Central has stations which include Sengwa Wildlife Research Area, Chirisa Safari Area, Chizarira National Park, Chete Safari Area and Matusadona National Park. During the reporting period of August 2016 we had a total of 22 incursions with the highest incursions happening in Chirisa Safari Area while the least was in Chete Safari Area. We had a total of 5 visual contacts with poachers but all were unarmed contacts. No ivory was recovered, no fire arms were recovered. 203 wire snares were removed. 8 people were arrested however all the arrests were not ivory cantered. No refresher course was conducted in the Region. Joint operations were conducted by our investigations section with MBCU, the police and MAPP. A total of 6 elephant carcasses were discovered of which 2 were natural mortalities in Matusadona, 1 was poached in Matusadona, 2 were poached in Chete and 1 was poached in Chizarira.
1.2 Informer network, Investigation and intelligence system strengthened	- Recruit informers and contacts - Maintain hotline for whistle-blowers - Procurement of 2 vehicles and 2 motorbikes - Recruit investigators (6) and deploy strategically - Train investigators - Constant liaison with informers - Rewards to informers standardized	- Number arrests and successful convictions based on information from intelligence system - Number of incursions reported on/reacted to by local communities - Number of informer reports per informer leading to arrests and convictions	From the month of August to date 2016,based on information given through informer network assisted in arresting two persons found in possession of a pangolin in Sengwa,Gokwe Davison Goredema and Batau Murambiwa Both were sentenced to 9 years effective each.On the 14th of September 2016 One suspect was arrested for possessing approximately 5kgs of ivory.The case is still pending in court.Approximately 8 ivory deals have been reported through informer network and are still being worked on for reaction.10 deposit fine tickets were also issued for separate offences .

9.5.1 Protection and Law Enforcement (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.3 Zambezi Valley deployment tactics revisited and implemented	- ZV deployment tactics revised - Identification of OP sites, crossing points etc - Identification and procurement of specialized equipment (eg night vision) - Provision of dry rations for operations - Introduction of aerial surveillance flights	- Resource books - Number of successes on detections - Number of contacts - Number of recoveries - Patrol effort (surveillance)	MAPP assisted in deployments for Matusadona both in the Lake with a boat and in the land with a vehicle. MAPP also assisted in joint operations and following up information from informers within the Gokwe and Nyaminyami districts. Recoveries and surveillances were made by our Investigations team together with the informers, MBCU and sometimes with the duty uniform ZRP
1.4 Ranger patrols strengthened	- Establish effective patrolling force of deployable rangers - Establish (or review) standard operating procedures (SOP) - Establish well-equipped reaction teams - Honorary Officer system re-established to support ranger patrols - Increase support for establishing/ improving dedicated APU for every concession.	- Number of deployable rangers at any one time - Total man-days spent on patrol - SOPs in place - Area patrolled each month - Reaction time to incidents - Number of APUs established	A total of 90 rangers were deployable and a total of 1099 man-days were spent on patrol during the month of August 2016
1.5 Training of staff enhanced	• Establish regular training and retraining schedule (includes training on weaponry, bushcraft, tracking, information gathering, crime scene management, Judiciary procedures etc • Training on standard operation procedures (harmonization)	• Number of training and retraining sessions carried out	8 rangers went for a refresher course at Head Office with the Army training them in drilling movements during the month.
1.6 Conviction rates improved	• Judiciary sensitization (incl. workshops) • Formulation of proper charges, indictment and summons • Gathering all evidence available using legal means • Completion of dockets timeously, submission and concluding cases in a reasonable time • Creation of a district sub-committee on elephant and wildlife issues • Hold workshops to share information on wildlife issues	• Number of successful prosecutions • Decrease in number of crimes committed • Number of workshops or meetings held	From August 2016 to date one case of ivory possession was successfully finalized and one for ivory is still pending trial.Generally poaching seem to have decreased as compared to the other years due to deterrent sentences being given by the courts,Conviction of ring leaders,changing of area of operation and current economic challenges which are also hitting the market on acquiring the us dollar.One workshop was held at Midlands black Rhino Concervancy with the judiciary to address challenges being faced .

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Viable population, geographical distribution, and habitat connectivity targets established.	- Establish TPC for all areas to set viable population target. - Collect spatial data (livestock densities, human population densities, forest cover, and agricultural cover) to map potential geographic distribution of elephants - Identify potential connectivity areas and promote wildlife-based land uses in those areas.	- Viable population target of minimum 5,000 for the region with minimum and maximum thresholds in different land categories - Updated geographical distribution map and spatial datasets - Number of conservancies approved/ green-lighted by communities	There are no private conservancies in the Sebungwe Region, however the 4 Rural District Councils within the Region are very active in conservation and also CAMPFIRE is active. The 4 RDCs are Gokwe North, Gokwe South, Nyaminyami and Binga RDC.
2.2 Monitoring system for population trends, habitat, and impacts designed and implemented.	- Establish regional database for data on population, habitat, HEC, patrolling, poaching, and trophies (for trophies, see also Output 5). - Design and adopt standardized reporting formats. (i.e. MOMS) - Report to the regional management committee to review data and decide on management actions. - Conduct annual aerial surveys for the "core area" (to be defined).	- Regional database operational - Number of reporting formats designed and distributed - Number of persons, patrols, and sectors submitting data - Quarterly reports - Quarterly reviews	We have formats for different reports which start from Incidental reports, Daily reports, Weekly reports, Monthly reports, Quarterly reports and Annual reports. The reports come from the stations and are consolidated at the Regional Office before they are sent to HQ.
2.3 Direct and indirect causes of decline (2006-2014) researched.	- Causes of mortality quantified using the regional database. - Gather information from local communities and experts. - Examine potential socio-economic factors related to decline - Research habitat changes. - Publish research in scientific publication.	Data and analyses	For the month of August 2016, the Sebungwe Region lost a total of 6 elephants, 2 of them died of natural causes in Matusadona National Park, 1 was poached in Matusadona, 2 were poached in Chete Safari Area and 1 was poached in Chizarira National Park. A long term elephant research programme to be launched in Matusadona National Park in conjunction with a private partner

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.4 Viable population, geographical distribution, and habitat connectivity achieved and maintained.	- Establish wildlife-based land-use system (not a land use plan) with community conservancies acting as corridors between protected areas - Reduce human-elephant conflict to acceptable levels. - Implement responsible habitat management (with regard to fires, REDD+, mining, illegal and legal settlement) - Conduct integrated land-use planning. - Support extension of REDD initiative	- Number of operational conservancies/ corridors - Elephant Population data - Number of elephants and people involved in "serious HEC incidents" - Effective, non-lethal elephant deterrents in place - Regional land-use plan - Number of stakeholders, meetings in planning process - Utilization of corridors by elephants	The Authority is supporting efforts to establish conservancies in the Region and we have approved the setting up of a conservancy in the Gatshe Gatshe Area. The Chirisa-Sengwa excision area is also planned to be established as a community conservancy
2.5 Sustainable offtakes established through participatory quota setting and monitored through adaptive management.	- Establish a database of offtakes, trophy qualities, and age classes (See Output 2, Activity 1). - Using participatory quota setting following best practices, set optional quotas based on scientific survey data, with no more than 0.5% of the estimate as the elephant quota for the region. - Revisit quota system and establish optional quotas as opposed to fixed quotas - Set minimum trophy size and a variable trophy fee with large increments based on size - Identify and enforce best hunting practices through a code of conduct incorporated in lease agreements and hunting permits.	- Trophy quality improving - Record of hunting practice transgressions	Quotas for the Nyaminyami District and the Sebungwe Region as a whole have been greatly reduced and all elephant hunts are now being monitored by Parks

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.6 Robust and comprehensive research program enhanced and maintained.	- Research the impact of decline on population dynamics. - Investigate migration hypothesis. - Develop applied research projects, especially interdisciplinary and multidisciplinary research. - Establish research oversight body, building on existing approval processes.	Publications, particularly with management guidance	A long term elephant research programme to be launched in Matusadona National Park in conjunction with a private partner

9.5.3 Social, Economic and Cultural Framework (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Transparent and equitable distribution of benefits established	- Develop an instrument to increase elephant revenues at the ward level. - Instrument to provide for traditional leaders to be involved in management and distribution of elephant related benefits. - Revise CAMPFIRE guide lines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodic auditing of the revenue sharing system.	- Instrument approved. - CAMPFIRE guidelines revised and approved - Revenue accountability system established - Number of audits	The Zimbabwe Elephant Nursery to establish a community outreach program that will provide community educational and developmental projects and activities in the region
3.2 Economic management of consumptive and non-consumptive tourism of elephants in Sebungwe improved.	- Preventing human settlement in protected areas - Review length of concession leases to encourage greater investment. - Rehabilitate the depleted Safari areas - Promote PPCPs	- Number of eviction notices issued. - Number of reviewed leases - Number of safari areas under proper management/concessions - Record of PPCPs established.	Mokore safaris is currently operating in Sengwa Wildlife Research Area and the lease is under proper management, Statunga Safaris has also got the Chirisa hunting lease and will start operating in the year 2017. Chete Safri Area is currently still open however there are applicants who may take it at anytime.
3.3 Land use strategies to mitigate human elephant conflicts (HEC) established	- Review of human elephant conflict measures (consultancy) - Increase sense of ownership of wildlife as a mitigation measure to HEC (review) - Traditional leaders to set up a compensation scheme for land holders directly affected by HEC. - Support review and development of land –use plans to optimize agricultural livestock and farming activities	- Reports - Link with activity 1 and 2 output1(benefits) - Compensation scheme functioning and record of HEC in place. - Land use plans supported	Established a Problem Animal Control Committee in Nyaminyami and Gokwe that includes all stakeholders to assist in the effective coordination of all PAC issues

9.5.3 Social, Economic and Cultural Framework (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.4 Investment of wildlife revenue in income generating community products established	- Revitalize technical support services to communities/ community initiatives - Participatory business plan at community level. - Explore micro financing opportunities - Explore markets for community projects related to elephant conservation	- Technical support services established through proper instrument. - Participatory business plan adopted.	There is a strong move to promote the development of aquaculture projects to enhance food security
3.5 Relationship and communication mechanism established	- Sebungwe WG to include Traditional leaders and RDCs - Methodologies for regular communication with communities and their leaders established	- Traditional leaders and RDC included in the WG - Communication strategy developed	
3.6 Education on elephant conservation in the community increased	- Information campaign explaining reasons for quota decrease (see Biological Component for cross check) - Explain what trophy hunting means and how it links to benefits - Share census results and explain implications - Extend conservation education to Sebungwe wards (NGOs?)	- Number of Outreach meetings with Traditional leaders / Wards/ RDC including the 4 key activities	The Zimbabwe Elephant Nursery to establish a community outreach program that will provide educational and developmental projects and activities in the region

9.5.4 Building Conservation Capacity Component (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Capacity needs for elephant management in Parks and CAMPFIRE areas analysed and identified	- Draw up TOR - Appoint consultant	Report produced	Still outstanding
4.2 Training provided	- Analyse training needs - Prioritise and develop training curricula if not already available - Implement in-service training and re-training	Numbers of people trained and certified	Still outstanding
4.3 Best practice standards for elephant management in place	- Standards defined by and through National Elephant Policy and CAMPFIRE Principles and Guidelines - Define clear objectives for elephant management in the Sebungwe - Support CITES MIKES site(s) and application of SMART and RBM	- MIKES PIKE database - SMART database	Nyaminyami RDC is a MIKE site and efforts are needed to adopt the SMART database system in th region
4.4 Research and monitoring capacity strengthened	- Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring systems - Identify equipment needs, source and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- 2 persons trained per annum - 5+ people in mentoring system each year - Equipment procured and in place - Active community research programme underway - Event Book System functional and operationalised	Still outstanding
4.5 Funding secured	- Complete Sebungwe Elephant Management Plan and disseminate for funding purposes - Development of funding proposals for each of the components, if necessary - Identify donors (e.g. bilateral, WB GEF, NGO, other) - Submit proposals - Develop Sebungwe branding and marketing campaign	Number of successfully funded proposals	Still outstanding
4.6 Infrastructure refurbished and functioning	- Roads rehabilitation: Parks and CL - Karoi-Binga road - Airstrips	- 2,000 km repaired to standard - Airstrips registered and functioning	Still outstanding

9.5.4 Building Conservation Capacity Component (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.7 Communications	- Procure and install radio communications systems	System installed and operational	Still outstanding

9.5.5 Coordination and Programme Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1. Sebungwe Management Committee with an Elephant Working Task Force and Project Coordinator established	-Identify committee members, select WTF and appoint Coordinator -ToR for each institution (from national plan)	Committee meeting twice yearly; WTF meets quarterly, identifies priority activities and oversees implementation by Coordinator	Still outstanding
5.2. Coordination and communication between Traditional Authorities, their communities and the elephant management programme and plan strengthened	-Address the community through CAMPFIRE and traditional leadership -Introduce elephant management plan in easily understandable format – maps and graphs – and disseminate through all levels/actors in Sebungwe	• Management plan documents for dissemination	Still outstanding
5.3. Coordination between Sebungwe safari operators and implementation of the elephant management plan strengthened	-SOAZ, ZPHGA appoint liaison officer for Sebungwe elephant management plan -Encourage non-members of associations to participate in plan implementation	Liaison officer appointed and operating and non-members of associating participating in implementation of the action plan	Still outstanding
5.4. Links with neighbouring states established – shared elephant management	-Establish relationship with KAZA Secretariat -Establish links and synergies with transboundary natural resource mgmt -Bilateral JOC to focus on illegal wildlife trade and trade routes -Establish links with TRAFFIC	• KAZA Secretariat aware of Sebungwe elephant management plan • TBNRM established and functional • Reduced illegal trade	Still outstanding

ANNEX 3.0 Lower Zambezi Valley Action Plan - *Status and progress report Aug - 2016*

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)			
Output	**Activities**	**KPIs**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants	-
1.2 Informer network, investigation and intelligence system established	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	5 informers were recruited, one more investigator was recruited. 10 calls were received indicating poachers coming in from the local community and 3 calls indicating foreign poachers coming in. Since January 2016, 4 foreigners have been arrested from tip offs and one local person. A total of 32 incursions were recorded whereby the majority of them were recorded during the first quarter of the year.
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines on collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering) - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	Of all the five arrested poachers, all were sent for prosecution and were all convicted and sentenced

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)			
Output	**Activities**	**KPIs**	**Narrative Report on Progress in Implementation**
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	The current data base in place is the MIKE data base system where one Senior Ranger and two rangers were trained to manage the input of information into that system. Recording starts from the time the callsign are deployed using patrol briefing form, patrol details will then record information of their findings onto the ground patrol data form whilst out on patrol; on return, a report is then reproduced which will be used together with the ground data form to then enter the information onto the MIKE system data base.
1.5 Joint law enforcement operations within the LZV	- Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) - Conduct joint operations	- Number of meetings held per year - Number of successes from shared wildlife crime information - Number of joint operations leading to arrests and successful prosecutions	One liaison meeting conducted with our Zambian counter parts, 3 community outreach programs with the Nyamakate and Chundu community. -
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the LZV	Implementation of the LZV Action plan is in progress with
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the LZV settled has not increased, or has declined, from 2015 levels	
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations and RDCs in LZV - Introduce ranger-based monitoring (SMART, MIKE, ETIS) across all stations in LZV - Analyze the data and report on trends	- Information on trends in elephant numbers, structure and mortality analysed and available	-According to the 2014 Aerial Survey report, Mana Pools has 2984 elephants. From 2009 to 2016, Mana Pools has lost 95 elephants to poaching of which 16 were recorded this year. The report states that there was 40% reduction in elephant populations from the 2001 survey. Causes of reduction include natural deaths, migration and poaching.
2.2 Impacts of elephants on selected habitats and selected indicator plant and animal species monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported	-Elephant damage has been observed and recorded on woody species on the flood plain where they are greatly concentrated. Impacts shown were ring barking and uprooting of woody species such as *Combretum spp* and, *Fidherbia albida.* The impacts have resulted in weakening of the tree species, making them susceptible to diseases and mistletoes. -These species also do not have recruitment due to impacts of elephants. -Introduction of enclosures are at initial stages to monitor the impacts and enhance recruitment.
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, HWC, in the LZV - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research report completed - Survey results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	-Recommendations have been submitted to release pressure on the Mana Pools national park through stopping hunting on the Sapi Safari Area flood plain.
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	-Sapi Safari Area turned hunting in the process of being stopped, and the area to promote photographic safaris instead of hunting.

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Elephant trophy quality is maintained or improved in relation to the stipulated desired trophy size.	Non-trophy hunting area. Mana Pools being a non-hunting areas, the sizes of trophies hunted from management quota and those picked from natural deaths, trophy sizes are more constant.
2.6 Current elephant range defined and management to recover habitats and elephant populations and maintain connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range and maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	Elephants aggregation on the flood plain during the dry season has resulted in a lot of pressure being exerted on the area. Changing of management system of Sapi's flood plain could contribute to recovery of the habitat on the floodplain once animals disperse.
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Situational reports involving poaching of elephants have been submitted in time. MIKE Data Base is also being maintained. A record of recovered of all ivory obtained is kept and the recovered tusks are constantly submitted to Head Office where they are again reweighed and recorded as well.

9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in the LZV adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	A number of organisations have come aboard in support of conservation through Joint Ventures and Memorandum of Agreements such organisations like: Zambezi Society, Tashinga Initiative, Animal Wildlife Fund Foundation, Sino Zimbabwe Wildlife Foundation Fund, and Kariba Animal Wildlife Fund Foundation, these have formalised they assistance to Mana Pools which vary from Anti-Poaching assistance to treatment of injured animals.
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	Benefits from wildlife utilisation are channelled through CAMPFIRE program through the local Rural District Council.
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	Only one case of Human Wildlife Conflict has been recorded since January where one person was attacked by a hippo but survived the attack. Cases of Wildlife encroachment onto the communities on the southern boundary are dealt with by the CAMPFIRE because of the buffer zone between the southern boundary of the park and the community.
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	Of the 16 located elephant carcass, six elephant carcasses were recovered from two contacts. Note that 22 other elephant carcass were recovered in Chirundu again from a contact but we cannot directly link them to the elephants poached in mana Pools though there is a very high possibility of having the elephants poached in Mana Pools as well or in Marongora or Sapi..

9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for the LZV - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in the LZV - Proportion of schools within or neighbouring elephant areas receiving and using information provided	2014 Elephant Survey Report

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- No of project proposals developed, submitted and funded - Value of funding and support in kind for conservation of elephants in LZV realised each year	A proposal was submitted by Tishinga Initiative for the establishment of the Nyakasikana Anti-poaching Base and has been funded and near completion. See section 9.6.3.1
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the LZV - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify equipment needs and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for the LZV developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	Mana Pools has one Ecologist

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. communities trained and implementing elephant management programmes	Training modules are guided as per the Mushandike College of Wildlife Management at the organisation training institute. The station has 8 staff members who have undergone training at Mushandike College of Wildlife Management in various fields from Accounting, Certificate in Wildlife Management, Diploma in Wildlife Management, and IT courses
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the LZV developed	- Rebuild / refurbish all main access roads to the LZV (c.150 km) - Repair, clear, grade where necessary some 600 km of internal roads and several bridges - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the LZV - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	Roads, bridges, airstrips refurbished and maintained as planned Feasibility study of required field stations completed by June 2016 Identified infrastructure requirements prioritised and required developments undertaken and completed	New operational roads are in the process of being opened, existed roads were maintained, the Mana Main Airstrip was renovated this year 2016 Of priority was to establish an anti-poaching base at Nyakasikana which I now near completion
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the LZV (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational communications system in place and being maintained	New operational radios, repeater links and potable GPS systems have been secured.

9.6.5 Coordination, Collaboration and Programme Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	Timely minutes of each meeting produced and circulated Committee resolutions and actionable points initiated and acted upon	
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA	Functional team established Technical support provided in keeping with TORs and planned activities implemented	A technical person has been seconded to Mana Pools by AWF to assist in Anti-poaching
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA - Establish terms of reference and recognition as formal entity - Establish effective engagement with RDCs, and Traditional Leaders in the LZV and neighbouring communities	Formal recognition by ZPWMA achieved Meetings held Effective engagement with neighbours	In 2016, 1 Meeting has been held between ZIMPARKS officers and the Chief (Chief Chundu) together with his village heads. Another meeting has also been held between Mana Pools Officers and Safari Operators to discuss their support in conservation.
5.4 Links with neighbouring Zambia and Mozambique to confer on the management of shared elephant populations established / strengthened	- Establish links with Zambia and Mozambique to confer on cross border elephant management issues	Links established and operating	There is cordial communication with ZAWA counterparts.
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	At least one awareness campaign conducted each year Annual progress reports produced Briefs / news releases on major developments or progress released Funds raised to support elephant conservation	Funds have been raised by Non-Governmental organisations through provision of camping equipment, availing vehicles for use in Anti-poaching, assisting in opening up of roads, developing of base camp for rangers and training

ANNEX 4.0 South East Lowveld Action Plan - *Status and progress report Aug – 2016*

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units strengthened	– Appoint anti-poaching coordinator (for region and/or separate areas) – Recruit staff – Train staff – Procure vehicles and equipment – Deploy unit – Support existing units	Trained and fully equipped units established and operating with relevant security agency by June 2016	Five units were established in Gonarezhou National Park, trained and fully equipped. Three new Lancruiser vehicles were procured to augment the existing patrol fleet. -Two candidates identified with one to be elected for the post of antipoaching coordinator for the Region. - 35 Cadet rangers recruited by the Gonarezhou Conservation Project to boost the existing staff compliment. Cadet Rangers trained in basic paramillitary skills by the Gonarezhou Conservation Project -A Gonarezhou Antipoaching Reaction Unit established and operating throughout the Gonarezhou Nationa Park. -Out of the 20 properties in Save Valley Conservancy, 8 properties have 2X call signs of 3 rangers each who are highly trained and able to carry out combined operations with security agencies in addition to the15scouts also highly trained with AggressiveTracking Specialist a security private company assisting in the protection of rhinos and elephants in SEL.
1.2 Informer and intelligence systems established and/or strengthened	– Identify and recruit informers – Establish and implement incentive protocols – Set up, implement hotline for anonymous reports and communicate it to the public – Analyse and use information – Ensure information is included in database outlined in Output 1.6	An active informer system/network operating within the SEL by Jan. 2016 Hotline widely advertised and operational by Jan 2016	-Informer network is being established and had a number of informer lead success. Awareness of the hotlines began in September 2016 by Regional team. -Informers recruited by the Gonarezhou Conservation Project. -A hotline set up for Gonarezhou and Save Valley Conservancy. -Data being analysed and a data base in place and being mantained at the Regional Office. -Hotline facility fully advertised through the Parks Investigations Branch.
1.3 Investigation of wildlife crime improved	– Implement training programmes for investigation personnel – Ensure collaboration between Parks, ZRP and intelligence officers	At least two law enforcement staff trained in scene of crime collection and preservation of	-3 Investigations officers trained in scene of crime collection and preservation of exhiits course

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
	– Recruit more investigators – Put in place Investigator incentive system – Collaborate with forensic scientists and ballistic experts, as well as agencies such as EMA and approved universities (e.g. Chinhoyi University of Technology, University of Zimbabwe, National University of Science and Technology)	evidence, ballistics evidence, etc. in SEL. Percentage of investigations resulting in successful prosecutions in SEL greater than in 2014	-1 investigations officer trained in Wildlife, Pestcide and Forensic Crime Scene Investigation Course. -Collaboration with other law enforcement agencies satisfactorily yielding results. -Collaboration with other agencies strengthened -plans are underway to recruit more investigators and to open an investigations office in Chiredzi. -Some stakeholders have pledged to assist the investigators with some incentives. -In Save Valley Conservancy one trained personnel is dealing with wildlife crimes and is based at Humani Ranch. -The % of successfulness on investigated cases is now higher than 2014, and the current % is estimated to be 60% after lobbying with the Judiciary Services
1.4 Prosecution of wildlife crimes improved	– Train prosecutors on legislation and processes available to deal with wildlife crimes – Conduct awareness / outreach programs with Prosecution, Judiciary – Utilize ancillary laws, such as those dealing with economic crime, organized crime, money laundering, – Communicate status of prosecutions to the public via ZPWMA website – Clear backlog of wildlife cases – Explore the possibility of appointing dedicated wildlife crime prosecutors at Regional and National level	Monthly liaison sessions on wildlife crime and law enforcement held with members of the judiciary Relevant legislation available and being used Wildlife crime prosecutors available and being used in SEL	-Liaison with the Judiciary, Courts and the Prosecuting Authority on wildlife crimes conducted. -Relevant legislation available and referred to in dealing with wildlife crimes -Wildlife Crime Prosecutors not available from the Wildlife Authorities but Public Prosecutors being used to deal with wildlife crimes to which they may not be well versed with certain technical wildlife issues. -No wildlife crime prosecutors appointed. -Inadequate resources of transport and fuels to fully implement monthly liaison.

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.5 Law enforcement in collaboration with communities enhanced [Links to Component 3]	– Engage and collaborate on curbing wildlife crimes (ZRP & Communities) – Establish anti-poaching clubs/ community natural resource monitors that collaborate with ZPWMA and ZRP – Lobby support from Chiefs to deal with local poachers – Hold workshops with Chiefs and communities about wildlife and wildlife crimes – Establish incentives for communities to provide information	Incentive schemes that encourage the public and members of rural communities to contribute to law enforcement (e.g. through informer hotline) established in SEL Increasing number of incidents of community contribution to law enforcement (e.g. whistle blowers) by Dec. 2017	Trained community rangers from Sengwe area, four passed and ready to carry out ant poaching operations within the Sengwe area. Several meetings on wildlife issues were held with Chief Sengwe. - Collaboration with ZRP and Communities strengthened and yielding results. - We have opened a hotline and fliers facility that we distributed through the Save Valley Conservancy, Gonarezhou and surrounding areas and information is coming in. - All stakeholders workshop on wildlife issues is planned soon - Some stakeholders have pledged to incentivize the whistle blowers - In Save Valley Conservancyseveral education awareness campaigns have been carried out in all areas bordering wildlife protected areas. - meetings with chiefs have been maintained regarding protection of wildlife. - Resource monitors have been selected by the communites. - The surrounding communities are benefitting from meat obtained from problem animal control and trophy hunting.
1.6 Local wildlife law enforcement database established	– Set up database, as per national database – Ensure inclusion of prosecution status in database – Implement national data recording protocols – Train data entry staff and crime analysts	Local database established and operating Illegal activities recorded and analyzed	Spatial Monitoring And Reporting Tool is being used in Gonarezhou and all captured data can be easily analysed.The SMART approachaims at improving conservation effectiveness and tracking of wildife crimes. -No SMART use in Save Valley Conservancy -A poaching database from when the crime is committed up to the final court outcome is in place. -A database of poachers and their modus operandi in place -Crime Registers being mantained.
1.7 Illegal settlements / grazing in wildlife areas reduced	– Liaise with RDC, Traditional Leaders and ZRP, DA's Office – Conducted Education programmes – Regular updated satellite mapping	Illegal settlements reduced to less than 5% of wildlife areas by 2020 (i.e. state protected areas, conservancies and community wildlife areas)	Illegal settlement in the park is still very low no other settlement after 2000 (Chitsa communities). Grazing of cattle in the park is under control in the GonarezhouT National Park. -The Southern part of the Save Valley Conservancy 85 % settled.An inter ministerial committee set up to look at the possibilities of fencing out the settlers and also there

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
[Links to activities on land use mapping and planning in Component 2 – Output 2.2 and incentivization / alternative livelihood activities in Component 3]			are proposals to remove some of the settlers from some of the properties to pave way for a game corridor and allow free movement of game within. -Local authority currently working out on orderly settlement in the Save Valley Conservancy. -Fencing of the Save Valley Conservancy is also expected to assist in reduced human and domestic animal movements.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1Research programme to understand temporal and spatial drivers of elephants established [Links to Component 4]	– Create enabling opportunities and environment for research – Prioritise research needs – Conduct localised case studies and research projects – Monitor and evaluate poaching and other drivers - hunting, water, food, human disturbance – Explore possibility of GLTFCA flagship research programme for elephants [linked to Component 5] – Carry out ground surveys to monitor distribution and density	Research programme that enables local and international researchers, and links with the GLTFCA research programme, in place and producing reports	-Ten elephants were collared to monitor elephant movement in Gonarezhou.
2.2Current elephant range defined and options for extending range and maintaining connectivity between fragmented populations explored	– Define elephant range use, and existing and potential connectivity – Identify priority corridors and human land use barriers – Conduct spatial analyses to inform land use planning – Advocate land use planning to facilitate connectivity and reduce human wildlife conflict – Explore options for translocating elephants to under-stocked areas	Identified priority corridors for elephant connectivity within SEL, between SEL and other areas in Zimbabwe, and with neighbouring countries	-Research is in progress in the Gonarezhou National Park -Elephant corridors are known in Save Valley Conservancy but because of illegal settlements the problem of understanding this is still far from reality.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.3Elephant population numbers, structure, mortality and trends monitored, quotas adjusted, and desired levels of trophy quality maintained	– Undertake standardised, regular, aerial and ground surveys of the elephant range – Explore methods to monitor elephant presence and abundance in Mozambique (to Zinave) and up to the Chimanimani range – Undertake trend analysis – Define elephant age and sex structures and extract birth and death rates – Establish annual monitoring plans – Record and analyse elephant mortalities (all causes e.g. poaching, PAC, natural, hunting, etc.) – Monitor trophy quality and age – Develop and implement an age-based and size-based trophy quota	Elephant range surveyed at regular intervals Demographic data available and analysed Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers and used in quota setting	-Biannual aerial survey carried in Gonarezhou and surrounding. Last survey in September 2016. Could not get authority to survey in Mozambique. Elephant's mortalities recorded in park security registers -Elephant survey in Save Valley Conservancy done 2013 -Quota setting being a wild life management tool is implemented annually - taking cognisance of research data -PAC , hunting etc information is kept
2.4Elephant impacts on their habitats and selected indicator species of biodiversity monitored	– Establish annual monitoring plans – Measure vegetation indicators such as woodland cover – Measure other functional biodiversity indicators e.g. bird responses to structural changes to woodlands – Measure ecosystem functions – Relate desired impact to measures of elephant abundance and spatial use – Research other drivers of ecological impact (climate change, change in land use, water provision, and fencing, amongst others) – Use research findings, expert opinion and informed public opinion to establish thresholds of potential concern (TPC or limits to change) to initiate management action in respect of elephant impacts in protected areas and effects in communal land – Identify areas with key vegetation communities that are utilized by elephants	Annual monitoring plans defined and implemented for selected indicator species of biodiversity TPC's established Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	-Annual monitoring through sightings when conducting hunts and patrol is in place.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.5Costs and benefits of elephants to local and national economy monitored and costs of elephants to local communities reduced	– Monitor and evaluate extent and costs of human-wildlife conflict incidents – Relate human-wildlife conflict to elephant abundance and spatial use – Understand drivers and social and economic consequences of human-wildlife conflict – Evaluate the direct and indirect contribution (financial, economic and social) and the direct and indirect costs of elephants to the well-being of people and to conservation, through both consumptive and non-consumptive uses – Implement ongoing and new mitigation for human-wildlife conflict	Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	-PAC programmes are conducted, meat shared among the communities affected, skins and ivory may be sold and money ploughed back in to the affected communities.
2.6Adaptive elephant management framework adopted and implemented [Links to Component 4]	– Ensure collaboration between Regional Elephant Management Committee and regional and local resource management committees (e.g. LOCAL Forum) – Implement annual process of adaptive planning, implementation and monitoring in line with elephant management objectives and TPCs within the SEL – Develop and implement localised management plans (e.g. SVC plan) – Ensure alignment and harmonisation with other Zimbabwean, regional and international plans	Annual elephant management plans developed, adopted and implemented	-Annual elephant management plans have only been confined to hunting and PAC and cropping to a large extent has not been done. -Huge costs of this exercise are a major impediment as evidenced by the number of elephants taken off so far this year under such local arrangements.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.7Alternative outcomes modelled	– Develop framework for examining and modelling potential linked impacts between biodiversity issues, elephant issues, and societal issues, including any 'surprises', such as disease or extreme weather events. – Implement the modelling framework to define the outcomes of various management scenarios	Established modelling framework being used to guide adaptive management Scenario outcome recommendations and being used in management	Nothing to report
2.8SEL reporting to meet national / international standards achieved	– Advocate key summary set of elephant KPIs/outcomes for national reporting (e.g. potential population sizes against actual population sizes) – Comply with national and international legal obligations – Explore the designation of GNP as a MIKE site	CITES reporting requirements met National reporting compliance requirements	-Gonarezhou National Park meeting CITES requirements. Park not yet a MIKE site. -No information on Save Valley Conservancy and the area is still not a MIKE site

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Community partnerships and joint venture oportunities are incentivised and facilitated	– Establish protocols, policies and models for development of joint ventures (PPCPs) – Identify potential areas – Facilitate development of new, and strengthen existing, institutional frameworks and legal entities for beneficiaries at sub-district level – Develop concepts, business plans and prospectuses for different areas through consultative processes with Communities – Develop a SEL Tourism plan and review potential concessions within the framework of this Plan – Develop mechanisms for inclusive and transparent engagement and selection of operators and JV partners. – Facilitate communication, endorsement and support of JVs – Explore potential incentives and avenues of material and technical support that can be provided by Local Government and Authorities to promote establishment and sustainability of Community JVs – Promote access to affordable capital funding – Enhance capacity of community members to engage in wildlife and tourism management through training and employment	Models and protocols for joint ventures established Community institutions to engage in joint ventures established Joint ventures established and operating, resulting in financial benefit to communities SEL tourism developed and potential concessions identified Mechanisms of support and incentivisation to JVs established	- Save Valley Conservancy has a Joint Venture model and community share ownership trust with the local communities - PPCPs envisaged with the Gonarezhou Conservation Trust.
3.2 Elephant management in community wildlife areas improved	– Promote improved and professionalized elephant management and security in community wildlife areas through establishment and maintenance of improved capacity, infrastructure, security and management systems – Develop and implement a transparent Performance Based Quota system which incentivises improved management and security systems for elephant in community hunting areas and which promotes effective buffering of source populations – Update terms of lease agreements in community wildlife areas to confer a broader range of roles and responsibilities on operators including resource management and protection; re-investment and	Infrastructure, equipment and systems for elephant management in community wildlife areas established and operational Reduced human-elephant conflict Community capacity for wildlife management improved	-**WILD project** working on two community wildlife areas that is Naivasha in Chiredzi district and Jamanda in Chipinge district.WILD(Wildlife In Livelihood Development Programme is an intiative of SAT (Sustainable Agriculture Technology) and ZWVT (Zimbabwe Wild Vet Trust) funded by the European Union and is aimed at improving socio-economic and ecological resilience in semi arid communal areas through incorporation of robust wildlife based land use enterprise into the mainstream of communal areas. -Nyangambe in Save Valley Conservancy is part of the elephant managemnt in the community.

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
	infrastructure development; employment targets; local sourcing; etc. – Review key cooperation opportunities across different land uses and countries within GLTFCA, e.g. Sengwe-Tshipise Wilderness Corridor	Opportunities for cooperation within GLTFCA identified	
3.3 3.3 Additional elephant-based tourism and sustainable utilisation oportunities explored	– Promote awareness and marketing of iconic tuskers – Explore opportunities for expansion of community wildlife areas in viable wildlife corridors to enable establishment of additional sustainable utilisation areas and enterprises. [Links to Output 2.2 – identification of corridors]	Corridors identified and Agreements concluded Tourism and awareness campaigns undertaken	- No corridors agreed and concluded as as yet.
3.4 Transparent distribution of the benefits and costs of elephant management and conservation facilitated [Links to Output 2.5]	– Conduct regular and comprehensive Community Awareness campaigns regarding quotas, revenues and distribution within Communities – Capacitate and incorporate direct community involvement in management of Community Wildlife Areas, enterprises and JVs. – Diversify downstream natural resources enterprises to multiply the revenues from CBNRM, e.g. NTFPs	Awareness campaigns conducted Community structures have improved capacity to manage NRs and wildlife areas CBNRM revenues are invested in establishment of natural-resource based enterprises Community realises greater employment and financial benefit from CBNRM revenues	Awaerness campaigns are being conducted in areas arround Gonarezhou National Park and Save Valley Conservancy focusing on natural resources management not rvenue management. -The community share ownership trust is a clear testimony of improved capacity to manage NRs and Wildlife areas.These programmes bring about financial benefits to the communities.
3.5 Effective techniques and land use strategies to mitigate human-elephant conflict are implemented	– Review land use zonation through consultative processes [link to Output 2.2] – Promote awareness and adoption of effective HEC mitigation measures – Promote improved rangeland rehabilitation and grazing management to reduce competition between livestock and wildlife. – Promote improved and rationalised crop production and alternative mechanisms to promote food security to reduce habitat destruction for inefficient dry land cropping (e.g. irrigation development; carbon sequestration credits to generate income & purchase of staple grains).	HEC is effectively reduced Availability and application of HEC mitigation measures improved There is participation in effective grazing management schemes Grazing is better managed and rangeland health is improved	-Proposed irrigation schemes in fenced areas will help reduce human/wildlife conflict -Grazing areas for domestic animals are to be separated from wildlife areas again to reduce human wildlife conflict

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
		There is increased uptake of improved cropping techniques Crop yields are improved Alternative land uses evaluated	
3.6 Information on elephants and their conservation is included in school curriculae and environmental education adjacent to key elephant populations in the SEL is promoted	– Promote awareness of elephant conservation (and other issues) through cultural events, art, plays, sport, etc. – Participate in syllabus review of national environmental science curriculum approved by the Ministry of Education – Develop approved environmental training and extension material and promote dissemination to different stakeholder groups within the community – Promote the formation of environmental science clubs at schools – Coordinate various education, training and extension campaigns operating within the district	School children and communities have greater appreciation of elephant conservation issues Greater participation in environmental clubs at schools with greater understanding of environmental issues More social events linked to environmental and conservation awareness are held Elephant conservation messages are conveyed through art and cultural events & competitions Parallel education programmes are coordinated through stakeholder planning sessions at district level	Education extension programe established that is Chilojo club focusing on all schools close to Gonarezhou. Environmental books distributed to above schools. -Education extension programme in place in save Valley Conservancy and being conducted and funded by the Painted Dog Conservation and the Gonarezhou Conservation Project targeting schools surrrrounding the Save Valley Conservancy. -Education awawreness campaigns regulary conducted in schools by our Extension and Interpretation Unit. --Essay competions with prize giving are regularly done in schools to effectively disseminate information on wildlife conservation.
3.7 Cultural tourism is developed and marketed as a centre-piece of SEL attractions and linked explicitly to conservation of flagship species including elephant	– Promote existing cultural tourism events and attractions and promote incorporation of messages of elephant conservation within these – e.g. Machangana Cultural Festival; GL-Cultural Festival – Explore and develop additional cultural tourism opportunities – including development of interpretive centres, craft centres, museums, monuments, events, etc. and market these – Document and communicate the specific cultural importance of elephant to communities in the SEL and incorporate this into education, marketing, event and cultural messages and interpretative centres.	Community participation and tourist attendance of cultural events is increased Messages relating to elephant conservation and environmental issues are key themes	-GonarezhouNational Park actively involved in cultural festivals. Supported the Muhlanguleni cultural festival this year(2016). -

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
		The number of cultural tourism developments and enterprises is increased Anecdotes, artifacts and oral tradition regarding cultural importance of elephants are recorded and insinuated into marketing strategies and event messages	
3.8 Regional tourism is promoted	– Promote the development of infrastructure critical to accessibility of the region: e.g. border crossing at Pafuri; road development and maintenance; scheduled flights to Chiredzi; etc. – Promote diversification, branding and marketing of SEL-specific tourism products linked within the region and with other attractions in Zimbabwe and neighbouring countries. – Focus special attention on development of community-led tourism initiatives that contribute to the sustainability of the STWC as a movement corridor for elephant – Clear mines from STWC	Increased tourism traffic and arrivals Infrastructure upgrades Scheduled flights established Pafuri border crossing operational Tourism products are diversified Marketing and branding consultants engaged to develop branding and strategy Scoping, feasiblilty studies are undertaken Increased number of CB enterprises are operational	-The current global economic challenges faced are still a draw back to marketing efforts , however some individuals within the are putting much effort on consumptive tourism.
3.9 Policy framework for conservation and CBNRM is well understood by communities and other stakeholders in SEL	– Compile factsheets on policy framework for conservation and CBNRM and disseminate to communities and other stakeholders	Communities have access to existing CBNRM and Policy frameworks	- The awareness campaigns which are frequently conducted through out the year also attempts to explain about the existence of these policies as well as on traditional gatherings, village and council meetings.
	– Consider innovative mechanisms for trans boundary resource sharing and expanding “space for elephants”	Workshops conducted	- Still a challenge as the conept has not been fully embraced by the affected communities.

9.7.4 Building Conservation Capacity(South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to implement the plan secured	– Implement variable / graduated trophy fee structure based on trophy size – Review levy / fee structure for elephant hunting and the distribution of these revenues for conservation and communities – Develop and submit bankable project proposals to potential funders – Explore potential business partnerships – Increase capacity and law enforcement coverage by ensuring that all key stakeholders contribute to and are engaged in law enforcement activities: hunting operators, tour operators, and community anti-poaching teams [Links to Output 1.1] – Explore the potential for a dedicated elephant fund for SEL.	Revised trophy fee structure developed, resulting in increased funds available or secured for elephant conservation Number of project proposals developed submitted and funded Number of developed and functional partnerships contributing to improved elephant management	Gonarezhou Conservation Trust's establishment could secure funding for improved elephant management. - Funding not yet secured for the entire Save Valley Conservancy, but expecting the EU to come in with an aid once the fencing boundaries have been established.
4.2 Current capacity analysed and needs identified	– Analysed current capacity – Carry out a needs assessment across the full range of human resources – Carry out a needs assessment for equipment and infrastructure – Develop a strategy to address the identified needs	Needs assessment report	
4.3 Capacity for research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	– Develop and implement a multi-disciplinary research and monitoring strategy – Develop and implement a research programme based on that strategy, including graduate studies, post graduate and external researchers as well as ZPWMA researchers – Undertake periodic research meetings / conferences – Recruit and meet demands and requirements for research personnel in Parks and surrounding areas – Collaborate with external research institutions – Develop and implement a mentoring programme for researchers – Procure relevant research equipment	Functional research programme in place Research meetings held Publications Number of research projects developed and implemented Number of research personnel on the ground Number of collaborative projects Mentoring plan / number of days spent with experienced researchers Inventory of equipment for research procured	-Nothing to report for Gonarezhou National Park -No Parks Resident Ecologist in Save Valley Conservancy.

9.7.4 Building Conservation Capacity(South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.4 Training and retraining programmes established	– Carry out a training needs assessment for law enforcement, resource and wildlife management, research and monitoring, education and awareness, community elephant management, etc. – Develop and implement strategies based on the needs assessment – Standardise and harmonize training in law enforcement	Training needs assessment report Training programmes established	-Training needs for law enforcement and research staff known.

9.7.5 Coordination, Collaboration and Programme Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 SEL Regional elephant conservation and management steering committee of 8 established (ZPWMA, SVC, MT, Bubi Conservancy, Chiefs' rep, GCP, ZRP, RDC) This committee should include a core set of competencies (and can co-opt expertise if needed).	– Develop TOR for the steering committee – Identify members – Oversee the implementation of the regional elephant strategy as per national mandate – Meet biannually – Attend national elephant management meetings	Functional committee meetings held biannually with adequate attendance	- Steering committee members identified - Logistics for first meeting have been concluded in collaboration with stakeholders
5.2 Links with neighbouring states to confer on the management of shared elephant populations strengthened	– GLTFCA coordinator to identify relevant stakeholders to participate in the implementation of the regional elephant action plan – Sustain collaboration with regional partners+(one committee member for the regional committee meetings) – Share knowledge / data of all 5 key components of the plan with the regional partners	Number of consultative meetings held Tangible regional collaboration and participation	-Relevant stakeholders known.
5.3 Coordination between the tourism industry (consumptive and non-consumptive) and the elephant management programme strengthened	– Identify consumptive and non-consumptive operators in SEL – Liaise with SOAZ, ZPHGA, ZATSO, ZHA, etc. – Encourage non-members to be affiliated to relevant associations – Hold quarterly meetings with operators – Consider scale of operations in non-consumptive tourism	Regular meetings and workshops convened with the operators	
5.4 Effective information dissemination and communication strategy implemented	– Ensure clear communication of progress against action plan to all relevant stakeholders – Identify target groups, i.e. traditional leaders, school groups, amongst others – Develop a communications strategy, making use of relevant media (print, social, road shows) – Implement communication strategy – Monitor and evaluate	Outreach programmes conducted	Outreach programmes conducted by the Gonarezhou Conservation Project's Liaison Officer and the Parks' Extension and Interpretation staff.

THE ZIMBABWE NATIONAL ELEPHANT SUPPLEMENTARY MANAGEMENT PLAN (2015 – 2020)

Introduction and Background

The supplementary Elephant Management Plan (EMP) is a supplement that has been developed from the Zimbabwe National Elephant Management Plan (2015 – 2020). This supplementary plan looks at all the deliverables from this plan and highlights the priorities for the successful implementation of the plan. The supplement also highlights the progress that has been made towards the successful implementation of the EMP from the time it was adopted in 2015.

It was noted that the EMP was an ambitious plan and it required the cooperation of all internal and external stakeholders in order to achieve its obligations. The urgency that was placed upon well-equipped men on the ground to combat illegal killing of elephants, improved monitoring and research, and the provision of incentives to maintain and if possible increase the elephant range, requires huge resources.

This supplementary EMP recognises that the implementation of the Zimbabwe Elephant Management Plan (2015 – 2020) requires adequate and sustainable funding and provision of other resources to effectively protect the elephant and to curb illegal trade in elephant products. Thus there is need to fully resource all the components of this plan in order to successfully manage Zimbabwe's elephant population.

Resources are being mobilized from within ZPWMA, from its own business ventures, by the private sector, and by intergovernmental and nongovernmental organizations. Partnerships between ZPWMA and other stakeholders are also in place to secure some of the resources for elephant conservation. There is a need for the Government to provide additional support to the conservation of elephants given the present poaching crisis affecting the species continentally.

This supplementary elephant management plan recognises the work and the resource allocation that has made towards full implementation of the plan, and provides detail of the milestones achieved and work covered. It also prioritises the major areas of the EMP into immediate areas that are meant to arrest poaching and illegal trade in elephants. However, it details the impressive extent to which most of the structures have been set up and some of the innovations that have been put in place to attempt to bridge the funding gap.

Resources Available

An audit has been conducted of the implementation of the EMP to date and resources have thus far been channelled into the following areas.

Table 1: Financial resources deployed up to August 2016

BUDGET (USD)					
Item	**North West Matabeleland**	**Sebungwe**	**Mid Zambezi Valley**	**South East Lowveld**	**Total Current**
Law Enforcement	158,948	113,920	244,650	318,000	835,518
Monitoring	31,000	-	8,155	15,500	54,655

Investigations	-	-	16,500	8,000	24,500
Training	12,548	-	30,124	23,000	65,672
Community Relations	4,854	-	9,770	15,000	29,624
Total (USD)	205,350	113,920	309,199	379,500	1,009,969

Table 2: Other Non-Financial Resources

Item	**North West Matabeleland**	**Sebungwe**	**Mid Zambezi Valley**	**South East Lowveld**	**Total Current**
Summary Stats					
Area (Km^2)	24,989	15,529	16,014	8,835	**65,367**
Rangers	212	90	160	77	
Rangers/Km^2	0,01	0,01	0,01	0,01	**0,01**
Total Staff	271	123	181	142	**717**
NGO/Private Sector Anti-Poaching	Painted Dog Conservation, Bhejane Trust	Matusadonha Anti Poaching P	Zambezi Society, The Tashinga Initiative	-	
Vehicles					
4 WD Parks	12	4	8	10	**34**
4 WD Other	-	2	-	-	**2**
2 WD Parks	4	-	-	-	**4**
2 WD Other	1	-	-	-	**1**
5 Ton Trucks	1	6	2	2	**11**
Tractors	9	3	3	5	**20**
Graders	5	-	2	1	**8**
Boats	2	3	1	2	**8**
Motor Cycles	-	4	-	4	**8**
Micro light			1		**1**
2 Seater Helicopter	1		1		**2**
4 Seater Helicopter	1				**1**
Communications					
Repeater station	7	2	2	3	**14**
Mobile handsets	118	53	82	60	**313**
GPS	46	-	36	60	**142**
Operating Database	10	-	1	1	**12**

Progress towards Implementation of the Elephant Management Plan (2015 – 2020)

Several milestones stated in the Elephant Management Plan have already been achieved which include the following:

a. Appointment of the Elephant Manager as in section 4.5 of the Zimbabwe Elephant Management Plan (2015 – 2020).

b. Getting a basic agreement of implementation in the 4 relevant regions.
c. Some work towards Law Enforcement, Monitoring, Investigations, Training and Community Relations. As of August 2016, more than USD 1million had been spent on these activities. Table 1 above. More detailed breakdown of how this was spent see Annexes 1.0, 2.0, 3.0 and 4.0.

Constraints and Challenges

One of the major challenges regarding implementation of the EMP is with regards to the adoption of stricter domestic measures by the United States of America. This has had the net effect of further reducing the revenue from hunting into the Authority, which therefore affects the budget allocated to resource protection, in particular the elephant in this case.

One of the key impediments towards the full and comprehensive implementation of the Elephant Management Plan is the limited resources. However, Zimbabwe is at an advanced stage in the development of resource mobilisation strategies. These strategies include partnering with both local and international institutions in resourcing and financing aspects of the programme.

Priorities

Due to the fact that Zimbabwe is experiencing some funding constraints with respect to the full implementation of the Elephant Management Plan, which means therefore that it will not be possible to fully implement every aspect of the plan at the same time, we have developed a set of priorities (all drawn from the plan), that we feel are implementable and enable the work of conservation to proceed smoothly.

1. Law Enforcement
   Law enforcement continues to be one of the most critical aspects of this strategy. From the perspective of the EMP, it has also to date been allocated the biggest budget (Table 1). While strategic gaps still exist with respect to the law enforcement capacity (the numbers of rangers on the ground are still in need of improving to effectively cover that Parks Estate, more patrol kits and equipment are still required to improve enforcement capacity). In order to effectively combat poaching and illegal trade the Law enforcement capabilities are top priority.
2. Monitoring
   Biological monitoring and management, with respect to the priorities for this plan would come in as a second priority. This enables monitoring programmes and research to support science based adaptive management of elephants in this action plan. The resource allocation to this activity needs to be dramatically improved, although innovations have had to be put in place to manage that insufficient resource allocation. Rangers on patrol also carry out significant monitoring activities which feed into the biological monitoring and management of the elephants.
3. Investigations/Intelligence
   The investigations capacity (together with training) are critical components of this action plan. To date of the available resources, allocations to investigations have been minimal. Innovations have also been developed in this area, for support from various private players, institutions and state institutions in the investigative processes.

Assistance with areas like crime scene attendance have been improved through the assistance of the Zimbabwe Republic Police involvement.

4. Appointment of Elephant Manager

   While the appointment of the National Elephant Manager has been concluded (April 2016) to enhance implementation, monitoring and evaluation of the Action Plan, funding constraints still exists. Some funding for the activities of the Elephant Manager have been unlocked through cooperation with stakeholders in the monitoring and evaluation activities of the office. This includes setting up of the Regional Elephant Management Committees and funding their activities.

ANNEX 1.0 Northwest Matabeleland Action Plan – *Status and progress report Aug - 2016*

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants documented	- Collaborations with other stakeholders (e.g. WWF, Government of the People's republic of China) in law enforcement efforts was done were equipment such as camping tents, GPSs, vehicles, road maintenance equipment (graders, tipper trucks, lorries) were sourced - Training was done in Spatial Monitoring and Reporting Tool (SMART). 4 Officers and 40 Ranger were trained - New recruitment and recruitment drive for rangers initiated - Database on elephant illegally killed is maintained and updated
1.2 Informer network, investigation and intelligence system strengthened / established and operating	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	- 5 cases based on information from intelligence were attended to. No recruitment of investigators and training done 6 calls to whistle blowing systems resulted in effective follow up 10 incursions reported on by local communities and reacted to by ZPWMA/ZRP under the joint operations initiative

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines in collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	- The SOP for Joint Operations with ZRP and other law enforcement agencies not available - 100 % proportion of arrests leading to prosecution - 95 % proportion of successful prosecutions
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	- Database is available at station levels feeding into the Regional and National levels. - Reporting protocols in place
1.5 Joint law enforcement operations within the NWM region	- Conduct joint operations - Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing)	- Number of joint operations leading to arrests and successful prosecutions - Number of meetings held per year - Number of successes from shared wildlife crime information	5 joint operations leading to arrests and successful prosecution were done 16 meetings have been done to date Have been successful on all shared information wildlife crime
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the NWM	Enhanced data collection and collation of returns for quota setting implemented
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the NWM that are settled has not increased, or has declined, from 2015 levels	There are no increases or decreases in settlements within protected areas. It should be noted however, that there is illegal grazing in Hwange National Park from the communities in the Tsholotsho area.

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	There are no agreed SOP for cross border law enforcement operations 5 cases of joint operations leading to arrests and successful prosecution

9.4.2. Biological Monitoring and Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations, forest areas, and RDCs in NWM - Introduce ranger-based monitoring across all stations in NWM - Analyze the data and report on trends - Annual water hole count continued	- Information on trends in elephant numbers, structure and mortality analysed and available	Analysis data is based on the national survey of elephants and large herbivore done in 2014, road count data and from waterhole counts which are done yearly.
2.2 Impacts of elephants on selected habitats, selected indicator plant and animal species, and water use and supplies monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands - Measure and assess water use and its sustainability	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported Sustainability of water use completed	Permanent vegetation plots are monitored regularly for the effects of elephants and the data analysed. The effect of elephants on indicator plants species is monitored. Research is ongoing on their effects on major herbivores. A study on the effects of drawing on underground water to water elephants is about to be initiated
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, and HWC in the region - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research reports completed - PCP consultation results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	A study looking at changes in vegetation has recently been completed in collaboration with WWF, data is yet to be analysed Adaptive management is exercised through adopting results from research work within the park

9.4.2. Biological Monitoring and Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	More boreholes have been drilled to ensure there is enough water for other animals and to relieve pressure on some areas.
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Age, sex and tusk sizes for all elephant killed recorded Elephant trophy quality is maintained or improved in relation to the stipulated desired age and trophy size.	A database with information on elephants killed is maintained Trophy quality is maintained through the policing of the hunting industry and record keeping and adaptive management of quotas.
2.6 Elephant range defined and managed to maintain (and/or recover) habitats and elephant populations, and connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	13% of land in Zimbabwe is maintained for wildlife Corridors are being resuscitated such as the Hwange Sanyati Biological corridor which is being maintained in collaboration with WWF.
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Done at National level. However through our normal reporting system we feed in with the related information

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in NWM adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	HSBS, KAZA, CAMPFIRE, save Australia are some of the joint venture operations adopted and being implemented in NWM
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: ○ Increase elephant revenues at the ward level. ○ Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	There is need to review the benefit-sharing frameworks of CAMPFIRE and other schemes. There is little involvement of traditional leadership in revenue sharing There are no audits and accountability is minimum for revenue from wildlife
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	There are distinct land use regimes governed through government statutes and policies. Decline on human-wildlife conflicts is evident. For example data shows that lion conflicts have reduced by 50%
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	100%

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for NWM - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in NWM - Proportion of schools within or neighbouring elephant areas receiving and using information provided	There is little information distributed on elephants to communities. Distribution is largely done by private organisations such as painted dogs The proportion is low

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- Value of funding and support in kind for conservation of elephants in NWM realised each year	There is high value in funding of elephant conservation (WWF HSBC, WEZ, Friends of Hwange and Other Stakeholders)…funding coming in in terms of drilling of boreholes, vehicles, camping equipment, solar panels, fuels radio communication, roads and fire guards
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	Was done and is being implemented through HSBC
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the NWM - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify and provide needed equipment - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for NWM developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	Research strategy is under development 1 done by University of Zimbabwe Under review n/a 3 No publications have been done

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
			None
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. of communities trained and implementing elephant management programmes d) No. of elephant management campaigns conducted	No modules developed as yet - - - About 10 elephant management campaigns were conducted.
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the NWM developed	- Rebuild / refurbish all main access and internal roads within NWM wildlife areas - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the NWM - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	- Roads, bridges, airstrips refurbished and maintained as planned - Feasibility study of required field stations completed by June 2016 - Identified infrastructure requirements prioritised and required developments undertaken and completed by 2018	2 airstrips were refurbished and 1650km of roads were graded The list has been produced and is included in the Hwange Management Plan

9.4.4. Building Conservation Capacity (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the NWM (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational secure communications system in place and being maintained	The communication system has been improved, however more is required in relation to the repeater links

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	- Timely minutes of each bi-annual meeting produced and circulated - Number of committee resolutions and actionable points initiated and acted upon	N/A N/A
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA & FC	- Functional team established - Technical support provided in keeping with TORs and planned activities implemented	N/A N/A
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA and FC - Establish terms of reference and recognition as a formal entity - Establish effective engagement with RDCs, and Traditional Leaders in NWM and neighbouring communities	- Formal recognition by ZPWMA / FC achieved - Meetings held - Effective engagement with neighbours	Quarterly stakeholder meetings There is effective engagement with neighbours…working with RDCs, KAZA, communities in law enforcement, human wildlife conflicts
5.4 Links with neighbouring Botswana, Namibia and Zambia to confer on the management of shared elephant populations established / strengthened	- Establish links with Botswana, Namibia and Zambia to confer on cross border elephant management issues	- Links established and operating	The KAZA forum allows for the mentioned countries to tackle cross border management issues

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	- At least one awareness campaign conducted each year - Annual progress reports produced - Number of briefs / news releases on major developments or progress released - Funds raised to support elephant conservation	This is yet to be done

ANNEX 2.0 **Sebungwe Action Plan** - *Status and progress report Aug - 2016*

9.5.1 Protection and Law Enforcement (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1. Joint operation reaction team established and existing base renovated at Bumi Hills old ZRP Camp as primary base. Followed by 3 others (Binga, Siabuwa, Old Chizarira Lodge/ Sengwa Wildlife Research Institute) *Manpower* *Vehicles* *Aircrafts* *Communication – eg radios* *Equipment eg firearms, boats* *Training* *Central database* *Intelligence networks*	**Manpower** – Draw up 20 man reaction team from law enforcement agencies and other stakeholders from the whole Sebungwe sub-region. (Prioritise Bumi, Sengwa) **Refurbish main base** **Training** – Initial database training Refresher course **Transport and Equipment** Procurement of 3 vehicles (land cruisers) Procurement of 3 boats (speedboats – 1 mothership and 2 patrol boats) **Communications** – establish an independent inter-agency communication network	- Number of arrests - Number of cases detected - Number of recoveries made (eg ivory, firearms etc) - Number of patrols conducted - Number cases finalized (convictions) - Number of carcasses detected - Number of joint operations carried out - Number of refresher courses carried out - Number of failed cases	The Sebungwe Region whose greater part is under the jurisdiction of Central has stations which include Sengwa Wildlife Research Area, Chirisa Safari Area, Chizarira National Park, Chete Safari Area and Matusadona National Park. During the reporting period of August 2016 we had a total of 22 incursions with the highest incursions happening in Chirisa Safari Area while the least was in Chete Safari Area. We had a total of 5 visual contacts with poachers but all were unarmed contacts. No ivory was recovered, no fire arms were recovered. 203 wire snares were removed. 8 people were arrested however all the arrests were not ivory cantered. No refresher course was conducted in the Region. Joint operations were conducted by our investigations section with MBCU, the police and MAPP. A total of 6 elephant carcasses were discovered of which 2 were natural mortalities in Matusadona, 1 was poached in Matusadona, 2 were poached in Chete and 1 was poached in Chizarira.
1.2 Informer network, Investigation and intelligence system strengthened	- Recruit informers and contacts - Maintain hotline for whistle-blowers - Procurement of 2 vehicles and 2 motorbikes - Recruit investigators (6) and deploy strategically - Train investigators - Constant liaison with informers - Rewards to informers standardized	- Number arrests and successful convictions based on information from intelligence system - Number of incursions reported on/reacted to by local communities - Number of informer reports per informer leading to arrests and convictions	From the month of August to date 2016,based on information given through informer network assisted in arresting two persons found in possession of a pangolin in Sengwa,Gokwe Davison Goredema and Batau Murambiwa Both were sentenced to 9 years effective each.On the 14th of September 2016 One suspect was arrested for possessing approximately 5kgs of ivory.The case is still pending in court.Approximately 8 ivory deals have been reported through informer network and are still being worked on for reaction.10 deposit fine tickets were also issued for separate offences .

9.5.1 Protection and Law Enforcement (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.3 Zambezi Valley deployment tactics revisited and implemented	- ZV deployment tactics revised - Identification of OP sites, crossing points etc - Identification and procurement of specialized equipment (eg night vision) - Provision of dry rations for operations - Introduction of aerial surveillance flights	- Resource books - Number of successes on detections - Number of contacts - Number of recoveries - Patrol effort (surveillance)	MAPP assisted in deployments for Matusadona both in the Lake with a boat and in the land with a vehicle. MAPP also assisted in joint operations and following up information from informers within the Gokwe and Nyaminyami districts. Recoveries and surveillances were made by our Investigations team together with the informers, MBCU and sometimes with the duty uniform ZRP
1.4 Ranger patrols strengthened	- Establish effective patrolling force of deployable rangers - Establish (or review) standard operating procedures (SOP) - Establish well-equipped reaction teams - Honorary Officer system re-established to support ranger patrols - Increase support for establishing/ improving dedicated APU for every concession.	- Number of deployable rangers at any one time - Total man-days spent on patrol - SOPs in place - Area patrolled each month - Reaction time to incidents - Number of APUs established	A total of 90 rangers were deployable and a total of 1099 man-days were spent on patrol during the month of August 2016
1.5 Training of staff enhanced	• Establish regular training and retraining schedule (includes training on weaponry, bushcraft, tracking, information gathering, crime scene management, Judiciary procedures etc • Training on standard operation procedures (harmonization)	• Number of training and retraining sessions carried out	8 rangers went for a refresher course at Head Office with the Army training them in drilling movements during the month.
1.6 Conviction rates improved	• Judiciary sensitization (incl. workshops) • Formulation of proper charges, indictment and summons • Gathering all evidence available using legal means • Completion of dockets timeously, submission and concluding cases in a reasonable time • Creation of a district sub-committee on elephant and wildlife issues • Hold workshops to share information on wildlife issues	• Number of successful prosecutions • Decrease in number of crimes committed • Number of workshops or meetings held	From August 2016 to date one case of ivory possession was successfully finalized and one for ivory is still pending trial.Generally poaching seem to have decreased as compared to the other years due to deterrent sentences being given by the courts,Conviction of ring leaders,changing of area of operation and current economic challenges which are also hitting the market on acquiring the us dollar.One workshop was held at Midlands black Rhino Concervancy with the judiciary to address challenges being faced .

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Viable population, geographical distribution, and habitat connectivity targets established.	- Establish TPC for all areas to set viable population target. - Collect spatial data (livestock densities, human population densities, forest cover, and agricultural cover) to map potential geographic distribution of elephants - Identify potential connectivity areas and promote wildlife-based land uses in those areas.	- Viable population target of minimum 5,000 for the region with minimum and maximum thresholds in different land categories - Updated geographical distribution map and spatial datasets - Number of conservancies approved/ green-lighted by communities	There are no private conservancies in the Sebungwe Region, however the 4 Rural District Councils within the Region are very active in conservation and also CAMPFIRE is active. The 4 RDCs are Gokwe North, Gokwe South, Nyaminyami and Binga RDC.
2.2 Monitoring system for population trends, habitat, and impacts designed and implemented.	- Establish regional database for data on population, habitat, HEC, patrolling, poaching, and trophies (for trophies, see also Output 5). - Design and adopt standardized reporting formats. (i.e. MOMS) - Report to the regional management committee to review data and decide on management actions. - Conduct annual aerial surveys for the "core area" (to be defined).	- Regional database operational - Number of reporting formats designed and distributed - Number of persons, patrols, and sectors submitting data - Quarterly reports - Quarterly reviews	We have formats for different reports which start from Incidental reports, Daily reports, Weekly reports, Monthly reports, Quarterly reports and Annual reports. The reports come from the stations and are consolidated at the Regional Office before they are sent to HQ.
2.3 Direct and indirect causes of decline (2006-2014) researched.	- Causes of mortality quantified using the regional database. - Gather information from local communities and experts. - Examine potential socio-economic factors related to decline - Research habitat changes. - Publish research in scientific publication.	Data and analyses	For the month of August 2016, the Sebungwe Region lost a total of 6 elephants, 2 of them died of natural causes in Matusadona National Park, 1 was poached in Matusadona, 2 were poached in Chete Safari Area and 1 was poached in Chizarira National Park. A long term elephant research programme to be launched in Matusadona National Park in conjunction with a private partner

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.4 Viable population, geographical distribution, and habitat connectivity achieved and maintained.	- Establish wildlife-based land-use system (not a land use plan) with community conservancies acting as corridors between protected areas - Reduce human-elephant conflict to acceptable levels. - Implement responsible habitat management (with regard to fires, REDD+, mining, illegal and legal settlement) - Conduct integrated land-use planning. - Support extension of REDD initiative	- Number of operational conservancies/ corridors - Elephant Population data - Number of elephants and people involved in "serious HEC incidents" - Effective, non-lethal elephant deterrents in place - Regional land-use plan - Number of stakeholders, meetings in planning process - Utilization of corridors by elephants	The Authority is supporting efforts to establish conservancies in the Region and we have approved the setting up of a conservancy in the Gatshe Gatshe Area. The Chirisa-Sengwa excision area is also planned to be established as a community conservancy
2.5 Sustainable offtakes established through participatory quota setting and monitored through adaptive management.	- Establish a database of offtakes, trophy qualities, and age classes (See Output 2, Activity 1). - Using participatory quota setting following best practices, set optional quotas based on scientific survey data, with no more than 0.5% of the estimate as the elephant quota for the region. - Revisit quota system and establish optional quotas as opposed to fixed quotas - Set minimum trophy size and a variable trophy fee with large increments based on size - Identify and enforce best hunting practices through a code of conduct incorporated in lease agreements and hunting permits.	- Trophy quality improving - Record of hunting practice transgressions	Quotas for the Nyaminyami District and the Sebungwe Region as a whole have been greatly reduced and all elephant hunts are now being monitored by Parks

9.5.2 Biological Monitoring and Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.6 Robust and comprehensive research program enhanced and maintained.	- Research the impact of decline on population dynamics. - Investigate migration hypothesis. - Develop applied research projects, especially interdisciplinary and multidisciplinary research. - Establish research oversight body, building on existing approval processes.	Publications, particularly with management guidance	A long term elephant research programme to be launched in Matusadona National Park in conjunction with a private partner

9.5.3 Social, Economic and Cultural Framework (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Transparent and equitable distribution of benefits established	- Develop an instrument to increase elephant revenues at the ward level. - Instrument to provide for traditional leaders to be involved in management and distribution of elephant related benefits. - Revise CAMPFIRE guide lines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodic auditing of the revenue sharing system.	- Instrument approved. - CAMPFIRE guidelines revised and approved - Revenue accountability system established - Number of audits	The Zimbabwe Elephant Nursery to establish a community outreach program that will provide community educational and developmental projects and activities in the region
3.2 Economic management of consumptive and non-consumptive tourism of elephants in Sebungwe improved.	- Preventing human settlement in protected areas - Review length of concession leases to encourage greater investment. - Rehabilitate the depleted Safari areas - Promote PPCPs	- Number of eviction notices issued. - Number of reviewed leases - Number of safari areas under proper management/concessions - Record of PPCPs established.	Mokore safaris is currently operating in Sengwa Wildlife Research Area and the lease is under proper management, Statunga Safaris has also got the Chirisa hunting lease and will start operating in the year 2017. Chete Safri Area is currently still open however there are applicants who may take it at anytime.
3.3 Land use strategies to mitigate human elephant conflicts (HEC) established	- Review of human elephant conflict measures (consultancy) - Increase sense of ownership of wildlife as a mitigation measure to HEC (review) - Traditional leaders to set up a compensation scheme for land holders directly affected by HEC. - Support review and development of land –use plans to optimize agricultural livestock and farming activities	- Reports - Link with activity 1 and 2 output1(benefits) - Compensation scheme functioning and record of HEC in place. - Land use plans supported	Established a Problem Animal Control Committee in Nyaminyami and Gokwe that includes all stakeholders to assist in the effective coordination of all PAC issues

9.5.3 Social, Economic and Cultural Framework (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.4 Investment of wildlife revenue in income generating community products established	- Revitalize technical support services to communities/ community initiatives - Participatory business plan at community level. - Explore micro financing opportunities - Explore markets for community projects related to elephant conservation	- Technical support services established through proper instrument. - Participatory business plan adopted.	There is a strong move to promote the development of aquaculture projects to enhance food security
3.5 Relationship and communication mechanism established	- Sebungwe WG to include Traditional leaders and RDCs - Methodologies for regular communication with communities and their leaders established	- Traditional leaders and RDC included in the WG - Communication strategy developed	
3.6 Education on elephant conservation in the community increased	- Information campaign explaining reasons for quota decrease (see Biological Component for cross check) - Explain what trophy hunting means and how it links to benefits - Share census results and explain implications - Extend conservation education to Sebungwe wards (NGOs?)	- Number of Outreach meetings with Traditional leaders / Wards/ RDC including the 4 key activities	The Zimbabwe Elephant Nursery to establish a community outreach program that will provide educational and developmental projects and activities in the region

9.5.4 Building Conservation Capacity Component (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Capacity needs for elephant management in Parks and CAMPFIRE areas analysed and identified	- Draw up TOR - Appoint consultant	Report produced	Still outstanding
4.2 Training provided	- Analyse training needs - Prioritise and develop training curricula if not already available - Implement in-service training and re-training	Numbers of people trained and certified	Still outstanding
4.3 Best practice standards for elephant management in place	- Standards defined by and through National Elephant Policy and CAMPFIRE Principles and Guidelines - Define clear objectives for elephant management in the Sebungwe - Support CITES MIKES site(s) and application of SMART and RBM	- MIKES PIKE database - SMART database	Nyaminyami RDC is a MIKE site and efforts are needed to adopt the SMART database system in th region
4.4 Research and monitoring capacity strengthened	- Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring systems - Identify equipment needs, source and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- 2 persons trained per annum - 5+ people in mentoring system each year - Equipment procured and in place - Active community research programme underway - Event Book System functional and operationalised	Still outstanding
4.5 Funding secured	- Complete Sebungwe Elephant Management Plan and disseminate for funding purposes - Development of funding proposals for each of the components, if necessary - Identify donors (e.g. bilateral, WB GEF, NGO, other) - Submit proposals - Develop Sebungwe branding and marketing campaign	Number of successfully funded proposals	Still outstanding
4.6 Infrastructure refurbished and functioning	- Roads rehabilitation: Parks and CL - Karoi-Binga road - Airstrips	- 2,000 km repaired to standard - Airstrips registered and functioning	Still outstanding

9.5.4 Building Conservation Capacity Component (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.7 Communications	- Procure and install radio communications systems	System installed and operational	Still outstanding

9.5.5 Coordination and Programme Management (Sebungwe)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1. Sebungwe Management Committee with an Elephant Working Task Force and Project Coordinator established	-Identify committee members, select WTF and appoint Coordinator -ToR for each institution (from national plan)	Committee meeting twice yearly; WTF meets quarterly, identifies priority activities and oversees implementation by Coordinator	Still outstanding
5.2. Coordination and communication between Traditional Authorities, their communities and the elephant management programme and plan strengthened	-Address the community through CAMPFIRE and traditional leadership -Introduce elephant management plan in easily understandable format – maps and graphs – and disseminate through all levels/actors in Sebungwe	• Management plan documents for dissemination	Still outstanding
5.3. Coordination between Sebungwe safari operators and implementation of the elephant management plan strengthened	-SOAZ, ZPHGA appoint liaison officer for Sebungwe elephant management plan -Encourage non-members of associations to participate in plan implementation	Liaison officer appointed and operating and non-members of associating participating in implementation of the action plan	Still outstanding
5.4. Links with neighbouring states established – shared elephant management	-Establish relationship with KAZA Secretariat -Establish links and synergies with transboundary natural resource mgmt -Bilateral JOC to focus on illegal wildlife trade and trade routes -Establish links with TRAFFIC	• KAZA Secretariat aware of Sebungwe elephant management plan • TBNRM established and functional • Reduced illegal trade	Still outstanding

ANNEX 3.0 Lower Zambezi Valley Action Plan - *Status and progress report Aug - 2016*

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)			
Output	**Activities**	**KPIs**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units established/ strengthened	- Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations	- Assessment of enforcement capacity completed - Fully staffed and trained anti-poaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants	-
1.2 Informer network, investigation and intelligence system established	- Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database	- Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP	5 informers were recruited, one more investigator was recruited. 10 calls were received indicating poachers coming in from the local community and 3 calls indicating foreign poachers coming in. Since January 2016, 4 foreigners have been arrested from tip offs and one local person. A total of 32 incursions were recorded whereby the majority of them were recorded during the first quarter of the year.
1.3 Investigation and prosecution of wildlife crimes improved	- Establish Standard Operating Procedures (to include guidelines on collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering) - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required	- Proportion of arrests leading to prosecution - Proportion of successful prosecutions	Of all the five arrested poachers, all were sent for prosecution and were all convicted and sentenced

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)			
Output	**Activities**	**KPIs**	**Narrative Report on Progress in Implementation**
1.4 Database that is compliant with national database established	- Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures	- Databases bases established and operational - Recording protocols in place and being used	The current data base in place is the MIKE data base system where one Senior Ranger and two rangers were trained to manage the input of information into that system. Recording starts from the time the callsign are deployed using patrol briefing form, patrol details will then record information of their findings onto the ground patrol data form whilst out on patrol; on return, a report is then reproduced which will be used together with the ground data form to then enter the information onto the MIKE system data base.
1.5 Joint law enforcement operations within the LZV	- Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) - Conduct joint operations	- Number of meetings held per year - Number of successes from shared wildlife crime information - Number of joint operations leading to arrests and successful prosecutions	One liaison meeting conducted with our Zambian counter parts, 3 community outreach programs with the Nyamakate and Chundu community. -
1.6 Full compliance with hunting and guiding regulations enforced	- Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations	Implementation of revised quota setting models in the LZV	Implementation of the LZV Action plan is in progress with
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	- Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected	Percentage of designated wildlife area in the LZV settled has not increased, or has declined, from 2015 levels	
1.8 Collaboration in law enforcement with neighbouring countries established	- Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations	- Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions	

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	- Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations and RDCs in LZV - Introduce ranger-based monitoring (SMART, MIKE, ETIS) across all stations in LZV - Analyze the data and report on trends	- Information on trends in elephant numbers, structure and mortality analysed and available	-According to the 2014 Aerial Survey report, Mana Pools has 2984 elephants. From 2009 to 2016, Mana Pools has lost 95 elephants to poaching of which 16 were recorded this year. The report states that there was 40% reduction in elephant populations from the 2001 survey. Causes of reduction include natural deaths, migration and poaching.
2.2 Impacts of elephants on selected habitats and selected indicator plant and animal species monitored and assessed	- Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported	-Elephant damage has been observed and recorded on woody species on the flood plain where they are greatly concentrated. Impacts shown were ring barking and uprooting of woody species such as *Combretum spp* and, *Fidherbia albida.* The impacts have resulted in weakening of the tree species, making them susceptible to diseases and mistletoes. -These species also do not have recruitment due to impacts of elephants. -Introduction of enclosures are at initial stages to monitor the impacts and enhance recruitment.
2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	- Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, HWC, in the LZV - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities	- Research report completed - Survey results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures	-Recommendations have been submitted to release pressure on the Mana Pools national park through stopping hunting on the Sapi Safari Area flood plain.
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	- Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action	- Adaptive management actions taken in response to elephant impacts	-Sapi Safari Area turned hunting in the process of being stopped, and the area to promote photographic safaris instead of hunting.

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	- Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report	Elephant trophy quality is maintained or improved in relation to the stipulated desired trophy size.	Non-trophy hunting area. Mana Pools being a non-hunting areas, the sizes of trophies hunted from management quota and those picked from natural deaths, trophy sizes are more constant.
2.6 Current elephant range defined and management to recover habitats and elephant populations and maintain connectivity between fragmented populations and buffer zone populations initiated	- Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict	- Elephant range and maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established	Elephants aggregation on the flood plain during the dry season has resulted in a lot of pressure being exerted on the area. Changing of management system of Sapi's flood plain could contribute to recovery of the habitat on the floodplain once animals disperse.
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Situational reports involving poaching of elephants have been submitted in time. MIKE Data Base is also being maintained. A record of recovered of all ivory obtained is kept and the recovered tusks are constantly submitted to Head Office where they are again reweighed and recorded as well.

9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	- Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs	- Policy framework and protocols for establishing Joint Ventures /PPCPs in the LZV adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018	A number of organisations have come aboard in support of conservation through Joint Ventures and Memorandum of Agreements such organisations like: Zambezi Society, Tashinga Initiative, Animal Wildlife Fund Foundation, Sino Zimbabwe Wildlife Foundation Fund, and Kariba Animal Wildlife Fund Foundation, these have formalised they assistance to Mana Pools which vary from Anti-Poaching assistance to treatment of injured animals.
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	- Develop instruments / protocols to: o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system	- A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited	Benefits from wildlife utilisation are channelled through CAMPFIRE program through the local Rural District Council.
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	- Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	Only one case of Human Wildlife Conflict has been recorded since January where one person was attacked by a hippo but survived the attack. Cases of Wildlife encroachment onto the communities on the southern boundary are dealt with by the CAMPFIRE because of the buffer zone between the southern boundary of the park and the community.
3.4 Recovery and use of all products from legally killed elephants improved	- Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products -	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	Of the 16 located elephant carcass, six elephant carcasses were recovered from two contacts. Note that 22 other elephant carcass were recovered in Chirundu again from a contact but we cannot directly link them to the elephants poached in mana Pools though there is a very high possibility of having the elephants poached in Mana Pools as well or in Marongora or Sapi..

9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	- Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for the LZV - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas	- Number and quality of elephant information items developed and delivered to schools in the LZV - Proportion of schools within or neighbouring elephant areas receiving and using information provided	2014 Elephant Survey Report

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to initiate and sustain the implementation of this plan secured	- Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models	- No of project proposals developed, submitted and funded - Value of funding and support in kind for conservation of elephants in LZV realised each year	A proposal was submitted by Tishinga Initiative for the establishment of the Nyakasikana Anti-poaching Base and has been funded and near completion. See section 9.6.3.1
4.2 Current capacity and staff, training, and equipment needs identified	- Carry out full audit of current human and financial resources required to implement this plan and identify needs	Capacity needs assessment (audit) completed by June 2016	
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	- Develop and implement a multi-disciplinary research and monitoring strategy for the LZV - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish in-service mentoring system - Identify equipment needs and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System	- Explicit research strategy for the LZV developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system	Mana Pools has one Ecologist

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	- Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme	- Training modules and curricula developed and being used - 50 to 100% increase in: a) No. of training days and programmes initiated b) No. of staff trained c) No. communities trained and implementing elephant management programmes	Training modules are guided as per the Mushandike College of Wildlife Management at the organisation training institute. The station has 8 staff members who have undergone training at Mushandike College of Wildlife Management in various fields from Accounting, Certificate in Wildlife Management, Diploma in Wildlife Management, and IT courses
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the LZV developed	- Rebuild / refurbish all main access roads to the LZV (c.150 km) - Repair, clear, grade where necessary some 600 km of internal roads and several bridges - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the LZV - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure	Roads, bridges, airstrips refurbished and maintained as planned Feasibility study of required field stations completed by June 2016 Identified infrastructure requirements prioritised and required developments undertaken and completed	New operational roads are in the process of being opened, existed roads were maintained, the Mana Main Airstrip was renovated this year 2016 Of priority was to establish an anti-poaching base at Nyakasikana which I now near completion
4.6 Effective, secure communications network across the region established	- Establish digital VHF and GPS communication and tracking systems across the LZV (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes	Fully operational communications system in place and being maintained	New operational radios, repeater links and potable GPS systems have been secured.

9.6.5 Coordination, Collaboration and Programme Management (Lower Zambezi Valley)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 Regional elephant management committee with membership from key stakeholders established and operating	- Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting	Timely minutes of each meeting produced and circulated Committee resolutions and actionable points initiated and acted upon	
5.2 Technical support team to assist in implementation of the plan established and operational	- Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA	Functional team established Technical support provided in keeping with TORs and planned activities implemented	A technical person has been seconded to Mana Pools by AWF to assist in Anti-poaching
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	- Establish a formal forum for private sector agencies to interact with ZPWMA - Establish terms of reference and recognition as formal entity - Establish effective engagement with RDCs, and Traditional Leaders in the LZV and neighbouring communities	Formal recognition by ZPWMA achieved Meetings held Effective engagement with neighbours	In 2016, 1 Meeting has been held between ZIMPARKS officers and the Chief (Chief Chundu) together with his village heads. Another meeting has also been held between Mana Pools Officers and Safari Operators to discuss their support in conservation.
5.4 Links with neighbouring Zambia and Mozambique to confer on the management of shared elephant populations established / strengthened	- Establish links with Zambia and Mozambique to confer on cross border elephant management issues	Links established and operating	There is cordial communication with ZAWA counterparts.
5.5 Information dissemination strategy developed and implemented	- Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan	At least one awareness campaign conducted each year Annual progress reports produced Briefs / news releases on major developments or progress released Funds raised to support elephant conservation	Funds have been raised by Non-Governmental organisations through provision of camping equipment, availing vehicles for use in Anti-poaching, assisting in opening up of roads, developing of base camp for rangers and training

ANNEX 4.0 South East Lowveld Action Plan - *Status and progress report Aug – 2016*

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.1 Highly trained rapid response anti-poaching units strengthened	– Appoint anti-poaching coordinator (for region and/or separate areas) – Recruit staff – Train staff – Procure vehicles and equipment – Deploy unit – Support existing units	Trained and fully equipped units established and operating with relevant security agency by June 2016	Five units were established in Gonarezhou National Park, trained and fully equipped. Three new Lancruiser vehicles were procured to augment the existing patrol fleet. -Two candidates identified with one to be elected for the post of antipoaching coordinator for the Region. - 35 Cadet rangers recruited by the Gonarezhou Conservation Project to boost the existing staff compliment. Cadet Rangers trained in basic paramillitary skills by the Gonarezhou Conservation Project -A Gonarezhou Antipoaching Reaction Unit established and operating throughout the Gonarezhou Nationa Park. -Out of the 20 properties in Save Valley Conservancy, 8 properties have 2X call signs of 3 rangers each who are highly trained and able to carry out combined operations with security agencies in addition to the15scouts also highly trained with AggressiveTracking Specialist a security private company assisting in the protection of rhinos and elephants in SEL.
1.2 Informer and intelligence systems established and/or strengthened	– Identify and recruit informers – Establish and implement incentive protocols – Set up, implement hotline for anonymous reports and communicate it to the public – Analyse and use information – Ensure information is included in database outlined in Output 1.6	An active informer system/network operating within the SEL by Jan. 2016 Hotline widely advertised and operational by Jan 2016	-Informer network is being established and had a number of informer lead success. Awareness of the hotlines began in September 2016 by Regional team. -Informers recruited by the Gonarezhou Conservation Project. -A hotline set up for Gonarezhou and Save Valley Conservancy. -Data being analysed and a data base in place and being mantained at the Regional Office. -Hotline facility fully advertised through the Parks Investigations Branch.
1.3 Investigation of wildlife crime improved	– Implement training programmes for investigation personnel – Ensure collaboration between Parks, ZRP and intelligence officers	At least two law enforcement staff trained in scene of crime collection and preservation of	-3 Investigations officers trained in scene of crime collection and preservation of exhiits course

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
	– Recruit more investigators – Put in place Investigator incentive system – Collaborate with forensic scientists and ballistic experts, as well as agencies such as EMA and approved universities (e.g. Chinhoyi University of Technology, University of Zimbabwe, National University of Science and Technology)	evidence, ballistics evidence, etc. in SEL. Percentage of investigations resulting in successful prosecutions in SEL greater than in 2014	-1 investigations officer trained in Wildlife, Pestcide and Forensic Crime Scene Investigation Course. -Collaboration with other law enforcement agencies satisfactorily yielding results. -Collaboration with other agencies strengthened -plans are underway to recruit more investigators and to open an investigations office in Chiredzi. -Some stakeholders have pledged to assist the investigators with some incentives. -In Save Valley Conservancy one trained personnel is dealing with wildlife crimes and is based at Humani Ranch. -The % of successfulness on investigated cases is now higher than 2014, and the current % is estimated to be 60% after lobbying with the Judiciary Services
1.4 Prosecution of wildlife crimes improved	– Train prosecutors on legislation and processes available to deal with wildlife crimes – Conduct awareness / outreach programs with Prosecution, Judiciary – Utilize ancillary laws, such as those dealing with economic crime, organized crime, money laundering, – Communicate status of prosecutions to the public via ZPWMA website – Clear backlog of wildlife cases – Explore the possibility of appointing dedicated wildlife crime prosecutors at Regional and National level	Monthly liaison sessions on wildlife crime and law enforcement held with members of the judiciary Relevant legislation available and being used Wildlife crime prosecutors available and being used in SEL	-Liaison with the Judiciary, Courts and the Prosecuting Authority on wildlife crimes conducted. -Relevant legislation available and referred to in dealing with wildlife crimes -Wildlife Crime Prosecutors not available from the Wildlife Authorities but Public Prosecutors being used to deal with wildlife crimes to which they may not be well versed with certain technical wildlife issues. -No wildlife crime prosecutors appointed. -Inadequate resources of transport and fuels to fully implement monthly liaison.

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
1.5 Law enforcement in collaboration with communities enhanced [Links to Component 3]	– Engage and collaborate on curbing wildlife crimes (ZRP & Communities) – Establish anti-poaching clubs/ community natural resource monitors that collaborate with ZPWMA and ZRP – Lobby support from Chiefs to deal with local poachers – Hold workshops with Chiefs and communities about wildlife and wildlife crimes – Establish incentives for communities to provide information	Incentive schemes that encourage the public and members of rural communities to contribute to law enforcement (e.g. through informer hotline) established in SEL Increasing number of incidents of community contribution to law enforcement (e.g. whistle blowers) by Dec. 2017	Trained community rangers from Sengwe area, four passed and ready to carry out ant poaching operations within the Sengwe area. Several meetings on wildlife issues were held with Chief Sengwe. - Collaboration with ZRP and Communities strengthened and yielding results. - We have opened a hotline and fliers facility that we distributed through the Save Valley Conservancy, Gonarezhou and surrounding areas and information is coming in. - All stakeholders workshop on wildlife issues is planned soon - Some stakeholders have pledged to incentivize the whistle blowers - In Save Valley Conservancyseveral education awareness campaigns have been carried out in all areas bordering wildlife protected areas. - meetings with chiefs have been maintained regarding protection of wildlife. - Resource monitors have been selected by the communites. - The surrounding communities are benefitting from meat obtained from problem animal control and trophy hunting.
1.6 Local wildlife law enforcement database established	– Set up database, as per national database – Ensure inclusion of prosecution status in database – Implement national data recording protocols – Train data entry staff and crime analysts	Local database established and operating Illegal activities recorded and analyzed	Spatial Monitoring And Reporting Tool is being used in Gonarezhou and all captured data can be easily analysed.The SMART approachaims at improving conservation effectiveness and tracking of wildife crimes. -No SMART use in Save Valley Conservancy -A poaching database from when the crime is committed up to the final court outcome is in place. -A database of poachers and their modus operandi in place -Crime Registers being mantained.
1.7 Illegal settlements / grazing in wildlife areas reduced	– Liaise with RDC, Traditional Leaders and ZRP, DA's Office – Conducted Education programmes – Regular updated satellite mapping	Illegal settlements reduced to less than 5% of wildlife areas by 2020 (i.e. state protected areas, conservancies and community wildlife areas)	Illegal settlement in the park is still very low no other settlement after 2000 (Chitsa communities). Grazing of cattle in the park is under control in the GonarezhouT National Park. -The Southern part of the Save Valley Conservancy 85 % settled.An inter ministerial committee set up to look at the possibilities of fencing out the settlers and also there

9.7.1 Protection and Law Enforcement (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
[Links to activities on land use mapping and planning in Component 2 – Output 2.2 and incentivization / alternative livelihood activities in Component 3]			are proposals to remove some of the settlers from some of the properties to pave way for a game corridor and allow free movement of game within. -Local authority currently working out on orderly settlement in the Save Valley Conservancy. -Fencing of the Save Valley Conservancy is also expected to assist in reduced human and domestic animal movements.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.1Research programme to understand temporal and spatial drivers of elephants established [Links to Component 4]	– Create enabling opportunities and environment for research – Prioritise research needs – Conduct localised case studies and research projects – Monitor and evaluate poaching and other drivers - hunting, water, food, human disturbance – Explore possibility of GLTFCA flagship research programme for elephants [linked to Component 5] – Carry out ground surveys to monitor distribution and density	Research programme that enables local and international researchers, and links with the GLTFCA research programme, in place and producing reports	-Ten elephants were collared to monitor elephant movement in Gonarezhou.
2.2Current elephant range defined and options for extending range and maintaining connectivity between fragmented populations explored	– Define elephant range use, and existing and potential connectivity – Identify priority corridors and human land use barriers – Conduct spatial analyses to inform land use planning – Advocate land use planning to facilitate connectivity and reduce human wildlife conflict – Explore options for translocating elephants to under-stocked areas	Identified priority corridors for elephant connectivity within SEL, between SEL and other areas in Zimbabwe, and with neighbouring countries	-Research is in progress in the Gonarezhou National Park -Elephant corridors are known in Save Valley Conservancy but because of illegal settlements the problem of understanding this is still far from reality.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.3Elephant population numbers, structure, mortality and trends monitored, quotas adjusted, and desired levels of trophy quality maintained	– Undertake standardised, regular, aerial and ground surveys of the elephant range – Explore methods to monitor elephant presence and abundance in Mozambique (to Zinave) and up to the Chimanimani range – Undertake trend analysis – Define elephant age and sex structures and extract birth and death rates – Establish annual monitoring plans – Record and analyse elephant mortalities (all causes e.g. poaching, PAC, natural, hunting, etc.) – Monitor trophy quality and age – Develop and implement an age-based and size-based trophy quota	Elephant range surveyed at regular intervals Demographic data available and analysed Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers and used in quota setting	-Biannual aerial survey carried in Gonarezhou and surrounding. Last survey in September 2016. Could not get authority to survey in Mozambique. Elephant's mortalities recorded in park security registers -Elephant survey in Save Valley Conservancy done 2013 -Quota setting being a wild life management tool is implemented annually - taking cognisance of research data -PAC , hunting etc information is kept
2.4Elephant impacts on their habitats and selected indicator species of biodiversity monitored	– Establish annual monitoring plans – Measure vegetation indicators such as woodland cover – Measure other functional biodiversity indicators e.g. bird responses to structural changes to woodlands – Measure ecosystem functions – Relate desired impact to measures of elephant abundance and spatial use – Research other drivers of ecological impact (climate change, change in land use, water provision, and fencing, amongst others) – Use research findings, expert opinion and informed public opinion to establish thresholds of potential concern (TPC or limits to change) to initiate management action in respect of elephant impacts in protected areas and effects in communal land – Identify areas with key vegetation communities that are utilized by elephants	Annual monitoring plans defined and implemented for selected indicator species of biodiversity TPC's established Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	-Annual monitoring through sightings when conducting hunts and patrol is in place.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.5Costs and benefits of elephants to local and national economy monitored and costs of elephants to local communities reduced	– Monitor and evaluate extent and costs of human-wildlife conflict incidents – Relate human-wildlife conflict to elephant abundance and spatial use – Understand drivers and social and economic consequences of human-wildlife conflict – Evaluate the direct and indirect contribution (financial, economic and social) and the direct and indirect costs of elephants to the well-being of people and to conservation, through both consumptive and non-consumptive uses – Implement ongoing and new mitigation for human-wildlife conflict	Annual monitoring plans implemented Evidence-based and research-based information and recommendations (consumptive, non-consumptive) provided to managers	-PAC programmes are conducted, meat shared among the communities affected, skins and ivory may be sold and money ploughed back in to the affected communities.
2.6Adaptive elephant management framework adopted and implemented [Links to Component 4]	– Ensure collaboration between Regional Elephant Management Committee and regional and local resource management committees (e.g. LOCAL Forum) – Implement annual process of adaptive planning, implementation and monitoring in line with elephant management objectives and TPCs within the SEL – Develop and implement localised management plans (e.g. SVC plan) – Ensure alignment and harmonisation with other Zimbabwean, regional and international plans	Annual elephant management plans developed, adopted and implemented	-Annual elephant management plans have only been confined to hunting and PAC and cropping to a large extent has not been done. -Huge costs of this exercise are a major impediment as evidenced by the number of elephants taken off so far this year under such local arrangements.

9.7.2 Biological Monitoring and Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
2.7Alternative outcomes modelled	– Develop framework for examining and modelling potential linked impacts between biodiversity issues, elephant issues, and societal issues, including any 'surprises', such as disease or extreme weather events. – Implement the modelling framework to define the outcomes of various management scenarios	Established modelling framework being used to guide adaptive management Scenario outcome recommendations and being used in management	Nothing to report
2.8SEL reporting to meet national / international standards achieved	– Advocate key summary set of elephant KPIs/outcomes for national reporting (e.g. potential population sizes against actual population sizes) – Comply with national and international legal obligations – Explore the designation of GNP as a MIKE site	CITES reporting requirements met National reporting compliance requirements	-Gonarezhou National Park meeting CITES requirements. Park not yet a MIKE site. -No information on Save Valley Conservancy and the area is still not a MIKE site

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
3.1 Community partnerships and joint venture oportunities are incentivised and facilitated	– Establish protocols, policies and models for development of joint ventures (PPCPs) – Identify potential areas – Facilitate development of new, and strengthen existing, institutional frameworks and legal entities for beneficiaries at sub-district level – Develop concepts, business plans and prospectuses for different areas through consultative processes with Communities – Develop a SEL Tourism plan and review potential concessions within the framework of this Plan – Develop mechanisms for inclusive and transparent engagement and selection of operators and JV partners. – Facilitate communication, endorsement and support of JVs – Explore potential incentives and avenues of material and technical support that can be provided by Local Government and Authorities to promote establishment and sustainability of Community JVs – Promote access to affordable capital funding – Enhance capacity of community members to engage in wildlife and tourism management through training and employment	Models and protocols for joint ventures established Community institutions to engage in joint ventures established Joint ventures established and operating, resulting in financial benefit to communities SEL tourism developed and potential concessions identified Mechanisms of support and incentivisation to JVs established	- Save Valley Conservancy has a Joint Venture model and community share ownership trust with the local communities - PPCPs envisaged with the Gonarezhou Conservation Trust.
3.2 Elephant management in community wildlife areas improved	– Promote improved and professionalized elephant management and security in community wildlife areas through establishment and maintenance of improved capacity, infrastructure, security and management systems – Develop and implement a transparent Performance Based Quota system which incentivises improved management and security systems for elephant in community hunting areas and which promotes effective buffering of source populations – Update terms of lease agreements in community wildlife areas to confer a broader range of roles and responsibilities on operators including resource management and protection; re-investment and	Infrastructure, equipment and systems for elephant management in community wildlife areas established and operational Reduced human-elephant conflict Community capacity for wildlife management improved	-**WILD project** working on two community wildlife areas that is Naivasha in Chiredzi district and Jamanda in Chipinge district.WILD(Wildlife In Livelihood Development Programme is an intiative of SAT (Sustainable Agriculture Technology) and ZWVT (Zimbabwe Wild Vet Trust) funded by the European Union and is aimed at improving socio-economic and ecological resilience in semi arid communal areas through incorporation of robust wildlife based land use enterprise into the mainstream of communal areas. -Nyangambe in Save Valley Conservancy is part of the elephant managemnt in the community.

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
	infrastructure development; employment targets; local sourcing; etc. – Review key cooperation opportunities across different land uses and countries within GLTFCA, e.g. Sengwe-Tshipise Wilderness Corridor	Opportunities for cooperation within GLTFCA identified	
3.3 3.3 Additional elephant-based tourism and sustainable utilisation oportunities explored	– Promote awareness and marketing of iconic tuskers – Explore opportunities for expansion of community wildlife areas in viable wildlife corridors to enable establishment of additional sustainable utilisation areas and enterprises. [Links to Output 2.2 – identification of corridors]	Corridors identified and Agreements concluded Tourism and awareness campaigns undertaken	- No corridors agreed and concluded as as yet.
3.4 Transparent distribution of the benefits and costs of elephant management and conservation facilitated [Links to Output 2.5]	– Conduct regular and comprehensive Community Awareness campaigns regarding quotas, revenues and distribution within Communities – Capacitate and incorporate direct community involvement in management of Community Wildlife Areas, enterprises and JVs. – Diversify downstream natural resources enterprises to multiply the revenues from CBNRM, e.g. NTFPs	Awareness campaigns conducted Community structures have improved capacity to manage NRs and wildlife areas CBNRM revenues are invested in establishment of natural-resource based enterprises Community realises greater employment and financial benefit from CBNRM revenues	Awaerness campaigns are being conducted in areas arround Gonarezhou National Park and Save Valley Conservancy focusing on natural resources management not rvenue management. -The community share ownership trust is a clear testimony of improved capacity to manage NRs and Wildlife areas.These programmes bring about financial benefits to the communities.
3.5 Effective techniques and land use strategies to mitigate human-elephant conflict are implemented	– Review land use zonation through consultative processes [link to Output 2.2] – Promote awareness and adoption of effective HEC mitigation measures – Promote improved rangeland rehabilitation and grazing management to reduce competition between livestock and wildlife. – Promote improved and rationalised crop production and alternative mechanisms to promote food security to reduce habitat destruction for inefficient dry land cropping (e.g. irrigation development; carbon sequestration credits to generate income & purchase of staple grains).	HEC is effectively reduced Availability and application of HEC mitigation measures improved There is participation in effective grazing management schemes Grazing is better managed and rangeland health is improved	-Proposed irrigation schemes in fenced areas will help reduce human/wildlife conflict -Grazing areas for domestic animals are to be separated from wildlife areas again to reduce human wildlife conflict

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
		There is increased uptake of improved cropping techniques Crop yields are improved Alternative land uses evaluated	
3.6 Information on elephants and their conservation is included in school curriculae and environmental education adjacent to key elephant populations in the SEL is promoted	– Promote awareness of elephant conservation (and other issues) through cultural events, art, plays, sport, etc. – Participate in syllabus review of national environmental science curriculum approved by the Ministry of Education – Develop approved environmental training and extension material and promote dissemination to different stakeholder groups within the community – Promote the formation of environmental science clubs at schools – Coordinate various education, training and extension campaigns operating within the district	School children and communities have greater appreciation of elephant conservation issues Greater participation in environmental clubs at schools with greater understanding of environmental issues More social events linked to environmental and conservation awareness are held Elephant conservation messages are conveyed through art and cultural events & competitions Parallel education programmes are coordinated through stakeholder planning sessions at district level	Education extension programe established that is Chilojo club focusing on all schools close to Gonarezhou. Environmental books distributed to above schools. -Education extension programme in place in save Valley Conservancy and being conducted and funded by the Painted Dog Conservation and the Gonarezhou Conservation Project targeting schools surrrrounding the Save Valley Conservancy. -Education awawreness campaigns regulary conducted in schools by our Extension and Interpretation Unit. --Essay competions with prize giving are regularly done in schools to effectively disseminate information on wildlife conservation.
3.7 Cultural tourism is developed and marketed as a centre-piece of SEL attractions and linked explicitly to conservation of flagship species including elephant	– Promote existing cultural tourism events and attractions and promote incorporation of messages of elephant conservation within these – e.g. Machangana Cultural Festival; GL-Cultural Festival – Explore and develop additional cultural tourism opportunities – including development of interpretive centres, craft centres, museums, monuments, events, etc. and market these – Document and communicate the specific cultural importance of elephant to communities in the SEL and incorporate this into education, marketing, event and cultural messages and interpretative centres.	Community participation and tourist attendance of cultural events is increased Messages relating to elephant conservation and environmental issues are key themes	-GonarezhouNational Park actively involved in cultural festivals. Supported the Muhlanguleni cultural festival this year(2016). -

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
		The number of cultural tourism developments and enterprises is increased Anecdotes, artifacts and oral tradition regarding cultural importance of elephants are recorded and insinuated into marketing strategies and event messages	
3.8 Regional tourism is promoted	– Promote the development of infrastructure critical to accessibility of the region: e.g. border crossing at Pafuri; road development and maintenance; scheduled flights to Chiredzi; etc. – Promote diversification, branding and marketing of SEL-specific tourism products linked within the region and with other attractions in Zimbabwe and neighbouring countries. – Focus special attention on development of community-led tourism initiatives that contribute to the sustainability of the STWC as a movement corridor for elephant – Clear mines from STWC	Increased tourism traffic and arrivals Infrastructure upgrades Scheduled flights established Pafuri border crossing operational Tourism products are diversified Marketing and branding consultants engaged to develop branding and strategy Scoping, feasiblilty studies are undertaken Increased number of CB enterprises are operational	-The current global economic challenges faced are still a draw back to marketing efforts , however some individuals within the are putting much effort on consumptive tourism.
3.9 Policy framework for conservation and CBNRM is well understood by communities and other stakeholders in SEL	– Compile factsheets on policy framework for conservation and CBNRM and disseminate to communities and other stakeholders	Communities have access to existing CBNRM and Policy frameworks	- The awareness campaigns which are frequently conducted through out the year also attempts to explain about the existence of these policies as well as on traditional gatherings, village and council meetings.
	– Consider innovative mechanisms for trans boundary resource sharing and expanding “space for elephants”	Workshops conducted	- Still a challenge as the conept has not been fully embraced by the affected communities.

9.7.4 Building Conservation Capacity(South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.1 Funding to implement the plan secured	– Implement variable / graduated trophy fee structure based on trophy size – Review levy / fee structure for elephant hunting and the distribution of these revenues for conservation and communities – Develop and submit bankable project proposals to potential funders – Explore potential business partnerships – Increase capacity and law enforcement coverage by ensuring that all key stakeholders contribute to and are engaged in law enforcement activities: hunting operators, tour operators, and community anti-poaching teams [Links to Output 1.1] – Explore the potential for a dedicated elephant fund for SEL.	Revised trophy fee structure developed, resulting in increased funds available or secured for elephant conservation Number of project proposals developed submitted and funded Number of developed and functional partnerships contributing to improved elephant management	Gonarezhou Conservation Trust's establishment could secure funding for improved elephant management. - Funding not yet secured for the entire Save Valley Conservancy, but expecting the EU to come in with an aid once the fencing boundaries have been established.
4.2 Current capacity analysed and needs identified	– Analysed current capacity – Carry out a needs assessment across the full range of human resources – Carry out a needs assessment for equipment and infrastructure – Develop a strategy to address the identified needs	Needs assessment report	
4.3 Capacity for research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	– Develop and implement a multi-disciplinary research and monitoring strategy – Develop and implement a research programme based on that strategy, including graduate studies, post graduate and external researchers as well as ZPWMA researchers – Undertake periodic research meetings / conferences – Recruit and meet demands and requirements for research personnel in Parks and surrounding areas – Collaborate with external research institutions – Develop and implement a mentoring programme for researchers – Procure relevant research equipment	Functional research programme in place Research meetings held Publications Number of research projects developed and implemented Number of research personnel on the ground Number of collaborative projects Mentoring plan / number of days spent with experienced researchers Inventory of equipment for research procured	-Nothing to report for Gonarezhou National Park -No Parks Resident Ecologist in Save Valley Conservancy.

9.7.4 Building Conservation Capacity(South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
4.4 Training and retraining programmes established	– Carry out a training needs assessment for law enforcement, resource and wildlife management, research and monitoring, education and awareness, community elephant management, etc. – Develop and implement strategies based on the needs assessment – Standardise and harmonize training in law enforcement	Training needs assessment report Training programmes established	-Training needs for law enforcement and research staff known.

9.7.5 Coordination, Collaboration and Programme Management (South East Lowveld)			
Output	**Activities**	**Key Performance Indicators**	**Narrative Report on Progress in Implementation**
5.1 SEL Regional elephant conservation and management steering committee of 8 established (ZPWMA, SVC, MT, Bubi Conservancy, Chiefs' rep, GCP, ZRP, RDC) This committee should include a core set of competencies (and can co-opt expertise if needed).	– Develop TOR for the steering committee – Identify members – Oversee the implementation of the regional elephant strategy as per national mandate – Meet biannually – Attend national elephant management meetings	Functional committee meetings held biannually with adequate attendance	- Steering committee members identified - Logistics for first meeting have been concluded in collaboration with stakeholders
5.2 Links with neighbouring states to confer on the management of shared elephant populations strengthened	– GLTFCA coordinator to identify relevant stakeholders to participate in the implementation of the regional elephant action plan – Sustain collaboration with regional partners+(one committee member for the regional committee meetings) – Share knowledge / data of all 5 key components of the plan with the regional partners	Number of consultative meetings held Tangible regional collaboration and participation	-Relevant stakeholders known.
5.3 Coordination between the tourism industry (consumptive and non-consumptive) and the elephant management programme strengthened	– Identify consumptive and non-consumptive operators in SEL – Liaise with SOAZ, ZPHGA, ZATSO, ZHA, etc. – Encourage non-members to be affiliated to relevant associations – Hold quarterly meetings with operators – Consider scale of operations in non-consumptive tourism	Regular meetings and workshops convened with the operators	
5.4 Effective information dissemination and communication strategy implemented	– Ensure clear communication of progress against action plan to all relevant stakeholders – Identify target groups, i.e. traditional leaders, school groups, amongst others – Develop a communications strategy, making use of relevant media (print, social, road shows) – Implement communication strategy – Monitor and evaluate	Outreach programmes conducted	Outreach programmes conducted by the Gonarezhou Conservation Project's Liaison Officer and the Parks' Extension and Interpretation staff.

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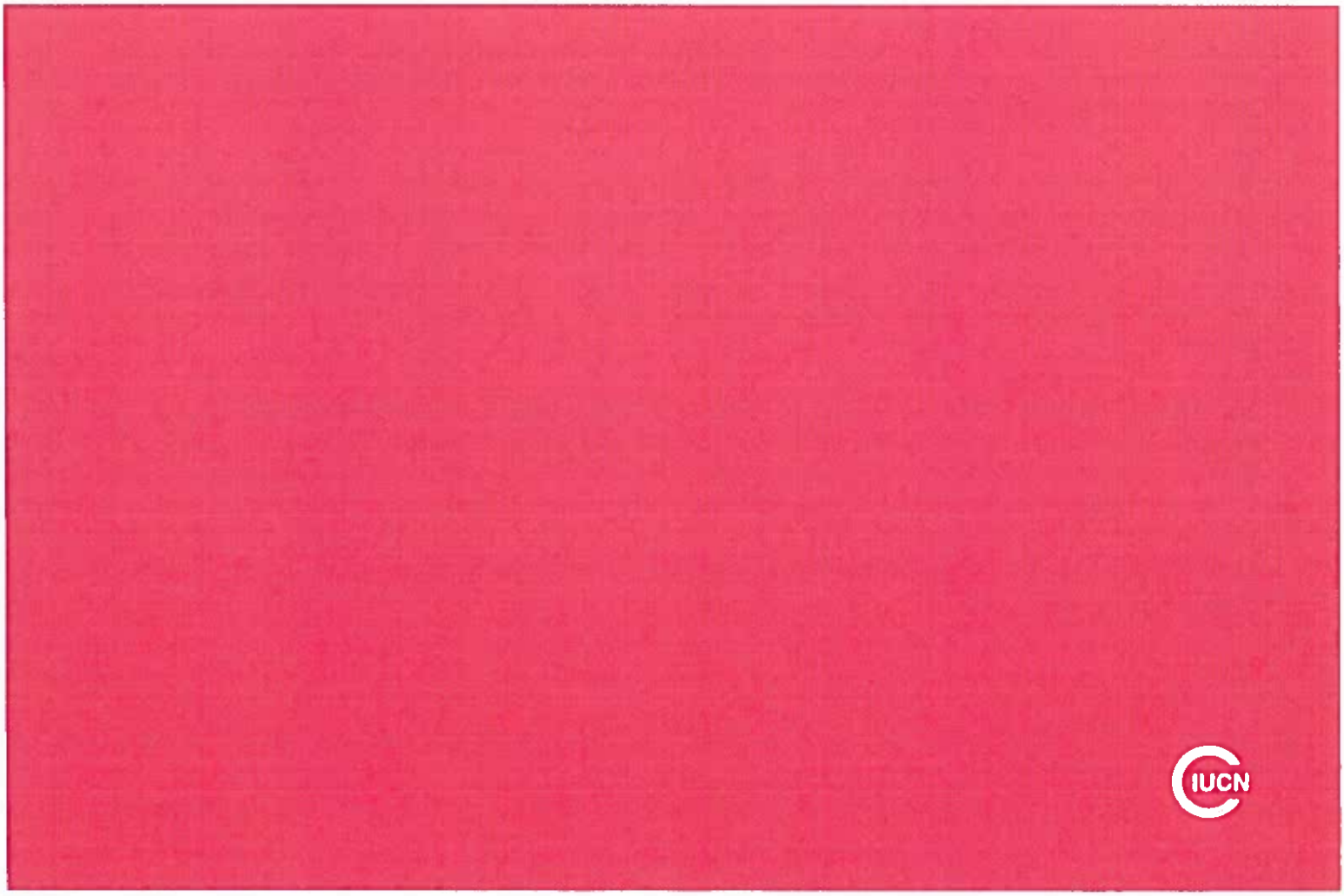
African Elephant Status Report 2016



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Lastly, we wish to thank all the governments of the range states of Africa's elephants. While we have worked with some more closely than others on this report, we are grateful for the continued commitment of all these countries to conserving and managing the African elephant across its range.

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ELEPHANT RANGE IN AFRICA

0 500 1500 2000 2500 km

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Executive Summary

This is the fifth printed African Elephant Status Report (AESR) produced by the African Elephant Specialist Group (AfESG) of the IUCN Species Survival Commission (SSC). Like its predecessors, the AESR 2016 is based on data from the African Elephant Database (AED), the most comprehensive database on the status of any species of mammal in the wild. This is the first comparison of continental populations between 2006 and 2015 across the 37 range states of the African elephant. Importantly this report not only provides information on changes in elephant numbers but also, because it is spatial, shows where these changes have taken place.

The AESR 2016 is the most authoritative and up-to-date compilation of information on the numbers and distribution of the African elephant at national, regional and continental levels across all range states in sub-Saharan Africa. The last year of data collected for this report is 2015. The title follows the convention of using the year of publication rather than the last year of data collection. We hope this report contributes to a wider discussion about the value of monitoring to conservation and to addressing the needs of the African Elephant Action Plan (AEAP), ensuring that policy decisions and the assessment of conservation activities and their performance are evidence-based, and that new conservation initiatives budget for support to monitoring programmes including the AED.

Status reports are intended to help address contemporary elephant management and conservation needs and, therefore, a key question is how the estimates and guesses in the AESR 2016 relate to the true number of elephants in Africa at the end of 2015. When populations are declining, any time difference between the date of surveys and the cut-off date for the report will lead to the true number being lower than the recorded figure. This is more of an issue with the guesses than with estimates, since the largest savanna populations have all been surveyed within the last two years. There are also reasons why the AED may under-record the true number of elephants: aerial counts, which make up the majority of the estimates, tend to undercount the true number of elephants; many of the guesses come from areas which are known to contain substantial elephant populations but have just not been surveyed to the standard required for an estimate, and there are areas of elephant range for which there are no estimates or guesses. On balance the true number of elephants are likely greater than the estimates based on surveys alone, though not necessarily greater than the combined estimates and guesses.

The AESR 2016 provides sound scientific evidence, a deep understanding of the context and a strong technical base to support the management and conservation of Africa's elephants across their range.

THE CONTINENTAL OVERVIEW

The desire to conserve and manage elephants is widespread, and even if opinions differ as to how best this goal can be achieved, it is widely agreed that decisions should be informed by the most up-to-date and reliable information available on the numbers and distribution of Africa's elephants.

Since the publication of the AESR 2007, this goal has been furthered among the African elephant range states through their joint development and adoption by consensus of the African Elephant Action Plan (African elephant range states, 2010), which provides objectives, strategies, and activities for the conservation and management of Africa's elephants. The AEAP recognizes the fundamental importance of monitoring progress and performance through constant reassessment of information on the status of the species throughout its range.

The AfESG and its AED occupy a unique and pivotal position with regard to this need, having been designated as the repository for information on the conservation status of the species by the parties to CITES (CITES Conference of the Parties, 2013a).

This report presents more than 275 new or updated estimates for elephant populations across Africa, with over 180 of these arising from systematic surveys. All aerial survey data from the Great Elephant Census, (greatelephantcensus.com), a Paul G. Allen project, and data from dung counts in Central Africa carried out primarily by the Wildlife Conservation Society (WCS) and World Wide Fund for Nature (WWF) were submitted through the AED for inclusion in this report.

In the AESR 2016, the estimated number of elephants in areas surveyed in the last ten years in Africa is 415,428 ± 20,111 at the time of the last survey for each area. There may be an additional 117,127 to 135,384 elephants in areas not systematically surveyed. Together, this estimate and guess apply to 1,932,732 km², which is 62% of the estimated known and possible elephant range. There remains an additional 38% of range for which no elephant population estimates are available, although it is likely that average elephant densities in this range are much lower than in the surveyed areas.

This is the first AESR in 25 years that has reported a continental decline in elephant numbers. Between the AESR 2007 and this report, there has been a reduction of approximately 118,000 in estimates for populations where comparable surveys have been carried out. However, some populations have been surveyed for the first time, particularly in Central Africa, and this has led to an increase of approximately 18,000 in the "new population" category. The result is that the total estimated number of elephants from surveys has decreased by a smaller figure of about 93,000 since the AESR 2007. The estimated number of elephants from surveys and guesses combined has decreased since the AESR 2007 by about 104,000-114,000.

The decline is largely caused by the surge in poaching for ivory that began around 2006 (CITES, 2016), the worst that Africa has experienced since the 1970s and 1980s. Losses in Tanzania account for the major share of this decline. Other underlying drivers of population decline, such as loss of habitat and increasing human elephant conflict, are still of critical conservation importance but have been receiving less attention from managers, conservationists and policy-makers due to the immediacy of the poaching crisis.

Continuing uncertainties about the number of elephants in Botswana have a substantial potential impact on continental population estimates. Botswana holds the single largest population but national estimates since 2006 have differed by as much as 80,000 elephants. In order to better understand the current status of this critically important population, which is shared with four neighbouring countries, a coordinated survey of the entire cross-border population of Angola, Botswana, Namibia, Zambia and Zimbabwe remains a high priority.

The proportion of elephant range for which elephant estimates are available currently stands at 62%, which has increased from 51% since the previous report. The overall reliability of estimates has increased considerably, with estimates from systematic surveys now accounting for 37% of total range, compared to 29% in the previous report.

Holding over 70% of the estimated elephants in Africa (56% of estimated and guessed elephants) in 42% of the total range area for the species, Southern Africa has by far the largest number of elephants in any of the four regions. Eastern Africa comes second, with 20% of estimated elephants (18% of estimated and guessed elephants) in 28% of the range, while Central Africa is an even more distant third (6%) for estimated elephants in 25% of the range. There remain a high proportion of guesses for Central Africa, giving a total of 23% of estimated and guessed elephants. West Africa continues to hold the smallest regional population with under 3% of both categories in the remaining 5% of range.

Improved knowledge of elephant distribution is reflected by the proportion of range categorised as known, which has increased from 63% to 67%. Significant range expansion has occurred in Botswana and Kenya. The actual distribution of elephants across this range varies considerably across the four regions – from small, fragmented populations in West Africa to large, virtually undisturbed tracts of elephant range in Central and Southern Africa, with a mixture in Eastern Africa.

THE REGIONAL OVERVIEW

CENTRAL AFRICA

Central Africa's elephants have been severely affected by ivory poaching over the past ten years (CITES, 2015b; Maisels, Strindberg et al., 2013b; UNEP et al., 2013; Wittemyer et al., 2014). Evidence from the carcass reports sent to MIKE shows that poaching was already a problem in this region by 2003, long before it became unsustainable in Eastern Africa (CITES Secretariat, 2016).

The estimated number of elephants in areas surveyed in the last ten years in Central Africa is 24,119 ± 2,865 at the time of the last survey for each area. There may be an additional 87,190 to 103,355 elephants in areas not systematically surveyed. Together, this estimate and guess apply to 546,471 km^2, which is 70% of the estimated known and possible elephant range in the region. The number of elephants estimated from systematic surveys in Central Africa increased by about 10,000 between the AESR 2007 and the present. However, this was largely a consequence of "new populations" being surveyed and in some cases there have been major reductions in these populations in subsequent surveys.

Gabon and Congo still hold Africa's most important forest elephant populations but both have been affected by heavy poaching in recent years. Some populations in Cameroon have also been badly impacted, as has Chad's largest remaining population in Zakouma National Park, which has now stabilized. The savanna populations of the Central African Republic have almost completely disappeared, with the only remaining populations occurring in the forested south-west. There are only small remnant populations in Democratic Republic of Congo and Equatorial Guinea.

Populations recorded as having been lost in the last ten years have included one in Chad and another in the DRC. However, since populations in the extensive Central African forests are much less clearly defined than in other parts of Africa, loss of numbers and range is more likely to be recorded than that of discrete populations.

Substantial changes have been made to the range maps, but these are mostly the result of improved information, rather than real changes in range. There has been a decrease of recorded range from about 975,000 km^2 to about 780,000 km^2 with known range decreasing from 82% to 58%.

EASTERN AFRICA

Eastern Africa has been the region most affected by poaching, having experienced an approximately 50% population decline in estimates from surveys since the AESR 2007, largely attributed to a greater than 60% decline in Tanzania's elephant numbers.

The estimated number of elephants in areas surveyed in the last ten years in Eastern Africa is 86,373 ± 10,549 at the time of the last survey for each area. There may be an additional 11,973 to 12,060 elephants in areas not systematically surveyed.

Together, this estimate and guess apply to 548,587 km^2, which is 62% of the estimated known and possible elephant range in the region, a significant improvement on the 45% of estimated known and possible elephant range assessed in the AESR 2007, that resulted in reported survey estimates of 165,151 ± 27,990 and an additional 10,722 to 12,066 guesses in areas not systematically surveyed.

Between the AESR 2007 and this report, elephant numbers in Eastern Africa have declined by almost 87,000, on the basis of updated estimates for sites where comparable survey techniques were employed. However, some populations have been surveyed for the first time and this has led to an increase of approximately 9,000 in the "new population" category. The result is that the current total number of elephants from surveyed populations represents a smaller estimated reduction of about 79,000 elephants, still close to a 50% loss, during the period from late 2006 to the end of 2015.

Elephant numbers have been stable or increasing since the AESR 2007 in Uganda, Kenya, Rwanda and Ethiopia, although these national level figures include reductions in some of their populations. Significant losses have been recorded in Tanzania. There has been an apparent increase in elephant numbers in South Sudan, because the major populations were surveyed for the first time in 30 years after 2006, and it is suspected that there is no longer a resident elephant population in Somalia.

No populations are recorded as having been lost in Eastern Africa.

While there has been no net increase in range, known range has increased from 57% to 85% of total range in 2015. Range expansion is reported in two areas of Kenya.

SOUTHERN AFRICA

Southern Africa continues to hold by far the largest number of elephants on the continent, and nearly 75% of these elephants form part of a single population in the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA), some 520,000 km² in extent. Whereas conservation challenges associated with high elephant densities in large protected areas were common in the region a decade ago, contemporary elephant conservation in southern Africa is now also faced with the emergence of a growing poaching threat (UNEP et al., 2013). While overall, poaching has not had the same impact in Southern Africa as in other regions it has severely affected populations in Zimbabwe, Angola, Mozambique and to a lesser extent, Zambia.

The estimated number of elephants in areas surveyed in the last ten years in Southern Africa is 293,447 ± 16,682 at the time of the last survey for each area. There may be an additional 15,157 to 16,672 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 734,824 km², which is 55% of the estimated known and possible elephant range in the region.

Between the AESR 2007 and this report, elephant numbers in Southern Africa have declined by almost 30,000, on the basis of updated estimates for sites where comparable survey techniques were employed. However, some populations have been surveyed for the first time and this has led to an increase of approximately 3,000 in the "new population" category. The result is that the current total number of elephants from surveyed populations represents a smaller estimated reduction of about 27,000 elephants. Although there have been real declines in Mozambique and Zimbabwe, the main contributor to this decline is a reduction in the estimate for Botswana, which may be the result of uncounted elephants, range expansion, increased poaching or methodological differences between surveys. Some major populations in Namibia (Zambezi, Etosha NP and Khaudum NP), South Africa (Kruger NP) and Zimbabwe (South-east Lowveld and North-west Matabeleland) are stable or increasing.

Southern Africa has a relatively high reliability and quantity of elephant information, especially for the larger populations. Although overall survey coverage has increased since 2007, largely as a result of the Great Elephant Census carried out in 2014-2015, there is still wide variation amongst countries.

One population is reported as having been lost from Angola.

The current range area for Southern Africa is 1,325,998 km², a slight increase from the 1,305,140 km² recorded in the AESR 2007, and the percentage of this which is known range has increased from 53% to 60%. There has been no major loss of elephant range, and one notable southern expansion of range in Botswana. Other changes result from improved information, particularly in Angola.

WEST AFRICA

West Africa's elephant populations are mostly small, fragmented and isolated. With increasing human populations and infrastructural development, many countries in West Africa are experiencing increased pressure on natural areas from mining, logging and rapid transformation of land to agriculture.

The AESR 2016 provides more information than previous status reports on countries known to have small, isolated and highly vulnerable populations, with some stark results. Although numbers are small relative to continental levels, West Africa reported losing twelve populations of elephants since the AESR 2007: one each in Côte d'Ivoire, Ghana, Guinea Bissau, Sierra Leone and Togo; two in Guinea and five in Nigeria. It is surprising, however, that there is recent evidence for the continued survival of a number of populations that were already at a very low level 10-20 years ago. The transfrontier "WAP" complex that straddles the border between Benin, Burkina Faso and Niger remains the region's largest population and of great significance as one of West Africa's few populations with potential long-term viability.

The estimated number of elephants in areas surveyed within the last ten years in West Africa is 11,489 ± 2,583 at the time of the last survey for each area. There may be an additional 2,886 to 3,376 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 102,850 km², which is 72% of the estimated known and possible elephant range in the region.

The overall numbers of elephants in West Africa appear to have increased since 2006. This is largely due to the apparent growth in the WAP complex population.

At the national level, population estimates for both Benin and Burkina Faso suggest increases in the WAP complex. Estimates for Côte d'Ivoire, Ghana, Guinea Bissau, Senegal, Sierra Leone and Togo have stayed more or less constant with some higher and lower guesses, while estimates for Guinea, Mali and Nigeria have declined since 2006. Guinea's elephants are now reduced to a single small population. Niger's few remaining elephants are thought to still move in and out of the country as part of the WAP complex. Information on Liberia's elephants has been substantially improved in this report, adding a small number to guesses originating from 1989/90.

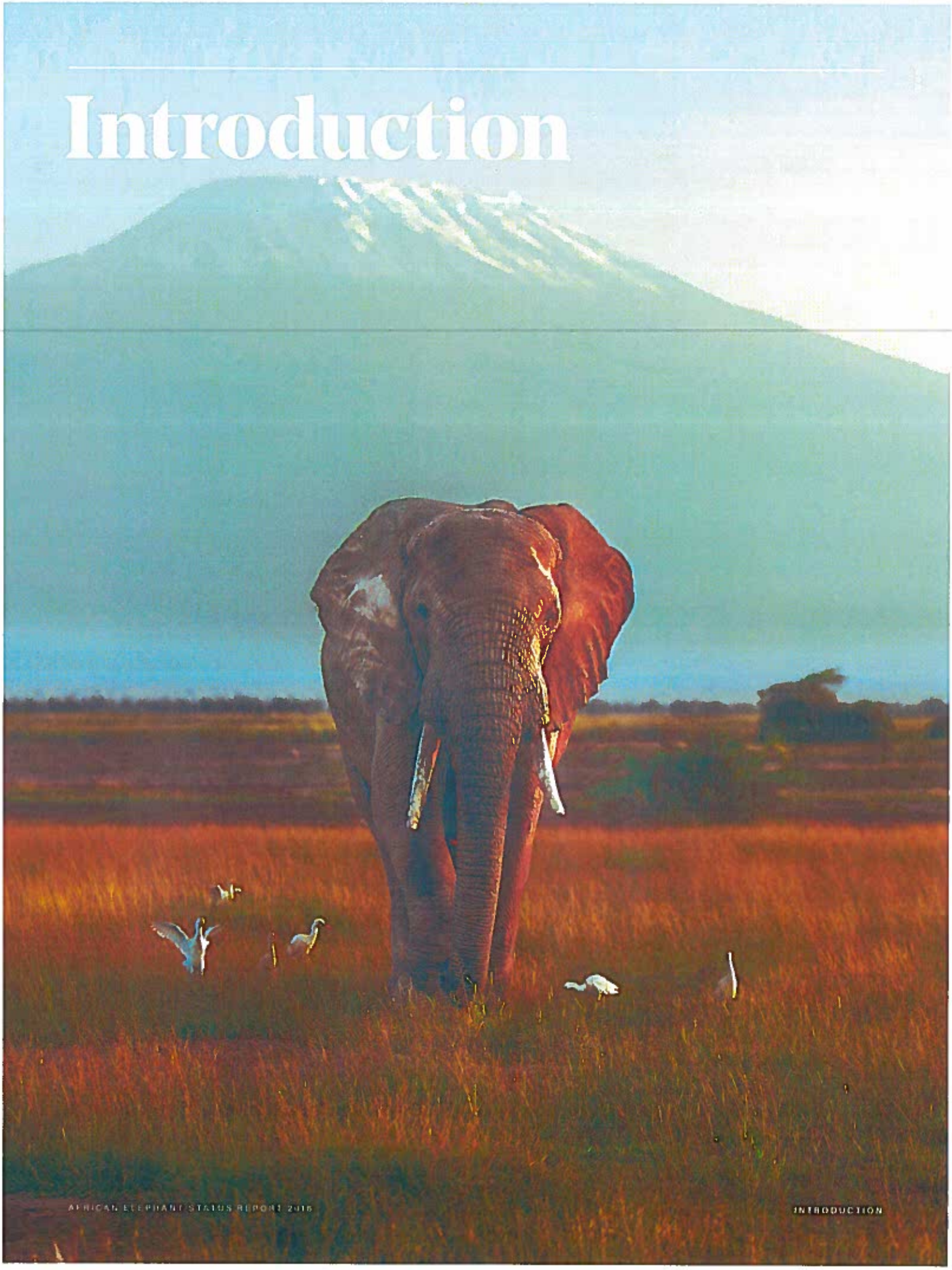
A substantial update of the West African elephant range has been completed for this report, and this has the effect of reducing the total range (known and possible) from around 176,000 km² to approximately 143,000 km², but the percentage of known range has increased from 71% to 79%.

THE AED ONLINE

Since the AESR 2007, the AED has moved to an online, web-based platform africanelephantdatabase.org. This online resource, which was launched initially in 2012 and has been substantially redesigned and updated to coincide with the production of this report, not only offers a platform for displaying data between the published status reports, but also provides new ways to view the data from all the status reports and access more detailed information on new surveys than are presented in this report. Readers are encouraged to visit the website to further explore the data.

With the transition to an online platform, the AED has undergone a very significant change. This has been both challenging and rewarding and lessons we have learnt are being used by other groups working on species databases. In the years to come, we hope to demonstrate meaningful advances in the analytical potential of the AED to provide a strong and relevant evidence base for the management and conservation of the African elephant.

Introduction



Background

HISTORY OF THE *AFRICAN ELEPHANT DATABASE* AND STATUS REPORTS

The African Elephant Database (AED) originated from the African Elephant Survey carried out by Iain Douglas-Hamilton in the late 1970s, which led to the first continental estimate for elephant numbers, produced in 1979 (Douglas-Hamilton, 1979). In 1986, Douglas-Hamilton and colleagues started to compile this information into a geographical information system. Using data accumulated from questionnaire replies, surveys and interviews, a database of elephant population estimates and distribution was assembled (Burrill & Douglas-Hamilton, 1987). An updated version was produced in 1992 (Douglas-Hamilton et al., 1992), which included the use of spatial models to estimate populations for the central African forests, as only a very small proportion of this area had been surveyed at that time.

In 1992, the AED became the direct responsibility of the IUCN Species Survival Commission's African Elephant Specialist Group (AfESG). Since that time, the structure and management of the AED has been overseen by a group of technical experts from within the AfESG known as the Data Review Working Group (DRWG), and chaired since mid-2014 by Dr. Chris Thouless. The DRWG oversees the selection and categorisation of data to be included in the AED; agrees on new features, tools and analyses; and reviews the content of the AESR. Decisions made by the DRWG and additional reviewers are coordinated and implemented by AfESG Secretariat staff and contracted consultants. For this report, additional reviewers were added to focus on and strengthen specific areas. The authorship of this report reflects these contributions.

Initially housed at the United Nations Environment Programme (UNEP) headquarters in Nairobi, Kenya, the AED was until April 1998 a collaborative effort of the Global Environment Monitoring System (GEMS), the Global Resource Information Database (GRID) of UNEP and the IUCN/SSC AfESG. In April 1998 the AED was moved from UNEP to its present location in the AfESG offices in Nairobi. Although the AED was transitioned to a web-based platform in 2012 it continues to be managed by the AfESG Secretariat from Nairobi through its website at africanelephantdatabase.org, where data from all earlier AED updates is publicly accessible, and more recent data is provisionally released whenever possible.

Today the AED is the most comprehensive database on the status of any single species of mammal in the wild.

HISTORY OF THE AFRICAN ELEPHANT DATABASE AND STATUS REPORTS CONT.

The AfESG's preparation of African Elephant Status Reports (AESR) began in the mid-1990s. Status reports are published to provide a complete picture of the status of the species based on the data within the database up to a certain point in time. Prior to the present report, four reports of the AED were published: the African Elephant Database 1995 (Said et al., 1995), the African Elephant Database 1998 (Barnes et al., 1999), the African Elephant Status Report 2002 (Blanc et al., 2003), and the African Elephant Status Report 2007 (Blanc et al., 2007). These reports are freely accessible as well as available for download, in PDF format, on the AED website. Other provisional data were posted on the AED website between the AESR 2007 and the AESR 2016, but this report replaces them.

With the transition to an online platform (www.africanelephantdatabase.org), the AED has undergone its most significant change in over 20 years. This has been both challenging and rewarding, with many lessons we have learned now being used by other groups working on species databases. We hope this report contributes to a wider discussion about the value of monitoring to conservation, ensuring that policy decisions and the assessment of conservation activities are evidence-based whenever possible and that new initiatives plan and budget for support to databases to better enable the monitoring of progress and evaluation of performance.

THE CONTINUING NEED FOR A CONTINENTAL APPROACH

A key issue in African elephant conservation is the variation in the status of the species across the 37 range states in which elephants occur. The desire to conserve and manage elephants is widespread, and even if opinions differ as to how best this goal can be achieved, it is widely agreed that decisions should rely on the best and most recent available information on the status of Africa's elephants.

Since the publication of the African Elephant Status Report 2007, this goal has been furthered among the African elephant range states through their joint development and adoption by consensus of the African Elephant Action Plan (African elephant range states, 2010a), which provides objectives, strategies, and activities for the conservation and management of Africa's elephants. The AEAP recognizes the fundamental importance of monitoring progress and performance through constant reassessment of information on the status of the species throughout its range.

IUCN SSC's African Elephant Specialist Group (AfESG) and its African Elephant Database (AED) occupy a unique and pivotal position with regard to this need, having been designated as the repository for information on the conservation status of the species by the parties to CITES (CITES Conference of the Parties, 2013b). The AfESG has had a specific mandate since CITES CoP15 in 2010 to provide the CITES Standing Committee "any new and relevant information on the conservation status of elephants" (CITES Conference of the Parties, 2013a) along with information and analyses from the CITES MIKE and ETIS monitoring programmes. This reporting, completed for four meetings of the CITES Standing Committee to date, draws heavily on the AED and has been proposed to CITES CoP17 in September 2016 to be adopted as a permanent reporting mandate. The AEAP also recognizes the vital contribution of the AED in one of its component activities to "maintain and update databases on elephant populations for management purposes".

CONTINUING NEED FOR A CONTINENTAL APPROACH CONT.

Such management information is required not only at the site and national level, but also regionally and continentally. Many elephant populations occur across international borders and a policy or management decision made in one country can affect elephant populations elsewhere. Changing land-use patterns or different approaches to tourism, such as trophy hunting in border areas, may have impacts beyond national boundaries. Likewise, the impact of policies concerned with ivory management and trade may affect elephants elsewhere. Civil instability and wars in Africa have sometimes led to a shift in populations across national boundaries. A regional and continental perspective is critical to identify and understand these ongoing dynamics and to support international and regional decision-making, including management of transfrontier conservation areas (TFCAs).

These issues become all the more important as African elephants have faced a devastating new wave of illegal killing over the last decade (CITES Secretariat, 2016). Despite the intense pressures of illegal killing, with some results detailed later in this report, African elephants continue to live outside protected areas and the majority of elephant range may still be found in unprotected areas. This poses additional challenges for wildlife authorities and wildlife managers, as levels of human-elephant conflict continue to be high, increasing and politically charged in many parts of the continent, and especially where human and agricultural expansion moves into new areas already occupied by African elephants. Many lessons have been learned regarding the challenges in mitigating this conflict (Hoare, 2000, 2015), the importance of broader landscape level land-use planning and what will be required in the future if elephants are to persist in the long term.

All these issues highlight the need to census and manage elephants across borders and the need to keep this information up to date and available in the AED in support of conservation action across the continent. The demand for and continued use of publications like the AESR and other analyses enabled by the AED demonstrate the ongoing need for this type of data even after the current pressures from illegal wildlife trafficking have been reduced. Conservation efforts, including implementation and monitoring of national, regional and continental strategies and action plans, should be informed by up-to-date and reliable data on elephant numbers and distribution. The AED and AESRs can also provide invaluable insights into the effectiveness of conservation responses.

About this Report

THE AFRICAN ELEPHANT STATUS REPORT 2016

The AESR 2016 is the fifth printed AESR produced by the AfESG. Like its predecessors, it aims to provide the most authoritative, comprehensive and up-to-date information on the numbers and distribution and of the African elephant at national, regional and continental levels. The last year of admissible data collected for this report was 2015. The title refers to the year of publication rather than the last year of data included. This is the first status report since the AESR 2007 and some modifications have been implemented since that publication.

In preparing the AESR 2016, the AfESG has enjoyed a close collaboration with the technical staff of Vulcan Inc to ensure that data from the Great Elephant Census (greatelephantcensus.com), sponsored by Paul G. Allen, were captured and presented in this report. Vulcan colleagues have also helped with the further development of the database, its web-based platform and in particular streamlining the system for adding new data. All elephant survey data from the GEC were submitted through the AED for inclusion in this report.

Status reports are intended to help address contemporary elephant management and conservation needs and, therefore, a key question is how the estimates and guesses in the AESR 2016 relate to the true number of elephants in Africa at the end of 2015. When populations are declining, any time difference between the date of surveys and the cut-off date for the report will lead to the true number being lower than the recorded figure. This is more of an issue with the guesses than with the estimates in this report since the largest savanna populations have all been surveyed within the last two years. There are also reasons why the AED may under-record the true number of elephants: aerial counts, which make up the majority of the estimates, tend to undercount the true number of elephants; many of the guesses come from areas which are known to contain substantial elephant populations but have not been surveyed to the standard required for an estimate; and there are areas of elephant range for which there are no estimates or guesses. On balance the true number of elephants are likely greater than the estimates based on surveys alone, though not necessarily greater than the combined estimates and guesses. It is the continuing need to improve the accuracy and coverage of these numbers and ensure that they are as up to date as possible that make survey efforts such as the Great Elephant Census and periodic national surveys so important.

CHANGES SINCE THE AESR 2007

Since the fourth report, the AESR 2007, the AED has moved to a web-based platform. Provisional, online-only updates have filled the gaps between the AESR 2007 and this report, and have been published on the AED website. Launched in 2012, the website is a platform for displaying new information incorporated into the database between full status reports, and also provides new ways to access the data from all the status reports as well as more detailed information on new surveys than is available in the AESR 2016. Readers are encouraged to visit the website to further explore the database.

A system for categorising and tracking changes in numbers was first introduced in the AESR 2007, resulting in the display of a "Cause of Change" for each area and an Interpretation of Changes table for each country and region as well as the continent. ("Cause of Change" has been renamed "Reason for Change" in this report; see below.) This system is intended to distinguish between real changes in numbers and changes in survey techniques or area of survey coverage, thus limiting inappropriate extrapolations about trends over time.

The Definite, Probable, Possible, and Speculative (DPPS) system, in use since 1995, was designed to describe uncertainty and data quality. However the calculations underpinning it are complex and its display of population numbers difficult to understand and interpret. Although the AESR 2007 emphasizes that "comparing guesses to derive population trends is a meaningless exercise," the four-category "DPPS" itself does not explicitly articulate the proportion of elephant numbers that are guesses (i.e. population figures that do not meet the criteria required to qualify as population estimates).

To simplify the presentation of elephant numbers and clearly demonstrate the calculations leading to the totals at the national, regional, and continental levels, the DPPS has been replaced in this report by the Alternative Data Display (ADD), which classifies numbers either as estimates or guesses, and distinguishes what kinds of surveys have provided the figures. In contrast to the DPPS, the estimates derived from surveys in the AESR 2016 are additive, so that the rows, listed by survey types, total to the country totals and the country level totals add to the regional totals, and so forth. Very small differences in the totals in the tables may occur due to rounding of decimal places. Guesses are not completely additive because they include upper and lower confidence limits from certain types of survey. Columns involving confidence limits (CL) remain the necessary exception, as adding CLs requires the pooling of variances to derive a new CL appropriate for the sum total. Furthermore, population estimates are now aligned with the range area (km^2) they cover in the same table. While the printed AESR 2016 only uses the ADD, the DPPS has been retained on the online platform for comparative purposes.

DATA TYPES AND CATEGORISATION

The AED contains both spatial and non-spatial (attribute) data, managed using GIS software and a relational database management system. Spatial and relational data are both maintained in a PostgreSQL database with the PostGIS extension. These data sets are combined with base map data derived from the Digital Chart of the World (ESRI, Inc., 1992) a widely available global geographical dataset, the World Database of Protected Areas (UNEP-WCMC & IUCN, n.d.), the World Resource Institute's protected area data set (WRI, 2016) and a variety of other sources. Each of these background datasets is used as appropriate for the production of this report and none are considered authoritative datasets produced by the AfESG.

Data in a variety of formats are collected and received into the AED. Survey reports are obtained from wildlife management agencies and other organizations, and non survey-report data are shared in many formats by individuals and organizations with expert knowledge of an area. Preliminary range maps are shared with relevant experts to aid in modifying and revising.

Data regarding an estimate or a guess are entered into the database using a submission form specific to the type of survey. Every estimate or guess is linked to spatial data, which is digitized and geo-referenced if not supplied by the data provider. Each submission consists of spatial data accompanied by appropriate attribute data manually extracted from the source material, such as transect length, flight speed, or dung decay rate. The source material (survey report, map, email, etc.) is then uploaded and linked to the submission.

Area measurements in the tables are calculated using geodetic coordinates on the WGS84 spheroid, for consistency across the African continent without projection-related errors. The surface areas of input zones, protected areas and elephant range are tallied at national, regional and continental levels. The overlay capabilities of GIS are used to determine percentages of both protected and surveyed elephant range.

The AED stores data on two basic variables reflecting the conservation status of African elephants, namely, numbers (abundance) and distribution (range). There are specific challenges associated with these kinds of data, related to their reliability and the availability and timing of new surveys. The ways that these issues are handled in this report are described in the following sections.

ELEPHANT NUMBERS

Although there are many different ways to count elephants, no single method is perfect. Possible sources of bias include the choice of survey technique, surveyor skill, quality and availability of adequate equipment, financial constraints, climatic conditions and vegetation cover. Ideally, data on elephants in any country should be collected by a wildlife management authority using qualified staff and standardized methods for collecting, recording and analysing data (Craig, 2012c; Hedges & Lawson, 2006). In reality very few countries have the means, either financial or in the form of expertise, to conduct systematic surveys on a regular basis and political strife in many range states sometimes makes survey work impossible.

As a result, elephant population data is collected by a variety of agencies and individuals, often without any direct linkage to one another and using a variety of different techniques. It is sometimes necessary to combine data from different types of surveys and different habitats to calculate a national estimate. Seasonal and cross-border movements of elephants are additional factors that can lead to inaccurate national estimates. Few cross-border surveys are conducted simultaneously to accurately estimate the size of such populations. Instead, they are generally treated as separate populations on either side of the border, which may occasionally result in either under- or over-counting. The end result is a collection of data of variable quality for most countries, and no data from formal surveys for many populations.

METHODS OF ESTIMATING ELEPHANT NUMBERS

While there is no single or ideal method for counting elephants, each method has its advantages and disadvantages under different conditions. The brief description of some of the most important methods below is not intended to be detailed or exhaustive. For more details, the reader is referred to the specialized treatments of these subjects (Barnes, 1993; Craig, 1993, 2004, 2012c; Douglas-Hamilton, 1996; Hedges et al., 2013; Hedges & Lawson, 2006; Kangwana, 1996; Norton-Griffiths, 1978).

Methods for establishing elephant numbers fall into three broad categories: estimates from total counts, estimates from sample counts, and guesses.

Total Counts aim to see and record all the elephants in a defined area, either from the air or from the ground. Aerial total counts are conducted from fixed-wing aircraft or helicopters. The speed at which the aircraft is flown influences the accuracy of the count, with high speeds usually leading to undercounts (Norton-Griffiths, 1978). Aerial total counts are commonly used in open, savanna habitats, where elephants are unlikely to be hidden by forest or thick bush, especially but not exclusively in Eastern and Southern Africa.

Total counts of a limited area can also be conducted at ground level by teams in vehicles or on foot. These are uncommon in Africa, but in a handful of places, total ground counts have been accomplished by attempting to identify every individual in the population. This is only possible for intensively studied populations where animals can be observed readily. For such individual recognition studies to provide high quality data for the AED, every individual in the population must be registered. Many ongoing studies have so far covered only a fraction of these focal populations, and cannot therefore provide reliable estimates of entire populations. If elephants are being identified in a place where they concentrate for a specific resource (such as the Amboseli swamps in Kenya and Dzanga Bai in the Central African Republic), it may be difficult to work out how large an area is covered by the identified elephants, and the estimate will be affected by the timescale over which elephants have been enumerated (if too short it will not include occasionally seen individuals, if too long it may include ones that have already died).

Sample Counts, in which only a sample of the area is counted (usually between 3% and 20%), are generally conducted along transects which may be randomly distributed or systematically placed across the study area. The resulting data are used to calculate a population estimate with

confidence limits. In contrast with total counts, which tend to produce underestimates of the true population, sample counts have in principle an equal chance of underestimating or overestimating the true population, provided that sampling error is the main source of error. In practice, however, factors such as high aircraft speed or dense vegetation cover lead to undercounts.

Direct Sample Counts are most commonly made from the air, but may also be conducted on the ground, either on foot or from vehicles. Aerial sample counts require considerable technical expertise and coordination, as well as the use of expensive additional equipment such as radar altimeters. Aerial sample counts are the most commonly employed survey technique in Eastern and Southern Africa.

Indirect Sample Counts are also referred to as dung counts. In low-visibility tropical forests, elephant abundance estimates typically use elephant dung density as a proxy for elephant density. Distance sampling (Buckland et al., 2001, 2015) along line transects estimates dung density and CLs within the area of interest (Hedges, 2012a; Strindberg, 2012). DISTANCE software (Thomas et al., 2010) is used for both survey design and analysis. Careful field protocol ensures accurate and precise estimates (Hedges et al., 2012a; Hedges & Lawson, 2006). Dung density is converted to elephant abundance using estimates of the rates of elephant defecation and dung decay and the surface area of the area surveyed. Dung decay rates can vary considerably across space and time; site and time-specific estimates of decay rates greatly improve accuracy in elephant abundance estimates (Hedges et al., 2012b; Laing et al., 2003). Estimates from well-conducted dung counts can be as accurate as those from direct methods, and more precise than those of aerial sample counts (Barnes, 2001, 2002).

At sites < 5,000km^2 and where elephant numbers are between a few tens and a few thousand, DNA-based capture-recapture methods have been used (Eggert et al., 2003; Gray et al., 2014; Hedges, 2012b; Hedges et al., 2013; Karanth et al., 2012b; Karanth et al., 2012c). Elephant DNA is extracted from as many dung piles as possible within the area of interest, and genetic fingerprinting is used to identify the number of unique genotypes (individuals) in the samples. The rates of repeat samples obtained can then be used to estimate the population size (Karanth et al., 2012a).

Often, it is not possible to carry out a systematic survey and the only type of information available for many areas is either an informed or other guess.

Survey Reliability

Population estimate data entered into the AED varies in quality from the identification of individual animals to plain guesswork. The addition of population numbers of varying quality into national, regional and continental totals is, from a statistical viewpoint, invalid and produces misleading results. On the other hand, discarding low-quality numbers can produce equally misleading estimates, as high-quality survey estimates are not available for many areas in which elephants are found.

In order to solve this problem, the AED incorporates a system to accommodate all types of numbers by classifying them according to their type and designating them as estimates and guesses.

As with the previous data aggregation system, which separated numbers into Definite, Probable,

METHODS OF ESTIMATING ELEPHANT NUMBERS
CONT.

Possible, and Speculative, the new ADD system uses a scale of survey reliability, ranging from A (highest) to E (lowest). Survey reliability gives an indication of the level of certainty that can be placed on a given number, as determined by the method employed and how it was carried out.

Tables 1 and 2 show the different types of surveys with the range of reliabilities that could be assigned to them and how each number contributes to the columns of estimates and guesses depending on its reliability and other criteria. How the columns are then summed to create country, regional, and continental totals is detailed in the next section, "Integration and Presentation of Data."

The unit of analysis for assigning these categories is the "input zone" and these are listed in each country table. An input zone has only one source of information and may align with a protected area or other land unit, or simply with an area for which there was previous information, better enabling comparison to previous AESRs. Each input zone is assigned a reliability category, and the figure associated with that input zone contributes to the estimates and guesses as shown in Table 2.

Carcass Ratios

The carcass ratio, a measure often calculated in aerial total and sample counts, is the estimated number of dead elephants divided by the sum of estimated dead plus live elephants. Carcass ratios can provide supporting information to changes in numbers in successive surveys and thus are included in the narrative text alongside survey estimates where available and appropriate. Douglas-Hamilton and Burrill (1991) showed that carcass ratios in excess of 8% for sample counts or 3.3% for total counts were indicative of declining populations.

ELEPHANT DISTRIBUTION

African elephants occur in a wide variety of habitats, from tropical swamp forests to deserts. They often move extensively in search of food, water and minerals or in response to disturbance, and the extent to which they move may depend on a large number of factors. In certain areas, seasonal movements are predictable, while in others, movement patterns are far more difficult to decipher. These factors, together with the scarcity of animals at the edges of their distribution, make elephant range a difficult concept to articulate and map. For these reasons, elephant range is broadly defined by the AfESG as the entire area where the species occurs in the wild at any time.

Collecting precise distribution information on such a wide-ranging species as the African elephant presents a number of practical problems, often related to the inaccessibility of some of the habitats in which elephants are found. As a result, the quality of information varies considerably from one area to another and its mapping heavily relies on expert opinion. The range map for a particular country is often updated by a single individual, and thus has a subjective element. Trying to draw a precise range boundary on maps of varying quality and scale is an inexact exercise. Neat, rounded lines may be indicative of scanty knowledge in comparison to the fragmented, more detailed pictures which emerge from countries where more precise information is available. Elephant range often appears to coincide directly with the boundaries of protected areas, because that is where most population surveys are carried out, and elephant movements in and out of protected areas are often unknown or unaccounted for.

TABLE 1. CATEGORISATION OF ELEPHANT ABUNDANCE DATA IN THE AED

SURVEY TYPE	RELIABILITY	CATEGORISATION
Aerial Total Count Ground Total Count	A	Reliability A if well-designed and implemented*; downgraded to an informed guess of reliability D if there are concerns about whether the count was well designed or implemented or if a range of estimates is provided
Individual Registration	A	Reliability A, downgraded to an informed guess of reliability D if a range of estimates is given, or other information suggesting the individual registration estimate does not include the entire population
Aerial Sample Count Ground Sample Count	B	Reliability B if 95% confidence intervals or other measures of precision are provided; otherwise, or if there are other concerns about survey design or implementation*, the estimate is downgraded to an informed guess of reliability D
Reliable Dung Count	B	Reliability B; as "reliable" dung counts are defined by having 95% confidence limits and a dung decay rate obtained on site
Other Dung Count	C	Reliability C; as "other" dung counts are defined by having 95% confidence limits but no on-site measurement of dung decay rate
Informed Guess	D	Reliability D, includes aerial sample counts, ground sample counts, and dung counts without 95% confidence limits or other methodological details or information and guesses that are based on a clearly explained logic for extrapolating from observations
Other Guess	E	Reliability E; any guess that does not fulfill the requirements for an Informed Guess
Degraded Data	E	Reliability E; any estimate or guess that is at least ten years old. For this report this includes any estimates from 2005 or earlier
Modeled Extrapolations	E	Reliability E; guesses derived from models that do not rely on elephant survey data at a site level but use instead other data such as habitat type, land use or human population density to extrapolate from elephant densities measured in other areas.

** The AfESG's Data Review Working Group (DRWG) reviews all surveys to ensure that key standards have been met and parameters included in the report to allow determination of the quality of survey design and implementation. The AfESG and its DRWG make every effort to engage with data providers to secure any essential missing information.*

TABLE 2. CATEGORISATION OF ELEPHANT NUMBERS BY SURVEY TYPE & CONTRIBUTION TO ESTIMATES AND GUESSES

SURVEY TYPE	RELIABILITY	# OF ELEPHANTS		GUESSES	
		ESTIMATE	± 95% CI	FROM	TO
Aerial Total Counts* Ground Total Counts* Individual Registrations*	A	Estimate	—	—	—
Aerial Sample Counts* Ground Sample Counts* Reliable Dung Counts	B	Estimate, if given, or else number seen	95% confidence interval divided by two	—	—
Other Dung Counts	C	Number Seen	—	Lower confidence limit minus number seen	Upper confidence limit minus number seen
Informed Guesses	D	Number Seen	—	Lower limit of guess minus number seen	Upper limit of guess minus number seen
Other Guesses Degraded Data Modeled Extrapolations	E	—	—	Lower limit of guess Estimate Modeled Estimate	Upper limit of guess Estimate Modeled Estimate

** These survey types may be downgraded to lower reliabilities and thus treated as informed or other guesses. See the criteria in Table 1.*

ELEPHANT DISTRIBUTION CONT.

Frequently, the depiction of range is also delimited by a natural boundary such as a river or a mountain range for convenience rather than accuracy. When range information in one country extends to a national border, it does not always match the adjacent range in the neighbouring country. While this is sometimes due to different human population densities or land uses across a border, more often lack of reliable information is the cause of what appear to be hard boundaries.

In order to address some of these difficulties, the AED classifies and maps elephant range information into four levels of certainty, as described in Table 3. In addition, range information in the AED is documented and referenced to original sources of data wherever possible to allow some evaluation of the reliability of range information and the reasons why range has either increased or decreased. In some cases these are real changes, while in others they are the result of improved knowledge. Where possible these distinctions have been mentioned in the text.

INTEGRATION AND PRESENTATION OF DATA

DERIVATION OF NATIONAL, REGIONAL AND CONTINENTAL TOTALS

The categorisation system described on the previous page is implemented in the AED through a series of algorithms applied to input zones, or each area for which an individual number is listed in the country tables displaying Elephant Estimates. When executed, these algorithms categorise each input zone in terms of survey type and reliability. The categorised records are then used to produce national, regional and continental totals.

It is important to note that the totals presented for each country and region are minimum numbers, based on the areas that have been surveyed or for which guesses are available. It should also be noted, however, that the totals can include relatively old estimates and if the population is declining, this will yield an overestimate, while it will understate the true number of elephants in an increasing population. In many countries, and in all regions, there are large areas of elephant range where neither surveys nor guesses are available. In the case of Gabon, a modeled extrapolation has been used to generate a guess for unsurveyed areas of the country. This is because there is a large proportion of known range in Gabon that has not been surveyed, but the factors affecting elephant numbers are well known. As the available estimates generally represent only a proportion of the elephant range in a country, they cannot be considered total estimates of the national population. Likewise, the estimates given for the regions and for the continent cannot be interpreted as total regional and continental estimates either.

CHANGES IN ELEPHANT NUMBERS AND DISTRIBUTION OVER TIME

A key question for African elephant conservation and management is whether elephant populations are increasing, decreasing or stable. Comparing estimates from different AESRs to derive continental trends is often attempted but can be invalid and potentially misleading for a number of reasons.

Many of the continent's elephant populations have never been systematically surveyed. Thus any differences reported between the AESRs refer to a subset of all elephant populations, and may

CHANGES IN ELEPHANT NUMBERS & DISTRIBUTION OVER TIME
CONT.

therefore not reflect overall changes, including those in unsurveyed populations. While it is likely that elephant densities in unsurveyed range are lower on average than in surveyed areas, there still may be significant numbers of elephants in areas for which there are no currently estimates or guesses.

Populations surveyed for the first time or populations newly added to the AED (i.e. "new populations" in Table 4) contribute to an apparent overall increase in numbers, even though these do not reflect a true increase in elephants, but rather an improvement in knowledge. Repeated surveys of the same area may use different techniques or cover different areas, so the results are not directly comparable between different time periods. Where new surveys have not been carried out recently, old estimates will be retained and, over time, degraded to guesses. Retention of these numbers for a significant proportion of the population can lead to a situation where the extent of real change is not reflected in the AESR totals.

In order to disentangle these confounding factors from real changes in elephant numbers, the AED relies on a system that links figures contained in the current version of the AED to the corresponding figures in the previous report, and assigns a "reason for change" to each pair, as described in Table 4. The AESR then displays the numbers associated with these reasons for change at the national, regional and continental levels.

Where the more recent surveys in methodologically comparable survey pairs account for a large proportion of the estimate column for a given region, a statistical comparison of elephant numbers over time for those populations can be performed (see Blanc et al., 2005 for details). A list of methodologically comparable surveys featured in this and the previous report is provided in Appendix I.

This report refers to the reason for change "population lost", or PL, more than it did in the AESR 2007 because of a focus on more deeply investigating the current status of small, isolated populations. The authors recognize the significance of this label and apply it only where there is reliable evidence regarding the loss of a population that is distinct and isolated from other populations.

OVERALL QUALITY OF INFORMATION AND SURVEY PRIORITIES

The state of knowledge on elephant numbers and distribution varies widely across the continent. Some populations have never been surveyed, or are only surveyed rarely, while others are counted more frequently. The objectives of the AED include promoting the use of standardized, reliable survey techniques, as well as facilitating the task of donors, wildlife authorities and decision-makers in prioritizing their efforts to monitor elephant populations.

In order to assist in meeting these objectives, a simple index measures the quality of elephant population data available at the national, regional and continental levels. Based on this index, a system to identify and prioritize the areas where systematic surveys are most needed has been developed. These measures, both of which are calculated from data contained in the AED, are described below.

OVERALL QUALITY OF INFORMATION AND SURVEY PRIORITIES CONT.

The **Information Quality Index (IQI)** is an unbiased, normalized and scalable index of the overall quality of information on elephant population estimates and guesses. The IQI ranges from zero (no reliable information) to one (full range coverage using good-quality estimates) and is the product of two key variables: a measure of the quality of available data and a measure of the completeness of estimate coverage. The data quality measure is based on the ratio of good quality population data (estimates) to total population data (estimates + guesses); the data completeness measure is based on the ratio of assessed range to total known and possible range.

The **Priority for Future Surveys (PFS)** index is designed as an unbiased system for setting priorities for future surveys in order to improve the accuracy of the continental estimate. For a truly accurate continental picture of elephant abundance to emerge, reliable estimates would have to be available for all elephant range. Countries accounting for a larger proportion of total continental range should therefore be prioritized more highly.

PFS is therefore based on the IQI (as described above) together with a measure of continental range coverage represented by each country. When calculated for each country, the PFS provides a measure, ranging from one (highest priority) to five (lowest priority), of the countries where population surveys are needed. At the input zone level, the PFS is based on the proportion of national range accounted for by each area. All areas of elephant range that have never been surveyed, i.e. those for which estimates are currently unavailable, are automatically assigned a priority of one. Systematic surveys should be conducted in areas of unsurveyed known range. In areas of doubtful range and unsurveyed possible range, elephant presence/absence should be established prior to conducting systematic population surveys.

It is important to stress that neither the IQI nor the PFS are measures of the health of elephant populations, or of overall elephant conservation priorities, but rather of the quality of elephant population data and of the need to conduct systematic surveys in the future. For instance, range loss in a country will often result in a decline in the proportion of unassessed range, thus causing the IQI to increase and the priority ranking to decline. A list of all African elephant range states with their IQI and PFS scores is shown in Appendix II.

While it is hoped that the PFS system will prove useful for prioritizing populations needing to be surveyed, the system is not intended to be prescriptive. Individual range states may have good reasons to use different criteria and different systems for prioritizing elephant population surveys.

Further details on how the IQI and PFS are calculated are available in the "Data Types and Categories" section of the AESR 2007.

TABLE 3. CATEGORISATION OF ELEPHANT RANGE DATA IN THE AED

RANGE CATEGORY	DEFINITION
Known	Areas in suitable habitat, which, if searched with reasonable intensity, are likely to yield signs of elephant presence. If no information is obtained confirming presence of elephants for a 10-year period, known range is downgraded to possible range (below).
Possible	Areas within previous elephant range, including former areas of known range where the source information is more than 10 years old where there is no confirmation that elephants still occur, but no evidence that they have been lost. Areas of possible range are considered to be a priority for studies to establish the presence or absence of elephants.
Doubtful	Areas where there are reasons to believe that elephants are no longer present, but for which there is no recent positive or negative information. Areas of doubtful range are also a priority for presence/absence studies.
Non-Range	Areas that are believed to hold no elephants. A change to non-range ideally requires a clear statement from a knowledgeable person who has actually visited the area, though sometimes range is classified this way as a result of known habitat transformation or high human population densities.
Point Records	Sightings of elephants or evidence of their occasional presence outside of known elephant range, shown as crosses on the map.

TABLE 4. CODES & DESCRIPTIONS OF REASONS FOR CHANGE AS IMPLEMENTED IN THE AED

CODE	REASON FOR CHANGE	DEFINITION
RS	**Repeat Survey**	Both surveys were conducted using comparable methodologies and covering the same area
NP	**New Population**	A new entry into the AED; i.e. no previous survey or guess to compare with
DT	**Different Technique**	The most recent survey uses a different survey methodology, or replaces a guess
DA	**Different Area**	Both surveys were conducted using the same methodology, but the extent of the areas covered differed by 10% or more*
NG	**New Guess**	A guess replaces an older guess or a survey estimate that was degraded data
PL	**Population Lost**	A distinct population is known to have disappeared from an area, be it through translocation or local extinction
DD	**Data Degraded**	The estimate or guess has been degraded after 10 years
—	**No Change**	The estimate or guess has been retained unchanged from the previous report

** The 10% difference is a guideline; at times, differences in areas deemed to be non-significant by reviewers in terms of capturing elephant populations (e.g. in the case of other recent surveys showing no elephants in the omitted area) may result in the assignation of other causes of change*

How this Report is Organised

→
Information in this report is presented at three levels—continental, regional and national. The continental section is followed by the regional sections, Central, Eastern, Southern and West. Each of these contains the relevant individual country sections. All sections follow the format described below.

NARRATIVE OVERVIEW

Each continental, regional, and national section begins with a brief narrative overview intended to supplement the information provided by the maps and tables that follow. The overviews are not intended to provide the reader with exhaustive information on each country, but simply to describe the current situation and to highlight any factors that may have contributed to it or notable changes in these factors since the AESR 2007.

The overview contains the three following sub-sections:

General Statistics. This section provides summary statistics of country area, area of elephant range, proportion of elephant range in protected areas, and the amount of range which has been surveyed or has elephant population estimates, IQI, CITES Appendix and year of that listing for each range state.

Current Issues. This section covers any issues that may, directly or indirectly, affect elephant populations and their conservation and management. These may include poaching, political stability, land use changes, large infrastructure developments or relevant new wildlife policies or management arrangements.

Numbers and Distribution. This section starts by describing the total population estimates and guesses before discussing individual areas that have been surveyed, the methods employed, and how the data and information were interpreted to result in changes to the tables and maps since the last report. The former sub-sections on "Range Data," "Population Data" and "Cross-border movements" from the AESR 2007 have been integrated under this heading.

TABLES

Summary Totals. These tables (see Table 5) present numbers at the national, regional and continental levels, separated into estimates and guesses. These tables depict the contribution of each survey type to the total area (in km^2) for which estimates and guesses are available. In addition, areas of unassessed known and possible range are also shown.

Total numbers from the previous report are also displayed in the table, the AESR 2007 data was

converted into the AED's new data display format for direct comparability, after first correcting AESR 2007 errata. For further explorations of the AESR 2007 dataset, and for comparisons between the former and the new data display approaches visit the AED website (www.africanelephantdatabase.org).

The Interpretation of Changes in Elephant Estimates from the Previous Report. These tables show the breakdown and net changes in the estimates and guesses, grouped by the categorised reason for change described in Table 4.

Elephant Estimates. These tables display the detailed inputs for each country that contribute to the summary totals and interpretation of changes tables. At the national level the table shows results for individual input zones. The centroid of each input zone is provided in decimal geographic coordinates to assist the reader in locating the areas on the accompanying maps. In addition, these input zone tables within each country present details on estimates, their reliability and other metadata, as described in Table 6. Input zones are, as a general rule, listed alphabetically. Where there are many input zones distributed across many parts of a country, sets of geographically adjoining input zones that indicate contiguous elephant populations or other geographically defined subsets are grouped into populations for ease of review and interpretation.

TABLE 5. DETAILS SHOWN IN REGIONAL & CONTINENTAL TABLES OF ESTIMATES IN THIS REPORT

COLUMN	DESCRIPTION
Country/Region	Name of the country or region
Elephant Numbers	Elephant numbers in terms of estimates and guesses
Range Area (km²)	Estimate total range area (known plus possible range) in the country or region
% of Regional Range	Percentage of the regional/continental range accounted for by the country/region in question, rounded to the nearest integer
% of Range Assessed	Percentage of elephant range in the country or region for which estimates and guesses are available
Information Quality Index (IQI)	Number from zero (lowest) to one (highest) that gives an index of the overall quality of information on elephant population estimates and guesses (as described in the Overall Quality of Information and Survey Priorities section)
Priority for Future Surveys (PFS)	Number from one (highest) to five (lowest) indicating urgency and need for future systematic surveys, based on the precision of estimates and the proportion of regional/continental range accounted for by the region's/continent's estimates and guesses

TABLE 6. DETAILS & SURVEY PARAMETERS PROVIDED IN NATIONAL TABLES OF ESTIMATES AND GUESSES

COLUMN	DESCRIPTION
Populations	A grouping of adjacent input zones to indicate contiguous elephant populations or other geographically defined subsets. These designations have been made for some countries only, particularly those with many input zones
Input Zone	Name of the input zone
Reliability	Category (A, B, C, D, and E) to which the estimate or guess is assigned; dependent on survey type and additional criteria (as described in the Data Types and Categorisation section, Table 1)
Survey Type	Type of survey conducted (as described in the Data Types and Categorisation section, Table 2)
Reason for Change	Attributed reason for change with respect to the previous report (as described in the Integration and Presentation of Data section, Table 4)
Survey Year	Year in which the survey was conducted or to which the guess applies
Number of Elephants	Elephant population estimate or guess
95 % C.L.	Where available, the 95% confidence limit for the estimate (in the case of asymmetric confidence intervals, the difference between the lower and upper confidence interval divided by two). For informed guesses, the upper range of the guess, marked with an asterisk
Source	Author and year of the source material (full citations given in the list of references)
Priority for Future Surveys (PFS)	Number from one (highest) to five (lowest) indicating urgency and need for future systematic surveys, based on the precision of estimates and the proportion of national range accounted for by the input zone
Area	Size of the input zone in square kilometers (km^2), when available, the area given is that reported in the source material; if unreported, the area is calculated from the spatial data for the input zone
Map Location	Longitude and latitude of the centroid of the input zone, given in decimal degrees

EXAMPLE MAP

Section of country map shown for visual reference in context to the map legend

MAPS

A map is shown for the continent, each region and each country, showing elephant distribution, input zones, protected areas within elephant range, national and/or regional boundaries, major towns, rivers and lakes. Countries of adjacent regions are shown to highlight important transfrontier populations, as well as the spatial relationships between elephant populations in neighbouring countries.

MAP LEGEND

- Int'l Boundaries
- Rivers & Lakes
- Towns
- Protected Areas
- Input Zones

ELEPHANT RANGE

- Known
- Possible
- Doubtful
- Sighting

EDITORIAL CONVENTIONS AND REFERENCING

In these overviews, several conventions have been adopted for ease of reading. Survey types are marked in bold when referring to the data included in this report, aligning with the tables. Range categories are also marked in bold in reference to the current range, not the category assigned in 2007. Estimates from sample counts are given with 95% confidence limits in the form xx ± yy. Asymmetrical confidence limits are shown in parentheses following the survey estimate. Abbreviations are used for protected areas after they are first named as a "National Park," (NP), "Forest Reserve," (FR) or other conservation area.

The AED relies on a huge number of discrete pieces of information, in the form of maps, survey reports, management plans, emails, phone calls, and news reports, among others. In addition to their inclusion in this report, these references are all eventually housed in the African Elephant Library, an invaluable and growing archive of over 7,500 references on the African elephant.

Africa

Continental Overview

ESTIMATED TOTAL ELEPHANTS

415,428 ± 20,111

GUESSES

117,127 - 135,384

GENERAL STATISTICS

Total Area	20,731,202 km²
Range Area	3,132,238 km² (15%)
Protected Range	30 %
Information Quality Index (IQI)	0.45

CURRENT ISSUES

This is the first African Elephant Status Report in 25 years which has reported a continental decline in elephant numbers. The decline is largely caused by the surge in poaching for ivory that began around 2006 (CITES, 2016), the worst that Africa has experienced since the 1970s and 1980s. Underlying conservation issues, particularly loss of habitat and increasing human elephant conflict, are still of critical significance but are receiving less attention because of the poaching crisis.

Systematic information on elephant poaching comes from the programme for Monitoring the Illegal Killing of Elephants (MIKE). This was established at the 10th Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Harare in 1997 and subsequently modified in accordance with the provisions in Resolution 10.10 (Rev. CoP16) on Trade in elephant specimens (CITES Secretariat, 2013). MIKE covers sites in 30 of the 37 African elephant range states, and 13 Asian elephant range states. In Africa, 60 MIKE sites together hold an estimated 30 to 40% of the African elephant population (CITES Secretariat, 2016). MIKE relies on ranger-based monitoring of elephant carcasses. When an elephant carcass is located, rangers record, if possible, the cause of death, allowing the calculation of the Proportion of Illegally Killed Elephants (PIKE). The dataset used for the 2016 analysis of MIKE data consisted of 14,606 records of elephant carcasses found in 54 MIKE sites in 29 African elephant range states from 2003 to 2015 (CITES Secretariat, 2016). PIKE levels above 0.5 (i.e. where half of dead elephants found are deemed to have been illegally killed) are considered to be unsustainable. Continental poaching levels have remained above this sustainability threshold since 2010 (Figure A). Further details are provided in the regional summaries.

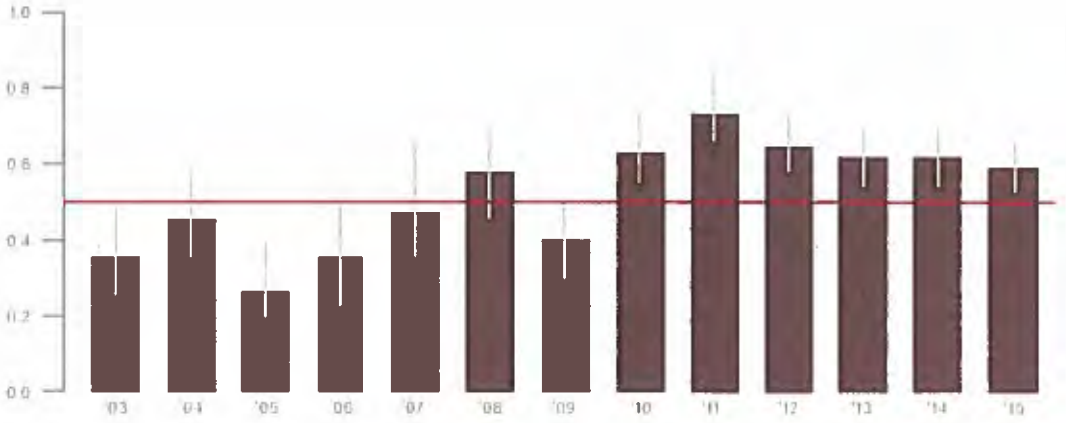


FIGURE A: *PIKE trends in Africa from 2003 - 2015 with 95% confidence intervals (CITES Secretariart, 2016)*

There has been much discussion as to whether one or two species of elephant should be recognized, with the forest elephant being acknowledged as a distinct species from the savanna elephant. The general opinion of taxonomists, particularly those with genetic expertise, is that two species should be recognized. However, this is complicated by lack of exact knowledge about where each species occurs and the presence of an unknown number of hybrid populations in areas around the fringe of the Congo Basin forests, including in Uganda (Mondol et al., 2015). Because of these uncertainties the African elephant is treated as a single species in this report. The use of the terms savanna and forest elephant is relevant at national and site level, and the terms are used in this report. Savanna elephants are found predominantly in Eastern and Southern Africa, while forest elephants occur primarily in the Congo Basin of Central Africa. In West Africa elephants live in both forest and savanna habitats; it is believed, however, that they are genetically forest elephants (Roca et al., 2015).

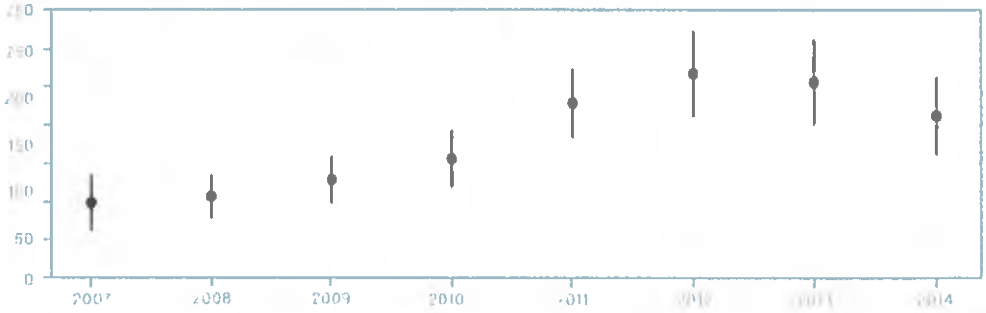


FIGURE B: *The overall trend of illegal ivory trade activity globally where all ivory types and weight classes are consolidated with mean (bold dot) and 90% confidence intervals, 2007-2014. (Milliken et al., 2016)*

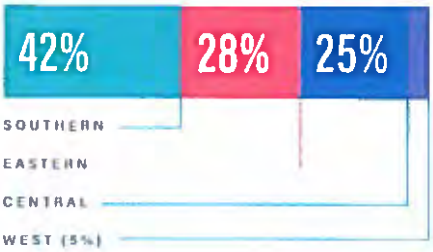
The African Elephant Action Plan (AEAP) was developed to respond to the needs of African elephant range states for the conservation and management of Africa's elephants. It was adopted in March 2010 at the 15th meeting of the Conference of the Parties to CITES (African elephant range states, 2010). The AEAP was developed over two years through a consultative process, facilitated by the IUCN SSC African Elephant Specialist Group and the CITES Secretariat, and is a consensus document fully owned and managed by the African elephant range states. It is intended to provide an overarching framework and a clear statement of shared objectives, to be achieved through activities implemented by the range states and their partners. The African Elephant Fund and the African Elephant Fund Steering Committee were established in accordance with CITES Decision 14.79 (Rev. CoP15) in 2010 to support and facilitate implementation of the action plan. As a follow

on to the AEAP development, national and regional level planning exercises are meant to highlight those actions urgently in need of funding if Africa's elephants are to be protected from the threats they face. The development of regional and national level plans, including those developed under the Elephant Protection Initiative, is described in the regional and national summaries.

All African elephant range states, except for South Sudan, are parties to CITES. Most range states have been parties to CITES for well over 20 years, except Angola, which joined the Convention in 2013. The elephant populations of four countries are in Appendix II of CITES: Botswana, Namibia, South Africa and Zimbabwe (CITES, 2015a). International trade in elephants and elephant specimens is allowed from these four countries under restricted conditions that differ slightly between the four countries, and there is currently a moratorium on international ivory sales until 2017. Elephant populations from the other range states are listed in Appendix I of CITES, and the trade in elephants and elephant specimens regulated accordingly.

In addition to the listing of the African elephant in the CITES Appendices, there is a CITES resolution governing trade in elephant specimens. Resolution Conf. 10.10 (Rev. CoP16) outlines a number of important provisions and regulations regarding trade in elephants and elephant specimens, as well as important reporting and monitoring responsibilities, such as the submission of data to the CITES monitoring systems MIKE and the Elephant Trade Information System (ETIS) (CITES Conference of the Parties, 2013b). CITES Decision 14.78 (Rev. CoP16) calls on the IUCN SSC's African and Asian Elephant Specialist Groups, MIKE, ETIS and the United Nations Environment Programme – World Conservation Monitoring Centre (UNEP-WCMC) to prepare a joint analysis on the conservation

FIGURE C. ELEPHANT RANGE PER REGION



Southern Africa has the largest extent of elephant range of any region, and accounts for 42% of the species' total range area. Eastern and Central Africa follow with 28% and 25% of the continental total respectively, while West Africa accounts for only 5%.

status and management of live elephants, illegal killing, ivory trafficking and trade. The CITES Standing Committee has recommended that this decision be enshrined in Resolution Conf. 10.10 (Rev CoP16) at the CoP17 in September 2016 (CITES, 2016).

ETIS measures and records the levels and trends of illegal trade in ivory and other elephant specimens. The most recent analysis, produced for the 66th meeting of the CITES Standing Committee, demonstrates a trend in illegal ivory trade activity (Figure B) that parallels the illegal killing of elephants reported by MIKE since 2008, with a possible leveling and even a decline in recent years (CITES Secretariat, 2016; Milliken et al., 2016).

Recent analyses of ivory seizure data prepared by ETIS for CITES have identified those countries of most concern in relation to the illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013;

2016). A number of countries were tasked by the CITES Standing Committee to prepare, implement and report on National Ivory Action Plans, a set of specific, time bound activities related to the control of poaching and the illegal ivory trade and compliance with Resolution Conf. 10.10 (Rev. CoP16). The CITES Secretariat has established a website devoted to tracking progress on National Ivory Action Plans, available at cites.org/niaps (CITES, n.d.-a).

TABLE 1: *Hunting quotas submitted to CITES (2007 – 2015), converted here to equivalent numbers of animals.*
** No quota reported, therefore a zero quota was automatically allocated*

EXPORT QUOTAS FOR ELEPHANT HUNTING TROPHIES

COUNTRY	2007	2008	2009	2010	2011	2012	2013	2014	2015
Botswana	300	330	400	400	400	400	400	400	0
Cameroon	80	80	80	80	80	80	80	80	0*
Gabon	50	50	0*	0*	0*	0*	0*	0*	0*
Mozambique	40	40	60	100	100	100	100	100	100
Nambia	90	90	90	90	90	90	90	90	90
South Africa	100	100	150	150	150	150	150	150	150
Tanzania	200	200	200	200	200	200	200	100	100
Zambia	20	20	20	20	80	80	0	0	80
Zimbabwe	500	500	500	500	500	500	500	500	500

TABLE 2. IVORY STOCKPILE DESTRUCTION

YEAR	COUNTRY	ESTIMATED WEIGHT (TONNES)	REFERENCE
2011	Kenya*	5.0	BBC News, 2011
2012	Gabon*	4.8	Jones, 2012
2013	Phillipines	4.2	Press, 2013
2013	USA	5.4	Goldenberg, 2013
2014	Belgium	1.7	Reuters, 2014
2014	Chad*	1.1	Godard, 2014
2014	China	6.2	Vaughan, 2014
2014	France	3.1	Willsher, 2014
2014	Hong Kong SAR	28.0	AFP, 2014
2015	Congo*	4.7	Smith, 2015
2015	China	0.7	Mathiesen, 2015
2015	Ethiopia*	6.1	BBC News, 2015b
2015	Kenya*	15.0	BBC News, 2015a
2015	Mozambique*	2.4	Vaughan, 2015
2015	Thailand	2.1	Reuters, 2015
2015	United Ared Emirates	10.0	Scanlon, 2015
2015	USA	1.2	Keim & Howard, 2015
2016	Malawi*	2.6	Reuters, 2016
2016	Sri Lanka	1.5	AFP, 2016
2016	Kenya*	105.0	CITES, 2016
Total		210.8	

Reported ivory stockpile destructions (2011 - August 2016.) ** African elephant range states*

CURRENT ISSUES
CONT.

Since 2007, there have been a number of destructions of ivory stockpiles, either by burning or crushing (Table 2). Three additional countries were known to have carried out stock destructions, Japan (2.8 tonnes in 2008) and unknown amounts in India and Portugal in 2014.

The nine range states listed above have submitted elephant hunting trophy quotas to CITES and these are shown below as the equivalent number of animals taken on quota derived from tusks and other trophies. In 2015 the United States imposed a suspension on permits for the import of African elephant trophies from Zimbabwe and Tanzania (USFWS, 2015a, 2015b) and the European Union imposed a suspension on the permits for the import of African elephant trophies from Mozambique (EU, 2015).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Africa is 415,428 ± 20,111 at the time of the last survey for each area. There may be an additional 117,127 to 135,384 elephants in areas not systematically surveyed. Together, this estimate and guess apply to 1,932,732 km^2, which is 62% of the estimated known and possible elephant range, an increase from 51% in the previous report. There remains an additional 38% of range for which no elephant population estimates are available, although it is likely that average elephant densities are much lower than in the surveyed areas. The overall reliability of estimates has increased considerably, with estimates from systematic surveys now accounting for 37% of total range, versus 29% in the previous report. The overall quality of information, as measured by the Information Quality Index (IQI), has not changed.

This report presents more than 275 new or updated estimates for elephant populations across Africa, with over 180 of these arising from systematic surveys. All aerial survey data from the Great Elephant Census, a Paul G. Allen project, and data from dung counts in Central Africa carried out primarily by the Wildlife Conservation Society (WCS) and World Wide Fund for Nature (WWF) were submitted through the AED for inclusion in this report.

Holding over 70% of the estimated elephants in Africa (56% of estimated and guessed elephants), Southern Africa has by far the largest number of elephants in any of the four regions. Botswana continues to have the largest national population. Eastern Africa comes second, with 20% of estimated elephants (18% of estimated and guessed elephants), while Central Africa is an even more distant third (6%) for estimated elephants. There is a high proportion of guesses for Central Africa, giving a total of 23% of estimated and guessed elephants. This is because most Central African surveys are dung counts, and many of these are recorded as guesses, since dung decay studies have not been done on site. West Africa continues to hold the smallest regional population with under 3% of both categories.

Between the AESR 2007 and this report, there has been a reduction of 118,000 in estimates for populations across Africa where comparable surveys have been carried out. However some populations have been surveyed for the first time, particularly in Central Africa, and this has led to an increase of approximately 18,000 in the 'new population' category. The result is that the current total estimated number of elephants from surveys has decreased by a smaller figure of about 93,000 since the AESR 2007. Continued uncertainties about the number of elephants in Botswana have

a substantial potential impact on the continental population, because Botswana holds the single largest population but national estimates since 2006 have differed greatly, by as much as 80,000 elephants. In order to better understand the current status of this critically important population, which extends into neighbouring countries, a well-coordinated survey of the entire cross-border population of Angola, Botswana, Namibia, Zambia and Zimbabwe remains a very high priority.

The estimated number of elephants from surveys and guesses has decreased since the AESR 2007 by 104,000 to 114,000.

Elephants are found in 37 range states in sub-Saharan Africa. There has been one change since the AESR 2007, as South Sudan became independent from Sudan and all of former Sudan's confirmed elephant populations occurred in the south. It is still possible that small numbers of elephants either visit seasonally or reside in Dinder National Park in Sudan (Mohammad, pers. comm., 2016). There have been no national level extinctions since the AESR 2007, although the populations in Guinea Bissau and Senegal are so small that they are in imminent danger of extinction. It was widely reported in 2009 that elephants had gone extinct in Sierra Leone as a result of a single poaching incident (AFP, 2009) but this was not correct and there are still at least four small populations surviving in the country.

The distribution of elephants varies considerably across the four regions from small, fragmented populations in West Africa to large, virtually undisturbed tracts of elephant range in Central and Southern Africa, with a mixture in Eastern Africa. Detailed knowledge of the status of elephant distribution is scanty in many parts of the continent, particularly in Central Africa and in countries that are emerging from armed conflict, such as Angola, Sudan and Sierra Leone.

The total area of known and possible elephant range at the continental level is currently estimated at slightly over 3.1 million km^2. This is hardly changed since the previous report. This is because most of the changes since the AESR 2007 were minor modifications rather than large scale changes. Improved knowledge of elephant distribution is reflected by the proportion of range categorized as known, which has increased from 63% to 67%. Significant range expansion has occurred in Botswana and Kenya.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	58,005	—	—	—	6 %	198,431
Ground Total Counts	133	—	—	—	0 %	136
Individual Registrations	1,695	—	—	—	0 %	3,576
Aerial Sample Counts	330,748	19,902	—	—	27 %	847,236
Ground Sample Counts	893	507	—	—	0 %	990
Reliable Dung Counts	20,555	2,854	—	—	3 %	96,670
Other Dung Counts	1	—	37,837	46,507	3 %	88,271
Informed Guesses	3,398	—	19,274	26,926	8 %	245,870
Other Guesses	—	—	10,145	12,080	7 %	218,187
Degraded Data	—	—	17,494	17,494	2 %	69,735
Modeled Extrapolation	—	—	32,378	32,378	5 %	163,629
Totals 2015	**415,428**	**20,111**	**117,127**	**135,384**		
Totals 2006	**508,325**	**36,563**	**138,651**	**146,700**		
Assessed Range					62 %	1,932,732
Unassessed Range					38 %	1,199,506
Total Range					100 %	3,132,238

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	-118,477	±40,682	-8,691	-2,896	23 %	714,065
New Population	+17,992	±6,858	+13,975	+15,235	11 %	335,754
Different Technique	+11,369	±5,180	-22,998	-26,192	5 %	145,318
Different Area	+4,165	±3,449	-16,248	-14,565	5 %	170,682
New Guess	-4,482	±333	+12,958	+19,389	15 %	483,766
Population Lost	-129	±167	938	-1,138	0 %	837
Data Degraded	-3,335	±642	+3,335	+1,708	0 %	0
No Change	0	±76	0	0	3 %	82,310
Totals	-92,897	±41,729	-18,667	-8,459	62 %	1,932,732

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	197,060	5,083	202,143
Direct Sample and Reliable Dung	841,678	103,218	944,896
Informed Guesses	230,720	178,779	409,499
Other Dung Counts	84,265	4,007	88,271
Other Guesses	229,086	54,266	283,353
Unassessed Range	515,413	682,070	1,198,197
Totals	2,098,222	1,027,424	3,126,359

REGIONAL ELEPHANT ESTIMATES

REGION	# OF ELEPHANTS		GUESSES		RANGE		
	ESTIMATE	± 95% CL	MIN	MAX	AREA (km²)	% REGIONAL	% ASSESSED
Central Africa	24,119	2,865	87,190	103,355	783,085	25 %	70 %
Eastern Africa	86,373	10,549	11,973	12,060	880,648	28 %	62 %
Southern Africa	293,447	16,683	15,157	16,672	1,325,998	42 %	55 %
West Africa	11,489	2,584	2,887	3,377	142,500	5 %	72 %
Total	415,428	20,112	117,128	135,385	3,132,238	100 %	62 %

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area, DD: Data Degraded; DT: Different Technique, NA: New Analysis, NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— : No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst)

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Africa

0 500 1500 2000 2500 km

Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

ABBREVIATIONS AND ACRONYMS

AfESG

Central

REGION

Central Africa

ESTIMATED TOTAL ELEPHANTS

24,119 ± 2,865

GUESSES

87,190 - 103,355

GENERAL STATISTICS

Region Area	5,365,550 km²
Range Area	783,085 km² (15%)
Protected Range	30 %
Information Quality Index (IQI)	0.13

CURRENT ISSUES

Central Africa's elephants have been substantially affected by ivory poaching over the past ten years (CITES, 2016; Maisels, Strindberg et al., 2013b; UNEP et al., 2013; Wittemyer et al., 2014). Evidence from the systematic carcass reports sent to MIKE shows that significant Central African poaching was already occurring in 2003, long before it became unsustainable in Eastern Africa (CITES Secretariat, 2016). Because elephant distribution and abundance in Central Africa is driven primarily by poaching and not by habitat availability, elephant strong-holds are the areas with least human impact. They are generally areas with effective anti-poaching protection and are also usually remote from roads, settlements, navigable rivers, or even hunting trails (Blake et al., 2008; Laurance et al., 2006; Maisels, Strindberg et al., 2013b; Yackulic et al., 2011). New development corridors being created throughout the region are likely to have a negative impact on elephant populations (Laurance et al., 2015). Political insecurity and lack of government control over remote areas continues to have a negative impact on elephant conservation, particularly in the Central African Republic and the Democratic Republic of Congo (DRC).

Central Africa has 16 MIKE sites. Two sites, Monte Alén National Park in Equatorial Guinea and Kahuzi-Biega National Park in DRC, have not submitted any carcass data since the MIKE programme began in 2002. While reporting rates vary, the remaining 14 sites submitted carcass data between 2007 and 2015, though eight of these sites did not submit any carcass data in 2015. Estimated PIKE levels in 2015 sustained the pattern of being above the 0.5 level in Central Africa (Figure 1, on the following page) (CITES Secretariat, 2016).

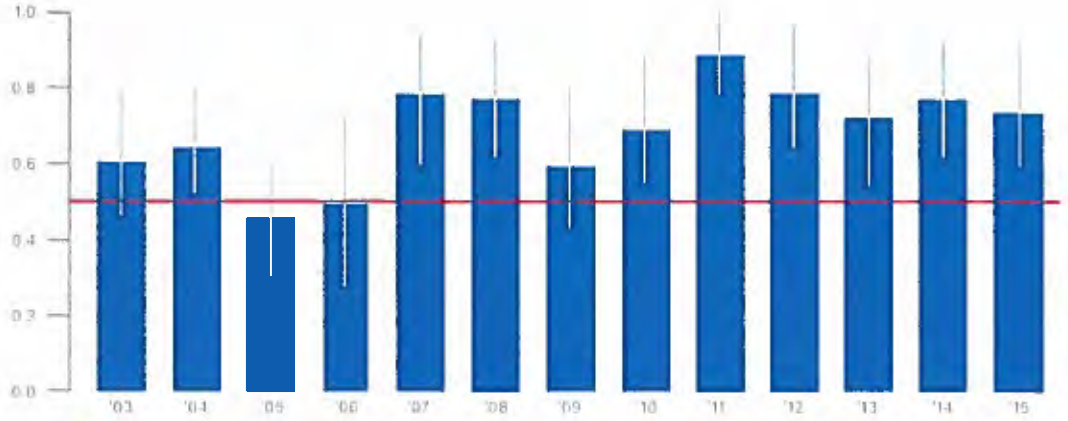


FIGURE 1: *Central African PIKE trends with 95% confidence intervals (CITES Secretariart, 2016)*

The Strategy for the Conservation of Elephants in Central Africa 2005-2015 was adopted by all Central African range states in 2005 (African Elephant Specialist Group, 2005a). The volume of seized ivory and illegal killings have greatly increased over the ten-year period in contrast to the 80% decrease projected (CITES, 2016). As a result, in 2013, the seven Central African range states adopted a Plan of Extreme Urgency to Combat Poaching (PEXULAB) (ECCAS, 2013)

In recent analyses of seizure data in ETIS, prepared for the CITES Standing Committee and Conference of the Parties, a number of countries within Central Africa were identified as having a worrying involvement in illegal ivory trade. Cameroon, Congo, DRC and Gabon have been requested to prepare and implement National Ivory Action Plans (CITES Secretariat, 2012; Milliken et al., 2013).

ETIS measures and records the levels and trends of illegal trade in ivory and other elephant specimens. The most recent analysis, produced for the 66th meeting of the CITES Standing Committee, demonstrates a trend in illegal ivory trade activity (Figure 8) that parallels the illegal killing of elephants reported by MIKE since 2008, with a possible leveling and even a decline in recent years (CITES Secretariat, 2016, Milliken et al., 2016).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Central Africa is 24,119 ± 2,865 at the time of the last survey for each area. There may be an additional 87,190 to 103,355 elephants in areas not systematically surveyed. Together, this estimate and guess apply to 546,471 km², which is 70% of the estimated known and possible elephant range. There remains an additional 30% of range for which no elephant population estimates are available.

The number of elephants estimated from systematic surveys in Central Africa increased by about 10,000 between the AESR 2007 and the present. However, this was largely a consequence of new populations being surveyed. In a number of cases, the first survey for an area took place after the publication of the AESR 2007 and a subsequent survey showed a decline – which does not show up in the comparisons between the present report and the AESR 2007. The number of elephants recorded as guesses declined between 14,000 and 26,000. Models for the entire region derived from the surveyed populations indicated that Central African elephants declined by over 60% between 2002 and 2011 (Maisels, Strindberg et al., 2013b) and the decline continued at least to 2014 at a rate of about 9% per year (Maisels, Strindberg et al., 2014b).

The proportion of elephant range for which elephant estimates are available currently stands at 70%, an increase from 52% in the previous report. The overall quality of information, as measured by the IQI, has decreased from 0.22 to 0.13.

Historically, elephants were distributed fairly evenly throughout the forests of the region but they are now concentrated in the small country of Gabon, which contains 12% of the total African tropical moist forest area (Verhegghen et al., 2012), and roughly half of Africa's forest elephants. By contrast, the DRC contains 60% of the region's forest and less than 10% of its forest elephants.

A number of Central African countries have experienced dramatic losses in some of their elephant populations in the last ten years. These include the loss of between 16,000 and 20,000 forest elephants, representing 60 to 80% of the population, in Minkébé National Park in Gabon (ANPN, 2013), the loss of approximately 3,000 elephants, representing 50% of the population, in the Ndoki landscape in Congo (Maisels et al., 2012), the loss of several thousand elephants in the Cameroon section of the TRIDOM and the loss of more than 50% from a number of smaller populations in Cameroon and the DRC.

There has been a major decline in elephant numbers in Chad, with the major population in Zakouma National Park declining by an order of magnitude between 2005 and 2011, although it has since stabilized. The savanna populations of the Central African Republic have almost completely disappeared, with the only remaining populations occurring in the forested south-west.

Eighty percent of elephant range in Gabon has not been surveyed in the past five years, and some of it has never been surveyed, but there are plans to rectify this in 2017-2018. The main elephant populations of Cameroon were surveyed between 2014 and 2016. In Congo, the Ndoki Likouala area has not been surveyed since 2010-2011 (surveys are ongoing in 2016) and Odzala National Park has not been surveyed since 2012. In DRC, two important populations, Salonga National Park and adjacent areas and the Okapi Faunal Reserve, have not been completely surveyed since 2004 and 2011, respectively, although about 40% of Salonga NP was resurveyed in late 2015.

Populations recorded as having been lost in the last ten years include those of the Siniaka-Minia FR in Chad and Bushimae in the DRC. However, since populations in the extensive Central African forests are much less clearly defined than in other parts of Africa, loss of numbers and range is more likely to be recorded than the loss of discrete populations.

Substantial changes have been made to the range maps, but these are mostly the result of improved information, rather than real changes in range, except in the case of the Central African Republic, where almost all of the range in the north and east of the country has been lost. There has been a decrease of recorded range from about 975,000 km^2 to about 780,000 km^2 with known range decreasing from 82% to 58%.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	2,707	—	—	—	2 %	13,838
Aerial Sample Counts	192	314	—	—	5 %	37,793
Reliable Dung Counts	19,531	2,848	—	—	12 %	91,312
Other Dung Counts	1	—	37,677	46,223	11 %	86,378
Informed Guesses	1,688	—	6,901	13,790	9 %	74,143
Other Guesses	—	—	3,325	4,055	5 %	42,291
Degraded Data	—	—	6,910	6,910	5 %	37,086
Modeled Extrapolation	—	—	32,378	32,378	21 %	163,629
Totals 2015	**24,119**	**2,865**	**87,190**	**103,355**		
Totals 2006	**14,622**	**4,259**	**113,540**	**117,881**		
Assessed Range					70 %	546,471
Unassessed Range					30 %	236,615
Total Range					100 %	783,085

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	-1,296	±2,395	-8,130	-2,185	5 %	36,337
New Population	+6,349	±1,182	+12,871	+14,113	16 %	123,521
Different Technique	+2,342	±4,250	-15,157	-16,632	7 %	53,577
Different Area	+558	±1,077	-15,412	-13,842	8 %	64,559
New Guess	+1,544	0	+2,942	+8,084	28 %	223,348
Population Lost	0	0	-620	-720	0 %	837
Data Degraded	0	0	0	-500	0 %	0
No Change	0	0	0	0	6 %	44,292
Totals	+9,497	±5,134	-23,506	-11,682	70 %	546,471

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	13,781	58	13,838
Direct Sample and Reliable Dung	101,390	27,715	129,105
Informed Guesses	82,322	155,451	237,772
Other Dung Counts	82,430	3,948	86,378
Other Guesses	67,697	11,680	79,377
Unassessed Range	105,833	130,781	236,615
Totals	453,452	329,633	783,085

ELEPHANT ESTIMATES

COUNTRY	# OF ELEPHANTS		GUESSES		RANGE			PFS	IQI
	ESTIMATE	95% CI	MIN	MAX	AREA (km²)	% REGIONAL	% ASSESSED		
Cameroon	6,830	944	1,985	2,134	89,718	11 %	68 %	2	0.47
Central African Republic	702	245	699	826	24,619	3 %	89 %	2	0.35
Chad	794	0	273	353	61,490	8 %	46 %	2	0.32
Congo	6,057	1,222	20,924	26,942	150,937	19 %	57 %	1	0.1
Democratic Republic of Congo	1,794	53	7,803	9,557	223,248	29 %	51 %	1	0.08
Equatorial Guinea	884	676	0	0	19,701	3 %	100 %	2	0.57
Gabon	7,058	2,303	59,057	67,094	213,373	27 %	101 %	1	0.09
Totals	24,119	2,865	87,191	103,356	783,085	100 %	70 %	1	0.13

RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (HS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— No Change

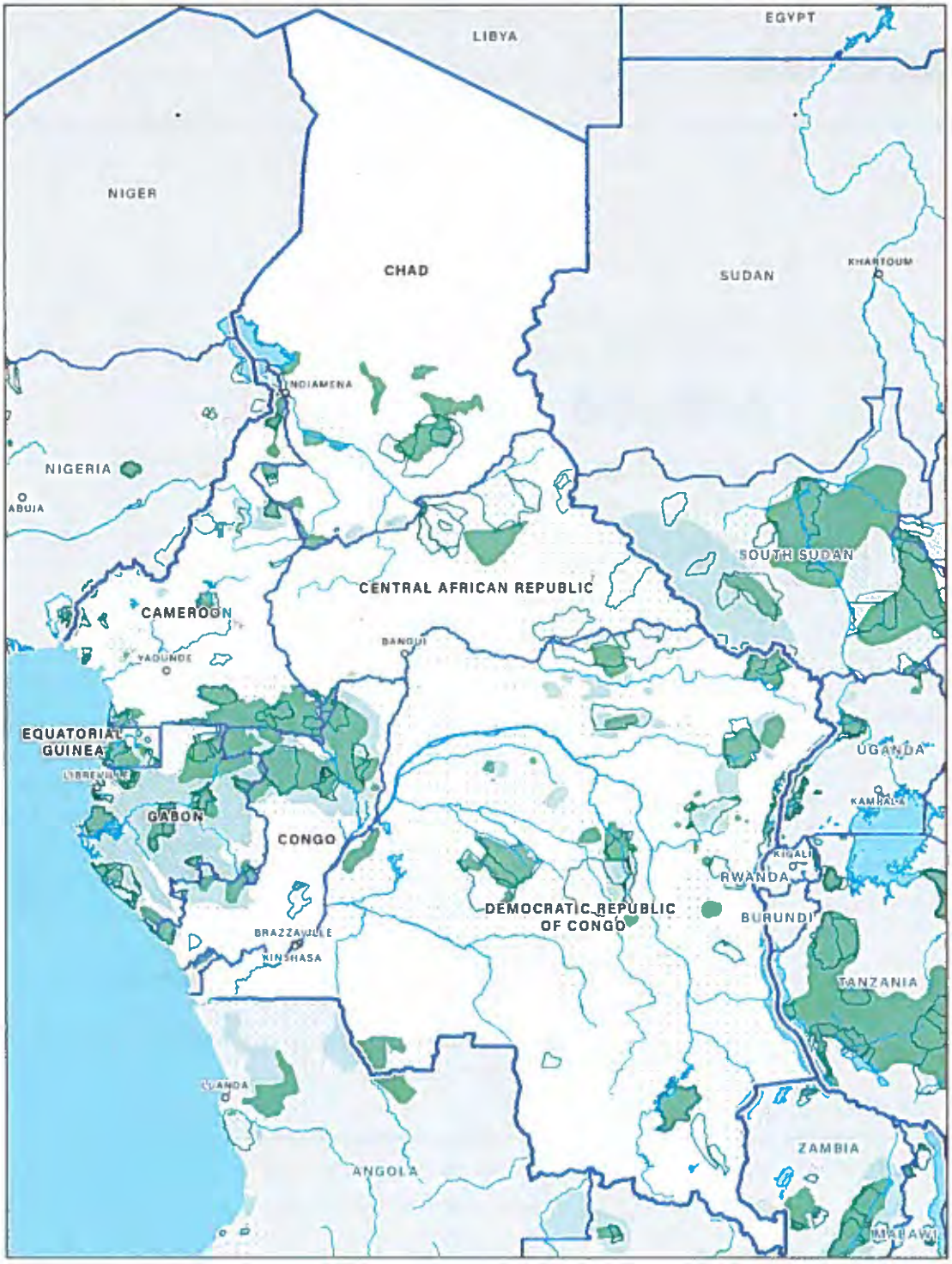
KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A–E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Central Africa



0 190 380 570 760 950 1140km

ABBREVIATIONS AND ACRONYMS

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

Cameroon

ESTIMATED TOTAL ELEPHANTS

6,830 ± 943

GUESSES

1,985 - 2,134

GENERAL STATISTICS

Country Area	475,440 km²
Range Area	89,718 km² (19%)
Protected Range	27 %
Information Quality Index (IQI)	0.47
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Elephants in Cameroon occur in three distinct bio-geographical regions. Savanna elephants are found in the northern Sahelian and Sudanian regions, while forest elephants occur in the southern forested area (Roca et al., 2015; Tchamba et al., 1997). Northern Cameroon used to hold some of the most important elephant populations in the Central African savanna. However, heavy poaching was reported in 2012 and it appears that the majority of these elephants have been lost.

A new protected area, the Mt Cameroon National Park, was declared in 2009.

In 2010 Cameroon adopted a new Strategy and Management Plan for Elephants covering the period 2011 to 2020 (Ministère des Forêts et de la Faune, 2010).

In recent analyses of seizure data in ETIS, prepared for CITES, Cameroon has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). Cameroon was requested by the CITES Standing Committee, at its 65th meeting, to prepare a National Ivory Action Plan, which it did in February 2015 (CITES, n.d.-a).

Cameroon declared an export quota of 160 tusks (as hunting trophies from 80 animals) for each year from 2007 to 2014. In 2015 and 2016, Cameroon did not submit a quota for elephant hunting trophies, resulting in an assumed zero quota (CITES, n.d.-b).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Cameroon is 6,830 ± 943 at the time of the last survey for each area. There may be an additional 1,985 to 2,134 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 61,186 km^2, which is 68% of the estimated known and possible elephant range. There remains an additional 32% of the estimated range for which no elephant population estimates are available.

A number of elephant populations have been surveyed using dung counts of a higher standard than before, which has resulted in an increase of about 6,500 in the estimated number of elephants since the AESR 2007, but a decline of more than 12,000 in the guesses category.

An **aerial total count** of Waza National Park in the north of Cameroon was carried out in 2007 (Foguekem et al., 2010) and 246 elephants were counted inside the park, with another 250 seen during the course of a reconnaissance flight further north in the Zgague area (Omondi et al., 2007). This replaces an informed guess of 475 to 1,500 elephants from a ground survey in 2002 (Saleh et al., 2002). Anti-poaching patrols stopped in 2014 because of the presence of the Boko Haram insurgents but were restarted in 2016; there is no information on the current status of elephants (Bechem, pers. comm., 2016).

In 2015 an **aerial sample count** of the Sudanian area, including the national parks of Bénoué, Bouba Ndjidah and Faro and the surrounding hunting blocks, was carried out as part of the Great Elephant Census, giving an estimate of 89 ± 288 (Elkan et al., 2016). In Bouba Ndjidah NP four live elephants were seen outside the counting strips; none were seen in Bénoué NP or Faro NP and 98 elephants were counted in the hunting blocks. By contrast 253 carcasses were seen. The range map has been modified using the results from this survey. These figures replace an estimate of 1,620 from 1991 (Direction de la Faune et des Parcs Nationaux, 1991). In addition an aerial total count was carried out in 2008 (Omondi et al., 2008) with 535 elephants reported in Bouba Ndjidah NP and the hunting areas, with none seen in the other two national parks. In early 2012 it was reported that 250-300 elephants had been killed by poachers in Bouba Ndjidah NP and it appears that there has been a substantial reduction in elephant numbers in this region (Elkan et al., 2016).

Mbam et Djerem National Park, in the savanna-forest ecotone in the centre of the country, is Cameroon's second largest protected area. The first **dung count** of Mbam et Djerem in 2009 produced an estimate of 901 (593-1369) elephants, which has been treated as an **informed guess** because of the lack of an on-site dung decay study (Maisels et al., 2009). A reconnaissance survey in 2014 confirmed the continued presence of elephants (Maisels, 2014).

Deng Deng National Park and the nearby logging concession were surveyed in 2012 (Maisels et al., 2013a). Only one dung pile and a few footprints and feeding signs were observed, so an **informed guess** of one elephant has been recorded. It is entered as a **new population**.

An old guess of 60 elephants in the vicinity of the town of Yoko to the south-west of Mbam-Djerem has been replaced with an **informed guess** of zero elephants (Maisels, 2014). There is an even older guess of 100 elephants in the Abong-Mbang Forest Reserve to the south of Mbam-Djerem (Ekobo, pers comm., 1994), but two surveys north and west of this reserve in 2001 (Fotso et al.,

2002) recorded no elephant signs, so a zero estimate has been entered.

There are several small elephant populations in the south-west of Cameroon, close to the Nigerian border. These include Mt Cameroon, for which an **informed guess** of 118 from 2013 (The Ministry of Forestry and Wildlife, 2014) replaces a 2003 estimate of 178 elephants (Ekobo, 2003).

A 2002 guess of 63 from the Yabassi area (the proposed Ebo National Park) has been updated to 5-30 (Morgan, pers. comm., 2016) and the area of **known range** reduced. There was an old estimate of 425 for Korup National Park on the Nigerian border from 1993 (Powell, pers. comm., 1993) but a survey in 2009 showed few signs, all concentrated in a very small area in the north of the park and to the south in an adjacent logging concession (Ekobo, 2009). A new **guess** of 10-20 for 2011 based on modelling has been entered (Maisels, Strindberg, et al., 2013b).

A **dung count** was carried out in the Banyang-Mbo Wildlife Sanctuary in 2007, resulting in an **informed guess** of 153 to 256 elephants (Greengrass & Maisels, 2007), which replaces an older estimate of 457 elephants in 2011 (Bechem & Nchanji, 2001). Elephants were still present in the north of the sanctuary in late 2015 (Greengrass, pers. comm., 2016).

There are some areas in the south-west which were marked as 'possible range' in 2007. A reconnaissance survey carried out in 2013 in the Takamanda National Park found some signs and gave an **informed guess** of 20 elephants (Ikfuingei & Kuchambi, 2013) so this has been changed to **known range**. These elephants are believed to cross into Cross River NP in Nigeria (Ikfuingei & Kuchambi, 2013).

A **dung count** was conducted in 2014 in the Campo-Ma'an area, giving an estimate of 539 (215-446) (WWF Cameroon, 2016a), of which just over half were estimated to be in the Campo-Ma'an National Park. This replaces estimates of 548 ± 255 from 2003, for a smaller area covering part of the park (Bekhuis & Prins, 2003), and 4-14 for the remaining Ma'an Region (Matthews & Matthews, 2000).

The largest remaining elephant populations are in the forested region in south-eastern Cameroon and these are described in the following section.

A **dung count** of Dja Faunal Reserve was carried out in 2015 (MINFOF/UICN, 2015) giving an estimate of 420 (313-563) elephants, compared to a guess of 1,500-2,000 in 1995 (Tchamba, pers. comm., 1995).

The Ngoyla-Mintom Forest, an area of logging concessions between Dja FR and Nki National Park, was surveyed in 2011 for the first time with an estimate of 1,735 (1,431-2,103) (Nzooh Dongmo et al., 2012). Another survey in 2015 gave an estimate of 395 (243-642) and four neighbouring logging concessions were also surveyed, resulting in two additional estimates of 82 (47-143) and 22 (8-56) (WWF Cameroon, 2016b). This total estimate of 499 is recorded as a **new population**.

Nki NP was surveyed in 2015 by **dung count** (WWF Cameroon, 2016b) giving an estimate of 565 (355-898), which replaces an earlier estimate of 2,178 from 1998 (Ekobo, pers. comm., 1998). A 2005 estimate of 2,577 was not captured in the AESR 2007 (Nzooh Dongmo et al., 2006).

NUMBERS AND DISTRIBUTION CONT.

A **dung count** was carried out in Boumba-Bek National Park in 2015 (WWF Cameroon, 2016b) giving an estimate of 143 (85-242) elephants. This replaces a guess of 318 from 2004 (Blake, 2005). Another dung count in 2012 gave an estimate of 2,062 (1,545-2,752) (Maisels et al., 2014a).

There was an estimate of 185 ± 86 for the forest concessions north of Nki in 2015 (these areas had not been previously surveyed) and 547 ± 242 for Mongokele Forest Reserve (WWF Cameroon, 2016c), which replaces an estimate of 773 from 1991 (Ekobo, 1993).

A guess of 1,354 for the Mengame Wildlife Sanctuary (to the west of Ngoyla-Mintom Forest) from 2003 (Halford et al., 2003) has been replaced by a **guess** of 10 (Maisels, Strindberg et al., 2013b).

Lobéké National Park is surrounded by logging and hunting concessions. Together they form the Cameroonian part of the 'Trinational de la Sangha' transfrontier protected area. A **dung count** of this area was carried out in 2015 (WWF Cameroon, 2016d). For Lobéké NP the estimate of 1,029 (670-1582) replaces one of 3,719 ± 2125 from 1993 (Ekobo, 2003). Another dung count in 2009 gave an estimate of 1,426 (Blake et al., 2012). There was also an estimate of 2,737 ± 603 for the previously unsurveyed areas around Lobéké NP (WWF Cameroon, 2016).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	246	–	–	–	2 %	2,007
Aerial Sample Counts	89	288	–	–	18 %	16,385
Reliable Dung Counts	6,244	899	–	–	32 %	29,028
Other Dung Counts	1	–	1,831	1,935	10 %	8,854
Informed Guesses	250	–	134	169	3 %	2,589
Other Guesses	–	–	20	30	3 %	2,322
Degraded Data	–	–	0	0	0 %	0
Totals 2015	**6,830**	**943**	**1,985**	**2,134**		
Totals 2006	**179**	**0**	**13,887**	**15,207**		
Assessed Range					68 %	61,186
Unassessed Range					32 %	28,532
Total Range					100 %	89,718

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+1	0	-357	-253	0 %	331
New Population	+3,671	±644	+912	+922	22 %	19,516
Different Technique	+2,444	±678	-9,988	-11,013	36 %	32,527
Different Area	+535	±132	-548	-558	5 %	4,516
New Guess	0	0	-2,037	-2,287	5 %	4,295
Totals	+6,651	±944	-12,018	-13,189	68 %	61,186

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	1,950	58	2,007
Direct Sample or Reliable Dung	32,646	12,767	45,413
Informed Guesses	985	1,604	2,589
Other Dung Counts	8,447	407	8,854
Other Guesses	1,190	1,133	2,322
Unassessed Range	19,843	8,689	28,532
Totals	65,060	24,658	89,718

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Abong-Mbang Forest Reserve	NG	O	E	2001	0		Fotso et al., 2002	2	1,597	13.1°E	4.2°N
Banyang-Mbo Wildlife Sanctuary	RS	DC	C	2007	153	52	Greengrass & Maisels, 2007	2	667	9.7°E	5.3°N
Campo Ma'an Landscape	DA	DC	B	2014	539	132	WWF Cameroon, 2016a	2	4,608	10.3°E	2.5°N
Deng Deng National Park and its Environs	NP	DC	D	2012	1		Maisels et al., 2013a	2	884	13.6°E	5.2°N
Korup National Park	NG	O	E	2011	10	10*	Maisels, Strindberg et al., 2013b	2	1,259	9.0°E	5.3°N
Mbam et Djerem National Park	NP	DC	C	2009	901	388	Maisels et al., 2009	2	1,433	12.7°E	5.8°N
Mengame Wildlife Sanctuary and Kom National Park	NG	O	E	2011	10		Maisels, Strindberg et al., 2013b	2		12.2°E	2.3°N
Mt. Cameroon National Park	NG	O	D	2013	118		Ministry of Forestry & Wildlife, 2014	2	676	9.2°E	4.2°N
South-eastern forests											
Boumba-Bek National Park	DT	DC	B	2015	143	78	WWF Cameroon, 2016c	2	2,499	14.5°E	2.6°N
Dja Faunal Reserve	DT	DC	C	2015	420	125	MINFOF/UICN, 2015	1	5,260	13.0°E	3.1°N
Lobéké National Park	DT	DC	B	2015	1,029	456	WWF Cameroon, 2016d	2	2,173	15.7°E	2.4°N
Lobéké Surrounding Area	NP	DC	B	2015	2,737	603	WWF Cameroon, 2016d	1	6,006	15.7°E	2.4°N
Logging Concessions 10-021, 022, 023, 029, and 030	NP	DC	B	2015	185	86	WWF Cameroon, 2016c	2	3,678	14.5°E	2.6°N
Mongokele Forest Reserve	DT	DC	B	2015	547	242	WWF Cameroon, 2016b	2	1,159	15.7°E	2.4°N
Ngoyla-Mintom Forest	NP	DC	B	2015	499	207	WWF Cameroon, 2016c	1	9,242	14.5°E	2.6°N
Nki National Park	DT	DC	B	2015	565	322	WWF Cameroon, 2016c	2	3,094	14.5°E	2.6°N
Sudanian											
Bénoué National Park	DT	AS	B	2015	0		Elkan et al., 2016	2	2,444	13.8°E	8.3°N
Bouba Ndjidah National Park	DT	AS	B	2015	0		Elkan et al., 2016	2	2,347	13.8°E	8.3°N
Faro National Park	DT	AS	B	2015	0		Elkan et al., 2016	2	4,087	13.8°E	8.3°N
Sudanian Area Hunting Blocks	DT	AS	B	2015	89	288	Elkan et al., 2016	1	11,720	13.8°E	8.3°N
Takamanda National Park	NP	O	D	2013	10	10*	Ikfungei & Kuchamla, 2013	2	633	9.3°E	6.2°N
Waza											
Waza National Park	DT	AT	A	2007	246		Foguekem et al., 2010	2	1,970	14.7°E	11.2°N
Zgague Area	NP	O	D	2007	250		Omondi et al., 2007	5	10	14.8°E	11.8°N
Yabassi Area	NG	O	D	2012	5	25*	Morgan, pers. comm. 2016	2		10.3°E	4.5°N
Yoko Area	NG	O	D	2011	0		Maisels, 2014	4	25	12.4°E	5.6°N

Cameroon

0 60 120 180 240 300 360km

ABBREVIATIONS AND ACRONYMS

AfESG

Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Central African Republic

ESTIMATED TOTAL ELEPHANTS

702 ± 245

GUESSES

699 - 826

GENERAL STATISTICS

Country Area	622 980 km²
Range Area	24 619 km² (4%)
Protected Range	21 %
Information Quality Index (IQI)	0.35
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Elephant populations in the Central African Republic (CAR) occur in the savannas of the north and in forest areas, particularly in the south-west. Elephants, along with many other wildlife species, have almost disappeared from the north of the country, despite a very low human population. The main reasons are thought to be the increase in cattle transhumance, civil disorder, the increase in weapons and commercial poachers from other countries. Protected areas have been ineffective, since elephant densities were lower there than in nearby hunting areas (Bouché et al., 2010).

Conservation efforts have been hampered by a lack of stability. The country was plunged into turmoil in 2013 when the Seleka rebel group seized power and was then countered by the Anti-Balakas. A transitional government took over in 2014 but violence continued despite the presence of peace-keeping forces.

The African Parks Network began working in Chinko in 2015 and was given a mandate to manage the area for 50 years by the Ministry of Forestry, the Environment and Tourism (Walley, 2014).

CAR published an elephant conservation action plan in 1992, although this is now out of date (Ministère des Eaux, des Forets, 1992).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Central African Republic is 702 ± 245 at the time of the last survey for each area. There may be an additional 699 to 826 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 21,812 km², which is 89% of the estimated known and possible elephant range. There remains an additional 11% of the estimated range for which no elephant population estimates are available.

There has been a reduction in both estimates and guesses since the AESR 2007, but the differences in the estimates from the main population in the south-western forest block are not significant.

The northern savanna elephant population occurs in an area that includes the Bamingui-Bangoran National Park and Manovo Gounda-St. Floris National Park. A 2010 **aerial sample count** (Bouché et al., 2011) gave an estimate of 68 ± 113 elephants for the northern savanna landscape. This replaces an estimate of 929 ± 950 elephants from an aerial sample count of a smaller area in 2005 (Renaud et al., 2005). The carcass ratio was 30% in 2005 and 53% in 2010, indicating a very high level of poaching (Bouché, 2010).

There is very little recent information on the status of elephants in the Bangassou Forest in the south-east region of the country. The last estimate was of 500-1,000 elephants in 2004 (Blake, 2005) and a guess of 500 has been retained from the AESR 2007, although it is very unlikely that this number of elephants still survives in the area. During a reconnaissance survey in 2009, Luhunu and Bechem (Luhunu & Bechem, 2009) only found signs of elephants in an area to the west of Bangassou, which had not been surveyed in 2004, and none in Bangassou Forest itself. The range has been changed to **doubtful** with a point record in the western area.

In the AESR 2007, the area to the north of Bangassou Forest was classified as doubtful range. However, African Parks Network staff report that there are at least 50, and perhaps as many as 150 elephants (believed to be forest elephants) in the Chinko area, just over 30 kilometres to the north of Bangassou Forest (Aebischer, pers. comm., 2016) so this is recorded as a **new population** with a small amount of **known range**.

The Dzanga Sangha landscape in the extreme south-west is the only remaining elephant stronghold in the country, and is contiguous with the Nouabalé-Ndoki landscape in Congo. Elephants in Dzanga-Sangha are part of a single population that extends across the border with Congo into the Nouabalé-Ndoki National Park, as shown by satellite collaring of elephants in the area and by individual recognition of 68 individual elephants moving between the two countries (Blake et al., 2008). A **dung count** carried out in 2011-12 gave an estimate of 631 ± 218 individuals (Princée, 2013) (excluding Yobe-Lidjombe, which has been treated separately for comparative purposes). In the same year 1,150 individuals were individually identified in Dzanga Bai, suggesting that this may have been an underestimate (Princée, 2013). The 2011-12 estimate replaces one of 869 ± 214 from a 2003 to 2004 dung count (Blake, 2005) indicating that no significant change took place over this time. The 2011-12 guess for the reconnaissance survey of Yobe-Lidjombe was 152-179. This area was not covered in the 2003-2004 survey so is recorded as a **new population**. The widely reported killing of at least 26 elephants in May 2013 at Dzanga Bai post-dates the 2011 survey, but

the prompt response to this incident probably limited the impact on the overall population (Canby, 2015).

The south of N'gotto Classified Forest still held elephants in 2000 (Dethier & Ghiurghi, 2000), but in a 2002 survey by Hicks, no elephant dung was found in over 150 kilometres walked (Maisels, Strindberg et al., 2013b) indicating that elephants may have been eliminated in the area or were only seasonally present (Brugière et al., 2005). This has been changed to **possible range**.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Sample Counts	68	113	–	–	69 %	17,034
Reliable Dung Counts	631	218	–	–	15 %	3,606
Informed Guesses	3	–	199	326	5 %	1,172
Degraded Data	–	–	500	500	0 %	0
Totals 2015	**702**	**245**	**699**	**826**		
Totals 2006	**929**	**820**	**1,585**	**2,085**		
Assessed Range					89 %	21,812
Unassessed Range					11 %	2,807
Total Range					100 %	24,619

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Population	+3	0	+47	-147	2 %	416
Different Technique	+631	±218	-869	-869	15 %	3,606
Different Area	-861	±828	0	0	69 %	17,034
New Guess	0	0	+152	+179	3 %	756
Data Degraded	0	0	0	-500	0 %	0
Totals	-227	±856	-670	-1,043	89 %	21,812

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	20,640	0	20,640
Informed Guesses	1,172	0	1,172
Unassessed Range	872	1,935	2,807
Totals	22,684	1,935	24,619

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Bangassou Forest Reserve	-	O	E	2004	500	500*	Blake, 2005	1	12,011	23.3°E	5.2°N
Chinko Drainage Basin	NP	O	D	2015	50	100*	Aebischer, pers. comm., 2016	1	19,000	23.9°E	6.5°N
Dzangha Ndoki National Park and Special Reserve	DT	DC	B	2012	631	218	Princée, 2013	1	3,861	16.2°E	2.8°N
Northern Landscape	DA	AS	B	2010	68	113	Bouché, 2011	1 2	94,962	20.8°E	8.2°N
Yobe-Lidjombe	NG	O	D	2012	152	27*	Princée, 2013		756	16.3°E	2.7°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— : No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst)

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Central African Republic

COUNTRY

Chad

ESTIMATED TOTAL ELEPHANTS

794 ± 0

GUESSES

273 - 353

GENERAL STATISTICS

Country Area	1,284,000 km²
Range Area	61,490 km² (5%)
Protected Range	23 %
Information Quality Index (IQI)	0.32
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

The northern part of Chad is desert, and elephants are confined to the south, particularly in the Sudanian zone in the far south. Conservation efforts have been affected by a difficult security situation, including coup attempts in 2006 and 2008, and the presence of Boko Haram in the west of the country. Substantial areas of elephant range are being lost due to exp-anded settlement and conversion of rangeland to agriculture. However, there are also some areas of increased elephant range, apparently a result of elephants moving to safer areas from Cameroon and Central African Republic (Antonínová et al., 2015).

Zakouma National Park, which holds Chad's largest elephant population, lost over 3,000 to poaching between 2005 and 2010; the reproductive rate appeared to reduce substantially and the elephants aggregated into a single herd. In 2010 the government of Chad signed a long-term private public partnership agreement with the African Parks Foundation (APF) for the management of Zakouma NP and its periphery. Law enforcement has improved, poaching has reduced and the reproductive rate has increased (Antonínová et al., 2015).

A National Elephant Action Plan has been written and covers the period 2016-2025 (Antonínová et al., 2015). The National Elephant Protection Centre (NEPC) was established in 2013 with a control room and database on elephant issues. Two toll-free telephone numbers enable people to report information about elephants.

CURRENT ISSUES
CONT.

In 2008 Chad introduced the first legislation governing forests, wildlife and fishery resources since independence in 1960. This legislation provides for the creation of Community Wildlife Areas and co-management of natural resources.

Chad is a major ivory transit area, with ivory from within the country and from other countries in the region being smuggled mainly via Sudan, Cameroon and Nigeria (UNEP et al., 2013).

In February 2014, Chad destroyed 1.1 tonnes of stock-piled ivory (Godard, 2014b).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Chad is 794 at the time of the last survey for each area. There may be an additional 273 to 353 elephants in areas not systematically surveyed. These guesses probably represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 28,561 km², which is 46% of the estimated known and possible elephant range. There remains an additional 54% of the estimated range for which no elephant population estimates are available.

Both estimates and guesses have declined substantially since the AESR 2007. The range map has been substantially modified following data collection for the National Elephant Action Plan, with major changes including the reduction of known range to the west of Zakouma NP and around Lake Fitri.

Zakouma NP holds the largest remaining elephant population in Chad, although the numbers have declined by an order of magnitude in the last ten years due to poaching, which was heaviest between 2005 and 2009 (Poilecot, 2010), the situation has more or less stabilised since 2010. An **aerial total count** was conducted in 2014 as part of the Great Elephant Census which gave a count of 443 elephants (Antonínová et al., 2014a) replacing one of 3,885 from 2005 (Fay et al., 2005). A sample count in 2008 gave an estimate of 2,285 carcasses and 939 live elephants. Total counts in 2009, 2010, 2011 and 2012 showed a small decline in live elephant estimates from 617 to 542 to 454 to 444 (Antonínová et al., 2014a). Carcass ratios decreased from 71% in 2008 to 19% in 2014, indicating a reduction in poaching pressure. There has been a steady reduction in poaching events; from 125 elephants killed in 2008, to 41 in 2009, 32 in 2010, 7 in 2011, 7 in 2012, 0 in 2013 and 0 in 2014 (Antonínová et al., 2014a).

Approximately 500-600 elephants were believed to occur in the Siniaka-Minia Faunal Reserve to the west of Zakouma NP (Malachie & Lassou, 2002) but they are no longer resident in the area, and survivors may have moved into Zakouma NP during the period of intense poaching. This has therefore been recorded as a **lost population**.

The Heban-Mourraye area to the north-east of Zakouma NP has a small population of elephants that may overlap with the Zakouma NP population during the rainy season. After nine elephants were killed in 2012, there were six individuals remaining (Antonínová et al., 2014a). There was no previous estimate for this area and it is thus recorded as a **new population**.

During an aerial survey carried out in the Birket Fatime-Eref area north of Zakouma in 2013, a herd of seven individuals was observed, but there may be up to 25 individuals in three herds (Antonínová et al., 2015). There was no previous estimate for this area so it is recorded as a **new population**.

Seventy three elephants were observed in the Lake Fitri area north-west of Zakouma NP in 2014 (Antonínová et al., 2015). This **informed guess** replaces a guess of 200-300 from 2002 (Malachie & Lassou, 2002).

There are two elephant populations in the vicinity of Lake Chad. There are thought to be 60 in the Doum Doum area at the south end of the lake (Antonínová et al., 2015). This **guess** replaces one of 50-100 for the Koloudia-Doum-Doum area from 2002 (Malachie & Lassou, 2002). The second population lives further north near Baga Sola town and six elephants were seen in 2013, but there may be up to 20 (Antonínová et al., 2015). This has been recorded as a **new population**.

An **aerial total count** was conducted in the Chari Baguirimi and Mayo Kebbi Est regions in 2014 as part of the Great Elephant Census, during which 168 elephants were observed (Antonínová et al., 2014c). This elephant population was heavily affected by poaching in 2012 when about 65 elephants were killed (Antonínová et al., 2014c). This area has a high human population and there is much human-elephant conflict. There was no previous estimate so it is recorded as a **new population** and the range changed from doubtful to **known range**. There was guess of 150-200 in the AESR 2007 for the nearby Massenya-Mandjafa area (Malachie & Lassou, 2002), which is not currently considered to be elephant range.

Elephants were not known to inhabit the Binder Léré ecosystem, which includes the Binder Léré Faunal Reserve, prior to 2007. In 2010, 236 elephants were seen in this area during the course of a ground survey, and it is thought that they had moved in from Waza National Park in Cameroon. About 90 elephants were killed in a single poaching incident in January 2013. During an **aerial total count** conducted in 2014 as part of the Great Elephant Census 132 elephants were observed (Antonínová et al., 2014b). This is recorded as a **new population**.

There are a further two small elephant populations on the Cameroon border, adjoining Bouba Ndjidah NP in Cameroon, which has been heavily impacted by poaching. One is in the Gagal-Yapala-Beinamar area where there may be up to 50 elephants, but only 18 have been confirmed (Antonínová et al., 2015). This **guess** replaces one of 400-500 for the Gagal-Yapala area from 2002 (Malachie & Lassou, 2002). There also may be 50 elephants in the Larmanaye area further south (Antonínová et al., 2015). This **guess** replaces one of 100-150 from 2002 (Malachie & Lassou, 2002).

There are believed to be four elephant populations living close to the southern border of Chad with Central African Republic (CAR). According to local communities, elephants started to return to Chad from CAR in the past few years, probably as a result of a safer environment on the Chadian side of the border, but it is not clear if these are resident populations. There are **guesses** of 30 elephants, with 14 confirmed, in the Mbaibokoum-Mbitoye-Bekan area, 50 in Baké - Yamodo - Goré , and perhaps 20 each in the Ngourou - Gondei (Aouk) area and the Dembo-Djéké Djéké- Sido area (Antonínová et al., 2015). The AESR 2007 gave one guess of 600-700 elephants for the Dembo area, so the other areas are recorded as **new populations** for this report.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	743	—	—	—	13 %	8,092
Informed Guesses	51	—	133	213	24 %	14,984
Other Guesses	—	—	140	140	9 %	5,485
Totals 2015	**794**	**0**	**273**	**353**		
Totals 2006	**3,885**	**0**	**2,000**	**2,550**		
Assessed Range					46 %	28,561
Unassessed Range					54 %	32,929
Total Range					100 %	61,490

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	-3,442	0	0	0	5 %	3,153
New Population	+165	0	+70	+118	20 %	12,033
New Guess	+186	0	-1,297	-1,715	20 %	12,539
Population Lost	0	0	-500	-600	1 %	837
Totals	-3,091	0	-1,727	-2,197	46 %	28,561

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	8,092	0	8,092
Informed Guesses	14,984	0	14,984
Other Guesses	4,711	774	5,485
Unassessed Range	25,591	7,337	32,929
Totals	53,378	8,112	61,490

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Baké - Yamodo - Goré Area	NP	O	E	2015	50		Antonínová et al., 2015	1	3,500	16.0°E	7.7°N
Binder Léré Wildlife Reserve Ecosystem	NP	AT	A	2014	132		Antonínová et al., 2016b	2	1,840	14.5°E	9.7°N
Birket Fatime - Eref Area	NP	O	D	2013	7	18*	Antonínová et al., 2015	2	1,884	19.0°E	12.6°N
Chari Baguirmi-Mayo Kebbi Est	NG	AT	A	2014	168		Antonínová et al., 2014c	2	3,312	16.2°E	10.7°N
Dembo - Djéké Djéké - Sido Area	NG	O	E	2015	20		Antonínová et al., 2015	1	2,409	18.0°E	8.2°N
Gagal - Yapala - Beinamar Area	NG	O	D	2015	18	32*	Antonínová et al., 2015	2	4,640	15.4°E	8.9°N
Heban-Mourraye area	NP	O	D	2013	6		Antonínová et al., 2014a	2	4,591	20.6°E	11.8°N
Lake Chad - Baga Sola Area	NP	O	D	2015	6	14*	Antonínová et al., 2015	2	963	14.2°E	13.6°N
Lake Chad - Doum Doum Area	NG	O	D	2015	60		Antonínová et al., 2015	1	2,363	15.2°E	13.0°N
Lake Fitri Area	NG	O	D	2015	73		Antonínová et al., 2015	1	4,167	17.7°E	12.3°N
Larmanaye	NG	O	E	2015	50		Antonínová et al., 2015	1	2,180	15.5°E	8.1°N
Mbaibokoum-Mbitoye-Bekan Area	NP	O	D	2015	14	16*	Antonínová et al., 2015	1	3,872	16.0°E	7.7°N
Ngourou - Gondei (Aouk) Area	NP	O	E	2015	20		Antonínová et al., 2015	2	300	14.3°E	9.7°N
Siniaka-Minia Faunal Reserve	PL	O	D	2015	0		Antonínová et al., 2015	1	4,740	18.2°E	10.4°N
Zakouma National Park	RS	AT	A	2014	443		Antonínová et al., 2014a	2	3,201	19.7°E	10.8°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA Different Area, DD Data Degraded, DT Different Technique, NA New Analysis, NG New Guess, NP New population, PL Population Lost, RS Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).

— No Change

KEY TO SURVEY REPORT

AS Aerial Sample Count, AT Aerial Total Count, DC Dung Count, GD Genetic Dung Count, GS Ground Sample Count, GT Ground Total Count, IG Informed Guess, IR Individual Registration, OG Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Chad

0 80 160 240 320 400 480km

ABBREVIATIONS AND ACRONYMS

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

Congo

ESTIMATED TOTAL ELEPHANTS

6,057 ± 1,222

GUESSES

20,924 - 26,942

GENERAL STATISTICS

Country Area	342,000 km²
Range Area	150,937 km² (44%)
Protected Range	21 %
Information Quality Index (IQI)	0.10
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Congo probably still holds Central Africa's second largest number of forest elephants, although they are increasingly threatened by poaching and human encroachment. Almost all of Congo's elephants occur in forest areas in the north of the country, with smaller numbers on the Atlantic coast, and along the Gabonese border to the west. Elephants have been almost totally eliminated from the savanna-forest mosaic of the rest of the country.

The construction and upgrading of access roads for national transport and logging purposes, particularly the surfacing of the road linking Ouesso and Brazzaville in 2013, which runs through core elephant range, is likely to have a negative impact on elephant populations. This is because forest elephants, which tend to avoid roads, get compressed into smaller and smaller tracts of relatively remote forests (Blake et al., 2001, 2007, 2008). Some logging concessions have received Forest Stewardship Council (FSC) certification for adopting conservation-friendly measures (Morgan et al., 2013) and in contrast to other parts of Central Africa, some of these forest concessions in Congo hold significant numbers of elephants.

The government of Congo signed co-management agreements with the Wildlife Conservation Society for Nouabalé-Ndoki National Park in 2014 (WCS, 2014) and with African Parks Network for Odzala-Kokoua National Park in 2010 (African Parks, n.d.-a).

In recent analyses of seizure data in ETIS, prepared for CITES, the Republic of Congo has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). The Republic of Congo was requested by the CITES Standing Committee,

at its 65th meeting, to prepare a National Ivory Action Plan. Congo submitted its National Ivory Action Plan to CITES in 2015, which is now in the process of being implemented (CITES, n.d.-a). In April 2015, Congo destroyed its entire national ivory stockpile of 4.7 tonnes (Smith, 2015).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Congo is 6,057 ± 1,222 at the time of the last survey for each area. There may be an additional 20,924 to 26,942 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 85,698 km², which is 57% of the estimated known and possible elephant range. There remains an additional 43% of the estimated range for which no elephant population estimates are available.

Since the AESR 2007 there has been a substantial apparent increase in both estimates and guesses. However, this is largely as a result of many new areas having been surveyed.

A **dung count** of Nouabalé Ndoki NP was conducted in 2011 giving an estimate of 2,324 ± 544 (Maisels et al., 2012) and this replaces the estimate of 3,032 ± 755 from 2003 (Blake, 2005). The 2003 survey only covered the park and a small buffer zone to the east, while the 2011 survey included a far larger area of neighbouring logging concessions; the estimate for the entire area was 8,792 (6,651-11,622) (Maisels et al., 2012). A previous survey in 2006 was not included in the AESR 2007, but provided an estimate of 11,076 elephants (8,223-14,920) for the larger area (Stokes et al., 2010).

The estimate of 380 (239-602) (Blake, 2005) from 2003 for the Mokabi logging concession to the north of Nouabalé Ndoki NP has been retained but degraded due to age. A 2006 estimate published in 2010 indicated only 59 elephants, but this data could not be included in this report because of its late receipt.

The Bailly Swamp North and Nouabalé Ndoki peripheral zones are recorded as **new populations** with estimates of 827 ± 656, and 5,345 ± 2,133 respectively from the 2011 count (Maisels et al., 2012). The range map has been modified, with a new area of **known range** to the south-west and south-east of Lac Télé, and some areas of **possible range** in the east.

The 2011 survey gave an estimate of 296 (92-948) for the Lac Télé Community Reserve (Maisels et al., 2012) which replaces an estimate of 316 from 2004 (Iyenguet et al., 2007).

A **dung count** conducted in the Batanga area just to the east of Lac Télé Community Reserve in 2012 (Iyenguet et al., 2012) gave an estimate of 104 (32-338) compared to an earlier estimate of 73 elephants (20-268) (Malanda et al., 2008). In the AESR 2007 this area was recorded as **possible range** and is now **known range**. There was no estimate for this area in the AESR 2007 so this is recorded as a **new population**.

A **dung count** of Odzala-Kokoua NP conducted in 2012 gave an estimate of 9,292 (7,468 - 12,357) (Maisels et al., 2013b) of which approximately 65% were in the southern sector. This replaces a 2005 estimate of 13,545 ± 3,252 (Hart, 2006a). However a reanalysis of the 2005 results gave an

estimate of 7,460 (5,738-9,705) and there was no significant change between 2005 and 2012. The area of **known range** to the south of Odzala has been reduced (Maisels, pers. comm., 2016a).

Elephants also occur in the Ngombe Forestry Concession and the Ntokou-Pikounda National Park to the east of Odzala-Kokoua, which were first surveyed in 2007. Based on a **dung count** which was carried out in the Ngombe landscape in 2014 (Maisels et al., 2014b), the elephant population is estimated at 4,143 (2,994-5,731). In 2007 the estimate was 4,992 (3,192-7,802) (Maisels et al., 2014). This has been recorded as a **new population** and the area of **known range** extended accordingly.

On the basis of a **dung count** from 2006 (Bassouama et al., 2006), which was not recorded in the AESR 2007, it has been suggested (Maisels, pers. comm., 2016d) that there might be approximately 490 elephants in the Lossi-Kelle area to the south-west of Odzala-Kokoua NP and this is also recorded as a **new population**.

A **dung count** was carried out in 2013 in the Messok-Dja area to the north of Odzala-Kokoua NP which gave an estimate of 346 (202-604) (Mantsila et al., 2013) as a **new population**. Most elephant signs were observed in the extreme north-east of the area. Part of this area has been changed from known to **possible range**.

The first **dung count** of Djoua-Ivindo area was carried out in 2015, and gave an estimate of 1,311 (778-2209) elephants (Allam et al., 2016). This is recorded as a **new population** and the range changed from mostly doubtful to **known**.

There is also a population of elephants on the Batéké Plateau in the area straddling the Congo-Gabon border, referred to as Ogooue-Leketi. Transect surveys in 2010 gave an estimate of 200 (116-345) (Maisels, pers. comm., 2016b), while individual observations in clearings suggest that there are least 285 elephants (Inkamba-Nkulu et al., 2015). There is a **guess** of 36 elephants from 2012 from the neighbouring MPD iron mine concession area. Neither of these areas had estimates in the AESR 2007 so are entered as **new populations**.

There are new **guesses** for populations in the south-west close to the Gabon border which had not previously been included in the AED. These include Mayoko for which there is a **guess** of 340 from 2005 based on a reconnaissance survey (Inkamba-Nkulu, 2007), and the Mount Fouari complex for which there is a **guess** of 200 from 2005 (Maisels, pers. comm., 2016c).

A **dung count** was carried out in Conkouati-Douli National Park in 2013 giving an estimate of 947 ± 180 (Vanleeuwe, 2014), which replaces an estimate of 772 ± 370 from 2005 (Vanleeuwe, 2006).

An area that was formerly recorded as possible range to the south-east of Conkouati, adjoining the Cabinda enclave in DRC has been changed to **non-range** since it is mostly savanna and has been heavily affected by hunting (Maisels, pers. comm., 2016d).

While much of the southern part of Congo consists of savanna, there are gallery forests along the watercourses in the Lefini Forest Reserve north of Brazzaville, and it is known that there are at least six elephants in this area (Inkamba-Nkulu & Tsoumou, 2008). This has been changed from doubtful range to **known range**.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Reliable Dung Counts	6,051	1,222	–	–	20 %	30,660
Other Dung Counts	0	–	19,478	25,496	29 %	43,944
Informed Guesses	6	–	526	526	4 %	6,506
Degraded Data	–	–	920	920	3 %	4,588
Totals 2015	**6,057**	**1,222**	**20,924**	**26,942**		
Totals 2006	**772**	**370**	**20,237**	**20,237**		
Assessed Range					57 %	85,698
Unassessed Range					43 %	65,239
Total Range					100 %	150,937

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+471	±594	-7,578	-1,560	16 %	23,811
New Population	+2,490	±991	+10,858	+10,858	37 %	55,803
Different Technique	+2,324	±544	-2,652	-2,652	3 %	4,118
Data Degraded	0	0	0	0	0 %	0
Totals	+5,285	±1,277	+628	+6,646	56 %	85,698

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	26,853	3,807	30,660
Informed Guesses	5,059	1,447	6,506
Other Dung Counts	40,773	3,171	43,944
Other Guesses	1,488	3,099	4,588
Unassessed Range	14,552	50,687	65,239
Totals	88,726	62,211	150,937

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Conkouati-Douli National Park	RS	DC	B	2013	947	180	Vanleeuwe, 2014	2	3,850	11.5°E	3.9°S
Lefini	NP	O	D	2007	6		Inkamba-Nkulu & Tsoumou, 2008	3	445	15.4°E	2.5°S
Mayoko	NP	O	E	2005	340		Inkamba-Nkulu, 2007	2	2,290	12.6°E	2.3°S
Mount Fouari/ Mavoumbou/ Nyanga complex	NP	DC	E	2005	200		Maisels, pers. comm., 2016c	2	1,017	11.9°E	2.8°S
MPD area	NP	DC	D	2012	36		Maisels, pers. comm., 2016b	2	1,139	13.6°E	2.6°S
Ndoki-Likouala Landscape											
Bailly Swamps North	NP	DC	B	2011	827	656	Maisels et al., 2012	2	4,210	16.8°E	1.8°N
Batanga	NP	DC	C	2012	104	153	Iyenguet et al. 2012	3	1,029	17.4°E	0.8°N
Lac Télé Community Reserve	RS	DC	B	2011	296	428	Maisels et al., 2012	2	6,054	16.8°E	1.8°N
Mokabi Logging Concession	-	DC	E	2003	380	182	Blake, 2005	2	2,669	16.7°E	2.7°N
Nouabalé Ndoki National Park	DT	DC	B	2011	2,324	544	Maisels et al., 2012	2	3,962	16.8°E	1.8°N
Nouabale Ndoki Peripheral Zone	NP	DC	C	2011	5,345	2,133	Maisels et al., 2012	1	13,016	16.8°E	1.8°N
North-west											
Djoua-Ivindo	NP	DC	B	2015	1,311	716	Allam et al., 2016	1	11,415	13.8°E	1.7°N
Lossi-Kelle	NP	O	D	2006	490		Bassoualma et al., 2006	1	5,051	14.2°E	0.2°N
Messok-Dja Forest Area	NP	DC	B	2013	346	202	Mantsila et al., 2013	2	1,457	14.5°E	2.0°N
Ngombe-Pikounda-Ntokou area	NP	DC	C	2014	4,143	1,459	Maisels et al., 2014b	1	16,186	15.9°E	0.9°N
Odzala Kokoua National Park	RS	DC	C	2012	9,292	2,206	Maisels et al., 2013	1	13,525	15.0°E	0.9°N
Ogooue-Leketi	NP	DC	C	2009	200	114	Maisels, pers. comm., 2016b	2	1,025	13.8°E	2.4°S

RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

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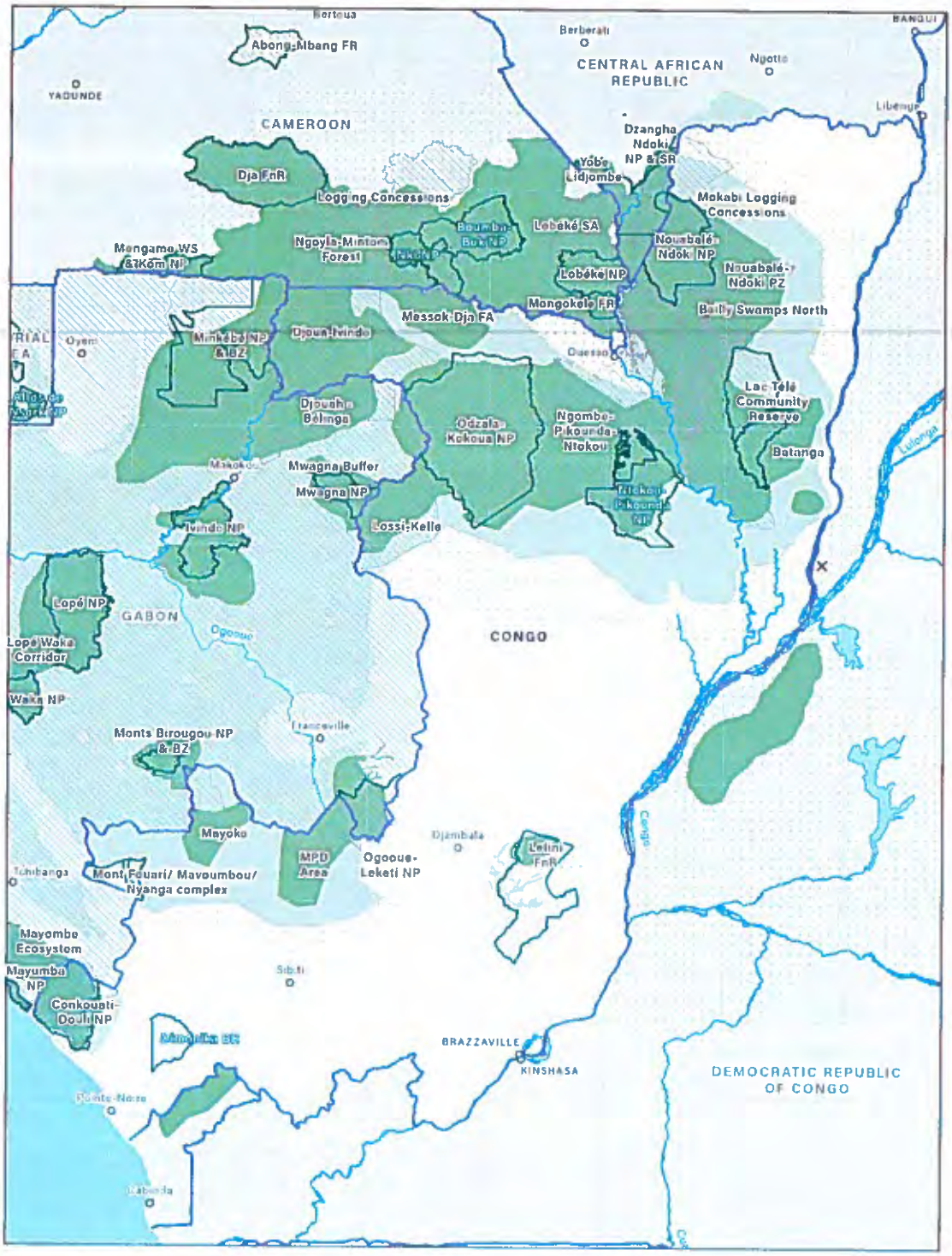
Congo



ABBREVIATIONS AND ACRONYMS

AfESG

COUNTRY

Democratic Republic of Congo

ESTIMATED TOTAL ELEPHANTS

1,794 ± 52

QUESSES

7,803 - 9,557

GENERAL STATISTICS

Country Area	2,345,410 km²
Range Area	223,248 km² (10%)
Protected Range	54 %
Information Quality Index (IQI)	0.08
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

The Democratic Republic of Congo (DRC) has the largest expanse of tropical forest of all the Central African countries, comprising around 61% of the total (Verhegghen et al., 2012). A civil war from 1996 to 2003 resulted in high levels of poaching as militias, refugees and military personnel occupied protected areas, and the Institut Congolais pour la Conservation de la Nature (ICCN) was forced to cease normal operations, in some cases abandoning entire protected areas, while many staff members were killed. Elephant meat and ivory was used to provision and fund insurgents and the military (Beyers et al., 2011). Even after the end of the civil war, there have been continuing impacts from the displacement of human populations, ready availability of weapons, the activities of remaining rebel groups and rogue elements of the army, as well as growing threats such as new road developments, growing human populations and immigration (Beyers et al., 2011, Nackoney et al., 2014). The consequence of this is that elephant populations, even in major protected areas, have been reduced to extremely low densities, and substantial areas of range appear to have been lost. Despite this, the only population recorded as having been completely lost is that of the Bushimae Reserve and Hunting Area, and there have probably not been elephants there for many years.

Most elephants in DRC are believed to be forest elephants. There are known to be forest-savanna hybrids in Garamba National Park and at other sites at the northern and eastern limits of the forest zone (Mondol et al., 2015; Roca et al., 2015).

There are a number of collaborative management partnerships in place. African Parks Network (African Parks, n.d.-b) has been managing Garamba NP since 2005, in 2015 WWF received a

CURRENT ISSUES
CONT.

3-year management agreement for Salonga National Park and the Virunga Foundation signed an agreement to manage Virunga National Park until 2021 ("Virunga National Park - Who we are," n.d.).

DRC published an elephant conservation plan in 1991, although this is now out of date (Institut Zairois pour la Conservation de la Nature, 1991).

In recent analyses of seizure data in ETIS, prepared for CITES, DRC has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). DRC was requested by the CITES Standing Committee, at its 65th meeting, to prepare a National Ivory Action Plan. This was submitted in April 2015 and progress on this plan was reported on in September 2015 (CITES, n.d.-a) Although none of the 27 planned activities had been completed, 15 of them were considered to be in progress.

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in DRC is 1,794 ± 52 at the time of the last survey for each area. There may be an additional 7,803 to 9,557 elephants in areas not systematically surveyed. These guesses probably represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 114,733 km^2, which is 51% of the estimated known and possible range. There remains an additional 49 % of the estimated range for which no population estimates are available.

There has been an approximately 70% reduction in elephant estimates for DRC since the AESR 2007 and a 50% reduction in the guesses.

The elephant population in Garamba NP in the north-east of the country has continued to decline in the last ten years as a result of intense poaching pressure from different groups, including the Lord's Resistance Army, which raided the park headquarters in 2009 (Agger & Hutson, 2013). An **aerial total count** in 2014 gave an estimate of 1,718 elephants from the total count in the southern portion of the park plus 206 from an **aerial sample count** in the northern part of the park and the neighbouring hunting areas (Mónico, 2014). This replaces the 2004 estimate of 6,354 ± 4,081 from an aerial sample count (Hillman Smith et al., 2006) and a guess of 1,000 to 1,450 for the neigbouring Gangala-na-Bodio hunting area. Aerial total counts were also carried out in 2007 and in April and May of 2012, giving estimates of 3,696, 1,847 and 1,708 respectively (Bolaños, 2012). The northern part of Garamba NP was shown as **non-range** in the AESR 2007, but radio-tracking data shows that elephants use the entire park (Mararv, pers. comm., 2016).

Large areas to the west of Garamba are now settled by people, and residents reported that elephants have not occurred here for decades (Hart, 2014) so these areas are shown as **non-range**.

The eastern savanna sector of the Bili-Uere complex has been overrun by hundreds of Fulani pastoralists with their cattle, and by 2010 most of the elephants in this area were gone; it has been changed to **doubtful range** (Hart, 2014). A 2011 **dung count** of the Bili Gangu sector gave an estimate of 365–799 elephants (Hart, 2014), which is recorded as a **new population** since it had not previously been surveyed.

South of Bili-Gangu, elephant range in north-central DRC is now limited to five areas of **possible range** where elephant signs or information on their presence was recorded between 2006 and 2009 (C.T. Hicks, unpublished data, in Hart, 2014).

Between five and 25 elephants may remain in the central Rubi Tele Hunting Zone, based on reconnaissance surveys in 2007 and 2011 (Hart, 2014). Previously this was recorded as possible range with no estimate, so this is recorded as a **new population**.

A survey of the western part of the Lomako Faunal Reserve on the south bank of the Congo River in 2014 indicated that there were still small numbers of elephants present, with an estimate of 105 to 185 (Maputla, 2015) so this is recorded as a **new population** and an area of **known range** added to the map. An additional two small areas south of Lomako had elephant signs (Maputla, 2015). The Okapi Faunal Reserve in the north-east of DRC used to form part of a continuous elephant population including Maiko National Park, although numbers and range have been greatly reduced in this area. The presence of illegal miners and militias severely affected the conservation status of the reserve, but the situation has improved since 2012 (Okapi Conservation Project, 2014). A **dung count** was carried out from December 2010 to January 2011 (Vosper et al., 2012), which gave an estimate of 1,701 (1,031-2,831). This replaces an estimate of 2,688 ± 1,348 from 2006 (Grossman et al., 2006). The 2006 survey covered less than half the area of the 2011 study. However, almost the whole area was surveyed in 2007 giving an estimate of 2,698 (1892-3836) elephants (Vosper et al., 2012). Just to the east of the Okapi is an area known as Mai Tatu. Surveys in 2008 and 2015 here show elephants are still present but very rare.

A guess of 3,000 elephants for Maiko National Park from 2006 (Hart, 2006a) has been replaced by a **guess** of 100-750 (Nixon & Plumptre, pers. comm., 2016). Most of the Park has been reclassified from known to **possible range** apart from some small areas on the periphery, where elephant presence was confirmed during surveys and patrols between 2013 and 2015 (Plumptre et al., 2015).

Virunga National Park has elephants both in savanna and forest areas (Owiunji et al., 2004; Wanyama et al., 2014a). The park has come under sustained assault from poachers and displaced people seeking sanctuary over many years of civil unrest (Virunga National Park, 2016). An **aerial sample count** of the Virunga National Park savanna sector in 2014 gave an estimate of 35 ± 60 (Wanyama et al., 2014b), which replaces an estimate of 348 ± 177 from 2006 (Kujirakwinja et al., 2006). Elephants move back and forth across the border into Queen Elizabeth National Park in Uganda (Douglas-Hamilton, pers. comm., 2016) so changes in numbers may reflect movements as much as mortality. Older guesses for the forest populations of Virunga NP have been retained – 75 for the southern section (Mubalama, pers. comm., 2003) and 43 for the Mikeno section (Gray, pers. comm., 2005).

There is a new **guess** of 20 elephants for the upland section of Kahuzi-Biega National Park (Plumptre, pers. comm., 2010), which replaces one of 20 to 50 from 2005 (Hart, 2006b). Also, there is a new **guess** of 50 to 100 for the lowland section (Plumptre, pers. comm., 2010) which is recorded as a **new population**, although in 2002 there was an estimate of 1,125, which was not recorded in the AESR 2007 (Hart, pers. comm., 2003).

The western section of the Sankuru Natural Reserve was surveyed in 2008, and it seems that no elephants remain at this site (Liengola et al., 2009).

A major, previously undocumented population of elephants was discovered in the centre of the country in the newly-designated Lomami National Park and its surrounding area, the Tshuapa Lomami landscape. A **dung count** carried out in 2008 gave an estimate for the core zone of 551 elephants (353-860) with an additional estimate of 265 elephants (120–700) in the adjoining peripheral zone (Hart, pers. comm., 2016), resulting in an **informed guess** of 500-1000 from the survey author (Hart, 2009). Subsequently, a 2012 dung count of the core zone gave an estimate of 462 elephants (261-813) (Hart, pers. comm., 2016). In late 2014, patrols reported small numbers of elephants (estimated at 10-15 animals) in the south of the park in an area that had not been occupied by elephants since 2007 (Hart, pers. comm., 2016). There was no previous estimate for the Tshuapa Lomami landscape, which is treated as a **new population** although it was recognized as known range in the AESR 2007.

In 2015 and 2016 the existence of several additional areas of elephant range in Central Congo were documented through arrests and seizures of ivory (Hart, n.d.) and these are marked as new areas of **known range** to the west and south of Tshuapa Lomami.

Salonga National Park has experienced poaching for decades, although anti-poaching operations starting in 2011 appear to have improved the situation (Dianzenza, 2015). Surveys have been carried out of different parts of the park. Partial surveys give an estimate of about 400 elephants in about 24% of the park (Reinartz, 2016; WCS, 2015a). Surveys outside the park in 2006 showed that only a few pockets of this vast landscape were occupied by elephants (Steel, 2007). Since the recent surveys did not cover the entire area, the estimates of 1,186 ± 692 inside the park in 2004 (Blake, 2005) and 2,800 outside the park in 2006 (Hart, 2006b) have been retained. There was no significant difference in dung density in the Lokofa area between 2006 and 2015 (WCS, 2015a).

A new **guess** from the Luama Hunting Zone of 21 elephants (Mubalama, pers. comm., 2013) replaces the guess of 110 ± 15 from 2002 (Mubalama, pers. comm., 2006). A new **guess** of 40-60 for Upemba National Park (Hasson, pers. comm., 2013) replaces a guess of 145 from 2005 (Mubalama, pers. comm., 2006).

In the AESR 2007 there is possible range shown close to the southern town of Lubumbashi. It has been many years since elephants occurred in this area, and this has been degraded to **non-range** (Hasson, pers. comm., 2013).

There are no longer believed to be any elephants in the Bushimaie Reserve and Hunting Area so this has been reported as a **lost population** (IUCN PAPACO, 2010).

Reports were received in 2012 of more than 20 elephants moving across the border from Angola and spending time in the Swa Kibula hunting area (Mbende et al., 2012). The map now shows this area as **known range**.

Low densities of elephants were found in the area south-west of Lake Tumba, close to the Congo River north of Kinshasa (Mbende et al., 2012). This has been changed from doubtful to **known range**.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	1,718	–	–	–	2 %	3,739
Aerial Sample Counts	35	53	–	–	2 %	4,374
Other Dung Counts	0	–	2,829	3,343	8 %	17,707
Informed Guesses	41	–	505	1,025	12 %	27,979
Other Guesses	–	–	3,165	3,885	15 %	34,484
Degraded Data	–	–	1,304	1,304	12 %	26,450
Totals 2015	**1,794**	**52**	**7,803**	**9,557**		
Totals 2006	**6,507**	**4,080**	**12,897**	**13,569**		
Assessed Range					51 %	114,733
Unassessed Range					49 %	108,515
Total Range					100 %	223,248

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	-118	±53	-195	-372	2 %	4,374
New Population	+20	0	+768	+1,852	15 %	34,464
Different Technique	-4,636	±4,081	-845	-1,295	4 %	8,106
Different Area	0	0	-987	-987	5 %	11,387
New Guess	+21	0	-3,115	-2,490	8 %	18,608
Population Lost	0	0	-120	-120	0 %	0
Data Degraded	0	0	0	0	0 %	0
No Change	0	0	0	0	17 %	37,794
Totals	-4,713	±4,081	-4,494	-3,412	51 %	114,733

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	3,739	0	3,739
Direct Sample and Reliable Dung	3,252	1,122	4,374
Informed Guesses	20,693	7,286	27,979
Other Dung Counts	17,525	182	17,707
Other Guesses	55,538	5,397	60,934
Unassessed Range	45,666	62,849	108,515
Totals	146,412	76,836	223,248

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CI			(km²)	LON.	LAT.
Bili Uere Hunting Zone (Bili-Gangu Sector)	NP	DC	C	2012	365	217	Hart, 2014	2	4,390	25.2°E	4.3°N
Bushimae	PL	O	E	2010	0		IUCN PAPACO, 2010	2	4,870	22.9°E	7.7°S
Garamba Ecosystem											
Garamba Ecosystem	DT	AT	A	2014	1,718		Mónico, 2014	2	3,581	29.4°E	3.9°N
Garamba Surrounding Area	DT	O	E	2014	206		Mónico, 2014	2	4,118	29.5°E	4.3°N
Kahuzi-Biega											
Kahuzi-Biega (Lowland) National Park	NP	O	E	2,010	50	50*	Plumptre, pers. comm., 2010	2	6,138	27.9°E	2.0°S
Kahuzi Biega National Park	NG	O	E	2010	20		Plumptre, pers. comm. 2010	3	584	28.7°E	2.3°S
Lomako Yokokala Faunal Reserve - Western Section	NP	DC	C	2014	105	40	Maputla 2015	2	1,206	21.0°E	1.0°N
Luama Hunting Zone	NG	O	D	2013	21		Mubalama, pers. comm., 2013	2	9,469	28.2°E	4.5°S
Maiko National Park and Surrounding Area	NG	O	E	2015	100	650*	Nixon & Plumptre, pers. comm. 2016	1	11,508	27.2 E	0.3°S
Okapi Faunal Reserve	DA	DC	C	2011	1,701	888	Vosper et al., 2012	1	12,787	28.5°E	1.5 N
Rubi Tele Hunting Zone	NP	O	D	2011	5	20*	Hart, 2014	2	3,100	24.8°E	2.5°N
Salonga											
Salonga National Park	-	DC	E	2004	1,186	692	Blake, 2005	1	25,141	21.2°E	2.1°S
Salonga Outside	-	O	E	2006	2,800		Hart, 2006b	1	25,140	21.1°E	2.5°S
Sankuru Natural Reserve	NP	O	D	2009	0		Lilongola et al., 2009	2	23,161	24.1°E	2.8°S
Swa Kibula	NP	O	D	2012	20		Mbende et al. 2012	2	12,326	17.7°E	7.4°S
Tshuapa Lomami Landscape	NP	O	D	2008	500	500*	Hart, 2009	1	40,000	25.0°E	2.6°S
Upemba National Park	NG	O	E	2011	40	20*	Hasson pers. comm. 2013	1	11,370	26.6°E	8.9°S
Virunga											
Virunga (Mikeno) National Park	-	O	E	2003	43		Gray pers. comm. 2005	3	256	29.5°E	1.4°S
Virunga (North & Central) National Park	RS	AS	B	2014	35	60	Wanyama et al. 2014a	2	4,810	29.5°E	0.5°S
Virunga (South) National Park	-	O	E	2002	75		Malonga, pers. comm. 2003	2	1290	29.2°E	1.4°S

* RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Democratic Republic of Congo

0 100 200 300 400 500 600km

ABBREVIATIONS AND ACRONYMS

Use samples still for map abbreviations and acronyms

AfESG

- Int'l Boundaries
- Rivers & Lakes
- Towns
- Protected Areas
- Input Zones

ELEPHANT RANGE

- Known
- Possible
- Doubtful
- Sighting

COUNTRY

Equatorial Guinea

ESTIMATED TOTAL ELEPHANTS

884 ± 676

GUESSES

0 - 0

GENERAL STATISTICS

Country Area	28,050 km²
Range Area	19,701 km² (70%)
Protected Range	21 %
Information Quality Index (IQI)	0.57
CITES Appendix	I
Listing Year	1992 (year of accession)

CURRENT ISSUES

Río Muni is the mainland portion of Equatorial Guinea, a country with a rapidly developing economy based on petroleum extraction, and associated infrastructure development, which is having a negative impact on wildlife. Around 80% of Río Muni is covered in mostly secondary tropical forest. Commercial hunting has been facilitated in recent years by the expansion of the road network across the country and the ongoing construction of a new capital city in the centre-east of the country. Elephant poaching is widespread, especially near roads. Hunting signs were found inside all protected areas during the course of a nationwide survey (Murai et al., 2013).

Although a protected area network was created in 1988, Monte Alén National Park is the only area that has any effective protection (Larziliere & Doumenge, 2015).

Equatorial Guinea published an elephant conservation plan in 1991, although this is now out of date (Ministry of Agriculture, Livestock, Fisheries and Forestry, 1991).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Equatorial Guinea is 884 ± 676. This estimate applies to 19,704 km², which is 100% of the estimated known and possible elephant range in Equatorial Guinea.

In 2011 a systematic countrywide line transect survey was carried out (Murai et al., 2013) giving an estimate of 884 elephants (437-1,789). This replaces an estimate of 700 ± 330 from 2004 for the southern part of the Monte Alén National Park plus a guess of 300 for the remaining part of the park. There were no estimates from the remaining elephant range in Equatorial Guinea in the AESR 2007, so the new estimate covers a **different area**. Given that the current estimate for the entire country is lower than the previous estimate for Monte Alén National Park, a substantial reduction in overall numbers seems likely.

Elephants were most abundant within Monte Alén National Park and the Monts de Mitra region extending south towards Gabon and the Rio Campo Nature Reserve (contiguous with the Campo Ma'an National Park in Cameroon) and the region to the east of the reserve. The range map has been modified to include new areas of **known range** in the eastern and western parts of the country.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Reliable Dung Counts	884	676	—	—	100 %	19,704
Totals 2015	**884**	**676**	**0**	**0**		
Totals 2006	**0**	**0**	**1,000**	**1,330**		
Assessed Range**					100 %	19,704
Unassessed Range					0 %	~2
Total Range					100 %	19,701

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Different Area	+884	±676	-1,000	-1,330	100 %	19,704
Totals	+884	±676	-1,000	-1,330	100 %	19,704

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	9,808	9,895	19,704
Unassessed Range	0	~2	~2
Totals	9,808	9,893	19,701

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB	YEAR	ESTIMATE	± 95% CL			(km²)	LAT	LON
Rio Muni Region	DA	DC	B	2011	884	676	Maisels et al. 2013	1	24635	10.5°E	1.7°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA Different Area; DD Data Degraded; DT Different Technique; NA New Analysis; NG New Guess; NP New population; PL Population Lost; RS Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— No Change

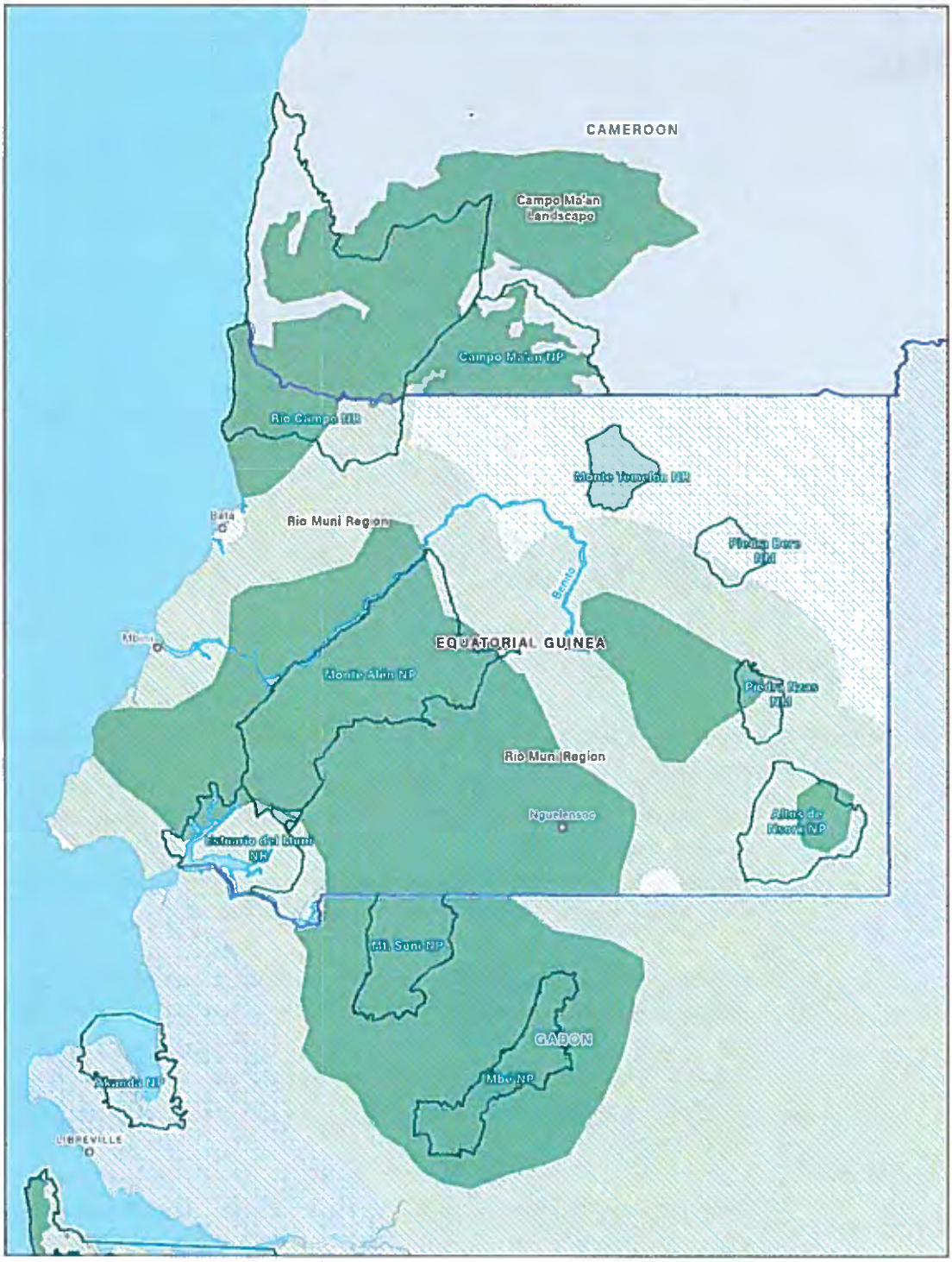
PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

KEY TO SURVEY REPORT

AS Aerial Sample Count; AT Aerial Total Count; DC Dung Count; GD Genetic Dung Count; GS Ground Sample Count; GT Ground Total Count; IG Informed Guess; IR Individual Registration; OG Other Guess. Survey Reliability is keyed A–E (best to worst).

Equatorial Guinea



0 15 30 45 60 75 90km

ABBREVIATIONS AND ACRONYMS

See Appendix for explanations of abbreviations and acronyms

AfESG

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Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zone

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

Gabon

ESTIMATED TOTAL ELEPHANTS

7,058 ± 2,303

GUESSES

59,057 - 67,094

GENERAL STATISTICS

Country Area	267,670 km²
Range Area	213,373 km² (80%)
Protected Range	18 %
Information Quality Index (IQI)	0.93
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Gabon is a relatively stable country with a low human population concentrated in the cities. Over 80% of the country is forested, with Gabon's forests accounting for 12% of the total African tropical moist forest area (Verheggen et al., 2012). There are small areas of savanna in the Batéké Plateau in the south-east and behind the coastal strip. All elephants found in Gabon are forest elephants including those found in the savanna patches (Roca et al., 2015).

Until recently much of the forest was relatively inaccessible and Gabon has been a stronghold for forest elephants, holding about half of Africa's forest elephants (Maisels & Strindberg, 2012). In 2002, Gabon created a network of 13 national parks, which cover about 11% of the country. Until recently levels of poaching were far lower than in neighbouring range states, but this has changed in recent years as road access has improved and ivory prices increased, and poaching is now seen as a serious threat.

In recent analyses of seizure data in ETIS, prepared for CITES, Gabon has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). Gabon was requested by the CITES Standing Committee, at its 65th meeting, to prepare a National Ivory Action Plan. Gabon submitted this to CITES in 2014 (CITES, n.d.-a). In June 2012, Gabon destroyed 4.8 tonnes of ivory from its national stockpile (Jones, 2012).

In 2015, as part of the Elephant Protection Initiative, Gabon developed a draft national strategy for elephant management (Government of Gabon, 2015), which is still under review. The Agence Nationale des Parcs Nationaux (ANPN) announced the creation, by presidential order, of a 240-strong

special forces unit within ANPN to operate as a rapid reaction unit anywhere in Gabon (Presidential Press Service, 2016).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Gabon is 7,058 ± 2,303 at the time of the last survey for each area. There may be an additional 59,057 to 67,094 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 213,373 km², which is 100% of the estimated known and possible elephant range.

Elephants are believed to occur throughout much of Gabon, with the exception of a number of areas with high human population densities, but only 20% of Gabon has been surveyed. For this reason an estimate from a spatial model has been used for the remaining area (Maisels, Strindberg et al., 2013b).

The estimated number of elephants through systematic surveys has increased by 4,300, largely because of an increased number from a repeat survey of Lopé National Park. Guesses on the other hand have decreased by 10,000-20,000, partly because of the reduced numbers recorded from Minkébé NP.

A **dung count** of Minkébé NP and its neighbouring buffer zone in the north-east of the country in 2013 gave an estimate of 6,875 (3,677-12,852) (ANPN, 2013). This replaces an estimate of 21,070 ± 7,942 from 2004 (Blake, 2005). The more recent survey was less intense but indicated a dramatic decline in both numbers and range, with elephants now almost totally confined to the southern and eastern borders of the park. The 2013 survey included areas outside the park but a direct comparison of areas surveyed in 2004 and 2013 suggests that 60-80% of the population has been lost (ANPN, 2013). This increase in poaching was associated with the presence of over 6,000 gold miners in the park and buffer zone from about 2008 onwards until they were moved out in 2011 by ANPN and the Gabonese military (ANPN, 2013).

Djouah Bélinga is south-east of Minkébé NP on the Republic of Congo border. The estimate of 4,035 from 2002 (Lahm & Barnes, pers. comm., 2006) has been degraded to a guess.

A **dung count** of Mwagna National Park and its proposed extension to the north-west in 2012 (Maisels & Akou, 2012) gave an estimate of 1,680 (1,254 to 2,251) elephants for the whole area, of which 81% were in the park. This replaces a 2004 guess of 2,483 (Lahm & Barnes, pers. comm., 2006). A 2004 guess of 151 elephants is available for the Mwagna buffer area (Maisels & Strindberg, 2012).

The Plateaux Batéké National Park in the extreme south-east of the country is largely composed of savanna with small areas of forest. A reconnaissance **dung count** in 2006 (which was not reported in the AESR 2007) gave a **guess** of 301 elephants (Maisels & Strindberg, 2012). However 337 elephants have been individually identified in clearings to the north-west of the park (Douckaga, 2014) of which 17 were recognisable from the Batéké population just across the border with Congo.

A **dung count** of Ivindo NP and its southern buffer zone in 2009 gave an estimate of 3,489 ± 732

elephants (Maisels et al., 2010) of which 82% were in the park. This replaced an estimate of 1,216 (730-2,000) (Maisels, pers. comm., 2006). As the area surveyed in 2009 was 11% larger than the 2005 area, this was recorded as a **different area**.

A **dung count** was carried out in Lopé NP, in the centre of Gabon, in 2009. This gave an estimate of 4,142 (2,508-6,842) (Bezangoye & Maisels, 2010), replacing an estimate of 2,350 (1,385 to 4,200) from a similar survey in 2005 (Maisels, pers. comm., 2006). A logging company started operations on the western border of the park after the end of the 2006 survey, which may have caused elephants to seek refuge in the park (Bezangoye & Maisels, 2010).

A reconnaissance survey of the neighbouring Waka National Park was carried out in 2006, giving a **new guess** of 690 (Maisels & Strindberg, 2012). The intervening Lopé-Waka corridor was surveyed using **line transects** and **dung counts** in 2008 giving an estimate of 1,343 ± 778 (Maisels et al., 2008). There were no previous estimates for these sites.

The Monts Birougou National Park was not marked as elephant range in the AESR 2007 and this has been changed to **known range**. A **dung count** was carried out in 2007 which gave an estimate of 216 (168-554) elephants (Aba'a & Bezangoye, 2007) and this is recorded as a **new population**.

A reconnaissance survey of the Monts de Cristal area, along the border with Equatorial Guinea, in 2006 gave an estimate of 2,416 elephants (Aba'a, 2006; Maisels & Strindberg, 2012). This replaces an estimate from a smaller area of 1,396 from 2001 (Lahm & Barnes, pers. comm., 2006).

Several new **dung counts** have been carried out of elephant populations along the Gabon coast. However, Pongara NP in the north was not surveyed and an estimate of 344 ± 152 (Latour, 2006) has been retained from the AESR 2007.

Wonga-Wongue Presidential Reserve was surveyed in 2011 for the first time, giving an estimate of 1,039 (601-1,797) (new analysis of the raw data by Maisels, Motsaba & Aba'a, 2012). Some of these elephants visit savanna areas in the reserve and monthly **aerial total counts** are conducted. Just over 1,000 elephants were seen in a single flight in 2015 and it is thought that there may be 2,000-3,000 elephants (Fay, pers. comm., 2016). A reconnaissance survey was carried out of the previously unsurveyed Evaro area in the swamps of the Ogooue Delta in 2006, but this was not included in the AESR 2007. This gave a **guess** of 469 (Maisels & Strindberg, 2012).

Several surveys have been carried out of different parts of the Gamba Forest Complex. A **dung count** was carried out in Loango NP in 2007, resulting in a guess of 290 elephants (Maisels, pers. comm., 2016e). A **transect survey** of the Kivoro logging concession was carried out in 2008 (Blake et al., 2012) which gave an estimate of 900 elephants (231-1,617). There was a previous estimate of 11,205 ± 969 from 1999 (Thibault et al., 2001) for the entire area but this is not comparable because a larger area was covered and a different decay rate was used.

A survey of the Mayombe area, further south along the coast, gave a **new estimate** of 299

elephants (299-634) (Aba'a et al., 2011) and there was a **new guess** from a reconnaissance survey for Mayumba NP of 80 (Maisels & Strindberg, 2012).

Finally, a small part of the Moukalaba-Doudou NP and a part of the adjacent Sette Cama Reserve was surveyed in 2011 giving an estimate of 236 (183-304) (Ngoran, pers. comm., 2014).

Using the model of Maisels, Strindberg, et al. (2013b) and excluding the sites for which specific estimates are available, the remaining unsurveyed suitable for-est habitat is predicted to contain 32,378 elephants.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Reliable Dung Counts	5,721	2,303	—	—	4 %	8,314
Other Dung Counts	0	—	17,089	18,999	7 %	15,873
Informed Guesses	1,337	—	5,404	11,531	10 %	20,913
Degraded Data	—	—	4,186	4,186	3 %	6,048
Modeled Extrapolation	—	—	32,378	32,378	77 %	163,629
Totals 2015	**7,058**	**2,303**	**59,057**	**67,094**		
Totals 2006	**2,350**	**827**	**66,490**	**67,459**		
Assessed Range**					101 %	214,777
Unassessed Range					-1 %	-1,405
Total Range					100 %	213,373

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+1,792	±2,320	-0	0	2 %	4,669
New Population	0	0	+216	+216	1 %	1,289
Different Technique	+1,579	±780	-803	-803	2 %	5,219
Different Area	0	0	-12,877	-10,967	6 %	11,918
New Guess	+1,337	0	+9,239	+14,397	88 %	187,150
Data Degraded	0	0	0	0	0 %	0
No Change	0	0	0	0	2 %	4,531
Totals	+4,708	±2,447	-4,225	+2,843	101 %	214,777

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	8,190	124	8,314
Informed Guesses	39,428	145,114	184,542
Other Dung Counts	15,686	187	15,873
Other Guesses	4,771	1,277	6,048
Unassessed Range	-690	-714	-1,405
Totals	67,384	145,988	213,373

***This country is known to have 100% assessed range. Differences in table values exist due to minor variations between map layers.*

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Djouah Bélinga	-	O	E	2002	4,035		Lahm & Barnes, pers. comm., 2006	2	4,339	13.6°E	1.2°N
Evaro Zone	NG	O	D	2006	469	525*	Maisels & Strindberg, 2012	2	2,365	10.0°E	0.9°S
Gamba											
Kivoro	NG	DC	C	2008	900	693	Blake et al. 2012	2	2,337	10.0°E	2.2°S
Loango National Park	NG	O	D	2007	290	383*	Maisels, pers. comm., 2016a	2	1,510	9.6°E	2.1°S
Moukalaba-Doudou Central South	DT	DC	B	2011	236	60	Ngoran, pers. comm., 2014	3	609	10.5°E	2.8°S
Ivindo National Park	DA	DC	C	2009	3,489	732	Maisels et al., 2010	2	3,864	12.6°E	0.1°N
Lope-Waka											
Lopé National Park	RS	DC	B	2009	4,142	2,167	Bezangoye & Maisels, 2010	2	4,486	11.5°E	0.6°S
Lopé-Waka Corridor	DT	DC	B	2008	1,343	778	Maisels et al. 2008	2	3,000	11.3°E	1.1°S
Waka National Park	NG	O	D	2006	690	773*	Maisels & Strindberg, 2012	2	1,061	11.1°E	1.3°S
Mayombe Ecosystem	NG	O	D	2011	299	335*	Aba'a et al. 2011	2	1,682	11.0°E	3.4°S
Mayumba National Park	NG	O	D	2011	60	68*	Maisels & Strindberg, 2012	3	161	11.0°E	3.8°S
Minkébé National Park and buffer zone	DA	DC	C	2013	6,875	4,588	ANPN 2013	1	11,956	12.6°E	1.7°N
Monts Birougou National Park and buffer zone	NP	DC	D	2007	216		Aba'a & Bezangoye, 2007	2	1,332	12.3°E	1.9°S
Monts de Cristal Ecosystem	NG	O	D	2006	2,416	2,707*	Maisels & Strindberg, 2012	2	5,300	10.3°E	0.7°N
Mwagna											
Mwagna Buffer	NG	O	E	2004	151	168*	Maisels & Strindberg 2012	2	2,020	13.7°E	0.7°N
Mwagna National Park	DT	DC	C	2012	1,680	733	Maisels & Akou, 2012.	2	1,581	13.8°E	0.5°N
Plateaux Batéké National Park	NG	O	D	2006	301	336*	Maisels & Strindberg 2012; Douckaga, 2011	2	2,042	12.5°E	0.5°S
Pongara National Park	-	DC	C	2006	344	152	Latour, 2006	3	378	9.4°E	0.1°N
Rest of Gabon Forest Range	NG	O	D	2011	32,378		Maisels, Strindberg et al., 2013	1	145,497	11.1°E	0.4°S
Wonga Wongue Presidential Reserve	NG	O	D	2015	2,000	1,000*	Fay, pers. comm., 2016	2	4,967	9.5°E	0.5°S

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
—: No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A–E (best to worst)

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Gabon

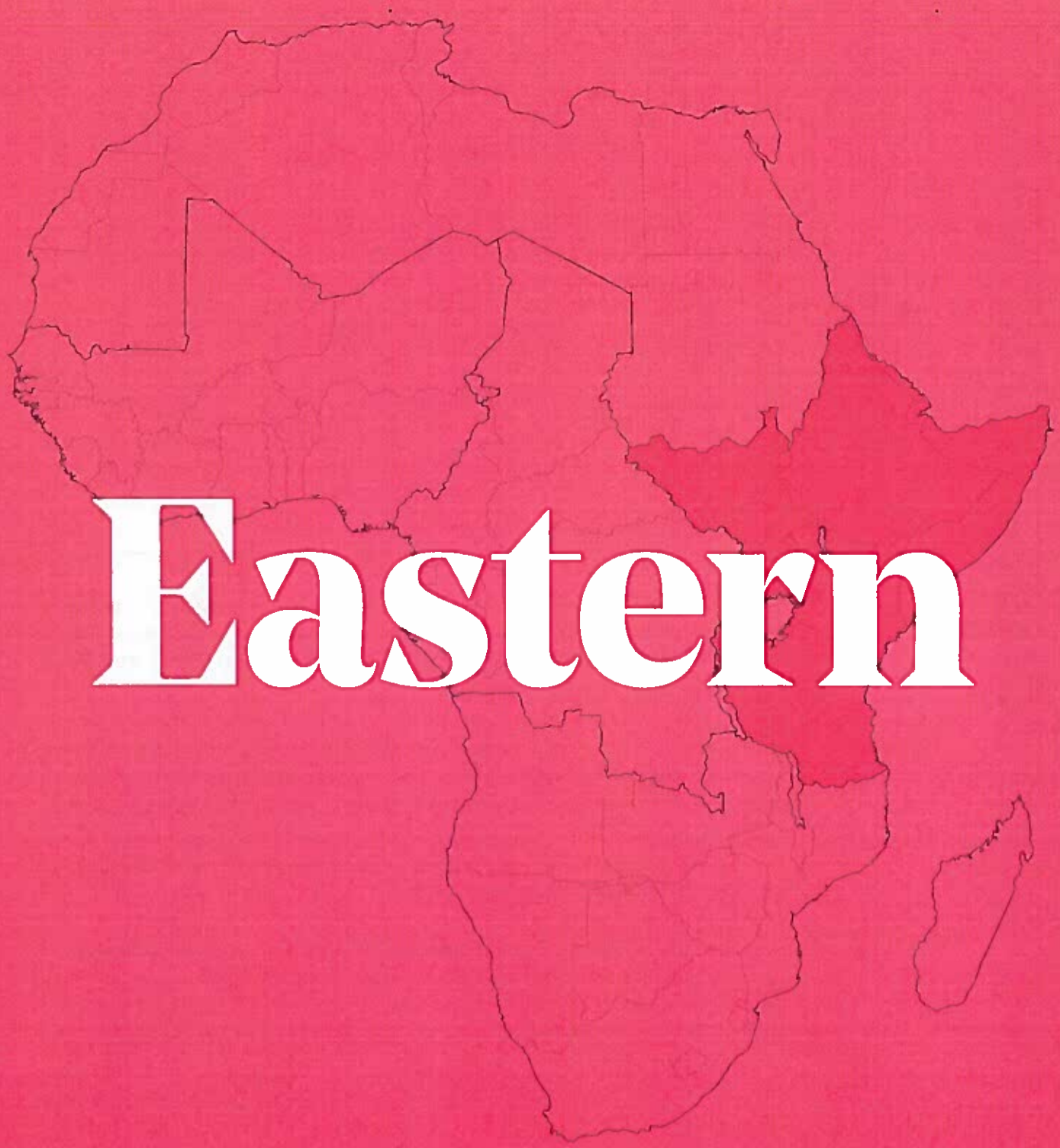
0 40 80 120 160 200 240km

ABBREVIATIONS AND ACRONYMS

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting



Eastern

REGION

Eastern Africa

ESTIMATED TOTAL ELEPHANTS

86,373 ± 10,549

GUESSES

11,973 - 12,060

GENERAL STATISTICS

Region Area	4,295,972 km²
Range Area	880,648 km² (20%)
Protected Range	35 %
Information Quality Index (IQI)	0.49

CURRENT ISSUES

Eastern Africa has been the region most affected by poaching, having experienced an approximately 50% decline in estimates from surveys since the AESR 2007, largely attributed to a greater than 60% decline in Tanzania's elephant numbers, including heavy losses in some of the region's formerly most significant populations.

The free flow of small arms in the region, providing a ready supply for poachers (Small Arms Survey, 2015), continues to be of concern. While major economic development has been underway in Ethiopia, Kenya, Rwanda, Uganda and Tanzania, political instability continues to cause problems for elephant conservation in South Sudan and Somalia. Extensive land transformation for agricultural expansion and exploration by extractive industries is taking place and elephant habitats are increasingly being fragmented, degraded and lost.

Eastern Africa has 16 MIKE sites. Mount Elgon National Park MIKE site in Uganda has not submitted any carcass data since the MIKE programme began in 2002. While reporting rates vary, the remaining 15 sites have submitted carcass data between 2007 and 2015. After a peak in 2011, 2015 was the fourth consecutive year in which the PIKE value declined in Eastern Africa. The PIKE value for Eastern Africa in 2015 is comparable to the levels recorded in the region in 2008 but is higher than the values for the five years prior to that (Figure 1, on the following page). (CITES Secretariat, 2016).

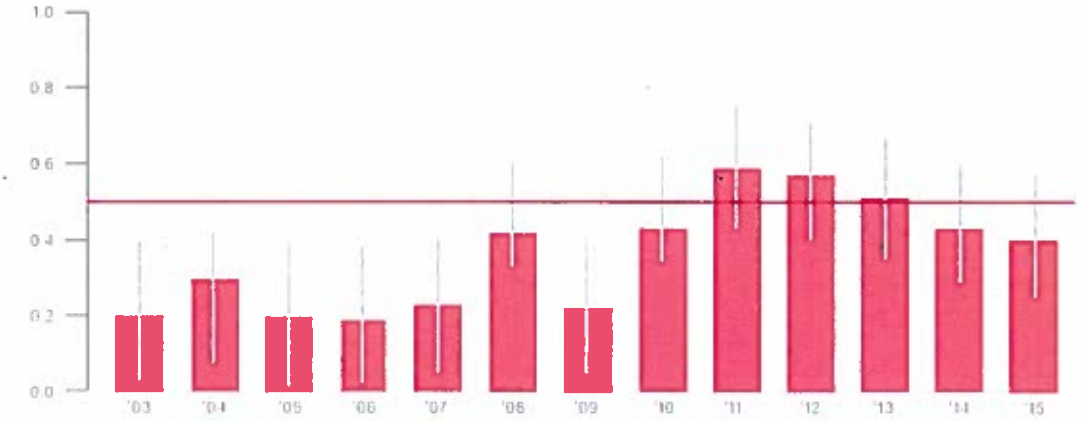


FIGURE 1: *Eastern African PIKE trends with 95% confidence intervals (CITES Secretariat, 2016)*

In recent analyses of seizure data prepared for CITES, Ethiopia, Kenya, Tanzania and Uganda were identified as countries with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016) and are currently part of the National Ivory Action Plan process. Further details are provided in the country summaries.

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Eastern Africa is 86,373 ± 10,549 at the time of the last survey for each area. There may be an additional 11,973 to 12,060 elephants in areas not systematically surveyed. Together, this estimate and guess apply to 548,587 km^2, which is 62% of the estimated known and possible elephant range. There remains an additional 38% of range for which no elephant population estimates are available.

Between the AESR 2007 and this report, elephant numbers in Eastern Africa have declined by about 87,000, on the basis of updated estimates for sites where comparable survey techniques were employed. However, some populations have been surveyed for the first time and this has led to an increase of approximately 9,000 in the "new population" category. The result is that the current total number of elephants from surveyed populations represents a smaller estimated reduction of almost 79,000 elephants, still close to a 50% loss, during the period from late 2006 to the end of 2015.

The proportion of elephant range for which elephant estimates are available currently stands at 62%, an increase from 38% in the previous report. In fact, the AESR 2016 shows an important, essentially reversed situation from the AESR 2007, which reported approximately 40% assessed and 60% unassessed range for Eastern Africa. Furthermore, the overall reliability of estimates has increased considerably, with estimates from systematic surveys now accounting for 53% of total range, versus 38% in the previous report. The overall quality of information, as measured by the IQI, has also increased from 0.36 to 0.49.

The large reported losses, primarily due to poaching in Tanzania, account for much of the continent's overall decline since the AESR 2007. The Selous and Ruaha-Rungwa ecosystems suffered the heaviest losses. Other areas, such as the Moyowosi-Kigosi and Sagara-Nyamagoma ecosystem and Ugalla Game Reserve also suffered losses, primarily from 2009–2013. Although Tanzania remains an important range state with about 50,000 elephants, this has been a catastrophic time

for elephants in that country, which is especially tragic following the strong recovery they experienced following the last poaching crisis in the 1970s and 1980s.

Despite worrying levels of poaching, and continued concerns over the trafficking of illegal ivory through the region, Kenya and Uganda's overall populations have remained stable with indications of small but not significant increases in the latter. All estimates from Kenya's forest populations were degraded due to age, though a new round of forest surveys have recently been initiated. Kenya's elephant stronghold remains in the Tsavo National Park and its surrounding areas. The Laikipia-Samburu population lost some elephants to poaching but over the 10-year period there was a slight increase. There were concerning levels of poaching in Masai Mara and surrounding areas.

Both Ethiopia's slight increases and South Sudan's more substantial increases probably result from an improvement in knowledge rather than genuine increment in elephant numbers. Most of South Sudan's elephant populations were surveyed for the first time in many years from 2007-2010. The resurgence of civil unrest in South Sudan has made it impossible to carry out surveys more recently. Rwanda's elephant numbers remain stable at just over 100 elephants in two widely-separated populations. The fate of elephants in Eritrea and Somalia remains unknown.

No populations are recorded as having been lost in Eastern Africa.

There has been no net increase in range but improved information has led to an increase in the proportion of known range, which has increased from approximately 500,000 km^2 (57% of overall range) in the AESR 2007 to approximately 736,000 km^2 (about 85% of total range) in 2015. This is mostly the result of better information on range in South Sudan and Tanzania but also a real increase in range in the Laikipia-Samburu and Magadi areas in Kenya.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	32,960	–	–	–	17 %	151,113
Individual Registrations	1,656	–	–	–	0 %	3,553
Aerial Sample Counts	50,851	10,549	–	–	36 %	317,490
Reliable Dung Counts	118	–	–	–	0 %	132
Other Dung Counts	0	–	137	137	0 %	188
Informed Guesses	788	–	2,429	2,516	7 %	57,360
Degraded Data	–	–	9,407	9,407	2 %	18,751
Totals 2015	**86,373**	**10,549**	**11,973**	**12,060**		
Totals 2006	**165,151**	**27,990**	**10,722**	**12,066**		
Assessed Range					62 %	548,587
Unassessed Range					38 %	332,061
Total Range					100 %	880,648

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	-87,414	±29,058	-400	-600	34 %	299,558
New Population	+8,665	±6,609	+270	+270	16 %	138,435
Different Technique	+861	±821	-911	-920	2 %	18,088
Different Area	+2,693	±2,373	-547	-547	6 %	52,754
New Guess	-488	0	+171	+181	2 %	21,200
Data Degraded	-3,095	±641	+3,095	+2,037	0 %	0
Totals	-78,778	±29,912	+1,678	+421	60 %	548,587

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	153,688	977	154,666
Direct Sample and Reliable Dung	302,942	14,680	317,622
Informed Guesses	48,591	8,769	57,360
Other Dung Counts	188	0	188
Other Guesses	15,619	43	15,662
Unassessed Range	214,531	115,844	330,625
Totals	735,559	140,314	876,123

ELEPHANT ESTIMATES

COUNTRY	# OF ELEPHANTS		QUESSES		RANGE			PFS	IQI
	ESTIMATE	± 95% CL	MIN	MAX	AREA (km²)	% REGIONAL	% ASSESSED		
Eritrea	0	0	100	120	5,275	1 %	100 %	3	0
Ethiopia	1,017	0	1,160	1,160	22,264	3 %	84 %	2	0.39
Kenya	22,809	0	8,023	8,090	130,725	15 %	80 %	2	0.59
Rwanda	88	0	37	37	1,079	0 %	99 %	4	0.7
Somalia	0	0	70	70	4,525	1 %	68 %	3	0
South Sudan	7,103	5,911	0	0	309,811	35 %	42 %	1	0.23
Tanzania	50,433	8,502	1,930	1,930	389,921	44 %	70 %	1	0.58
Uganda	4,923	2,012	653	653	17,048	2 %	79 %	2	0.51
Totals	86,373	10,549	11,973	12,060	880,648	100 %	62 %	1	0.49

* RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season)
— : No Change

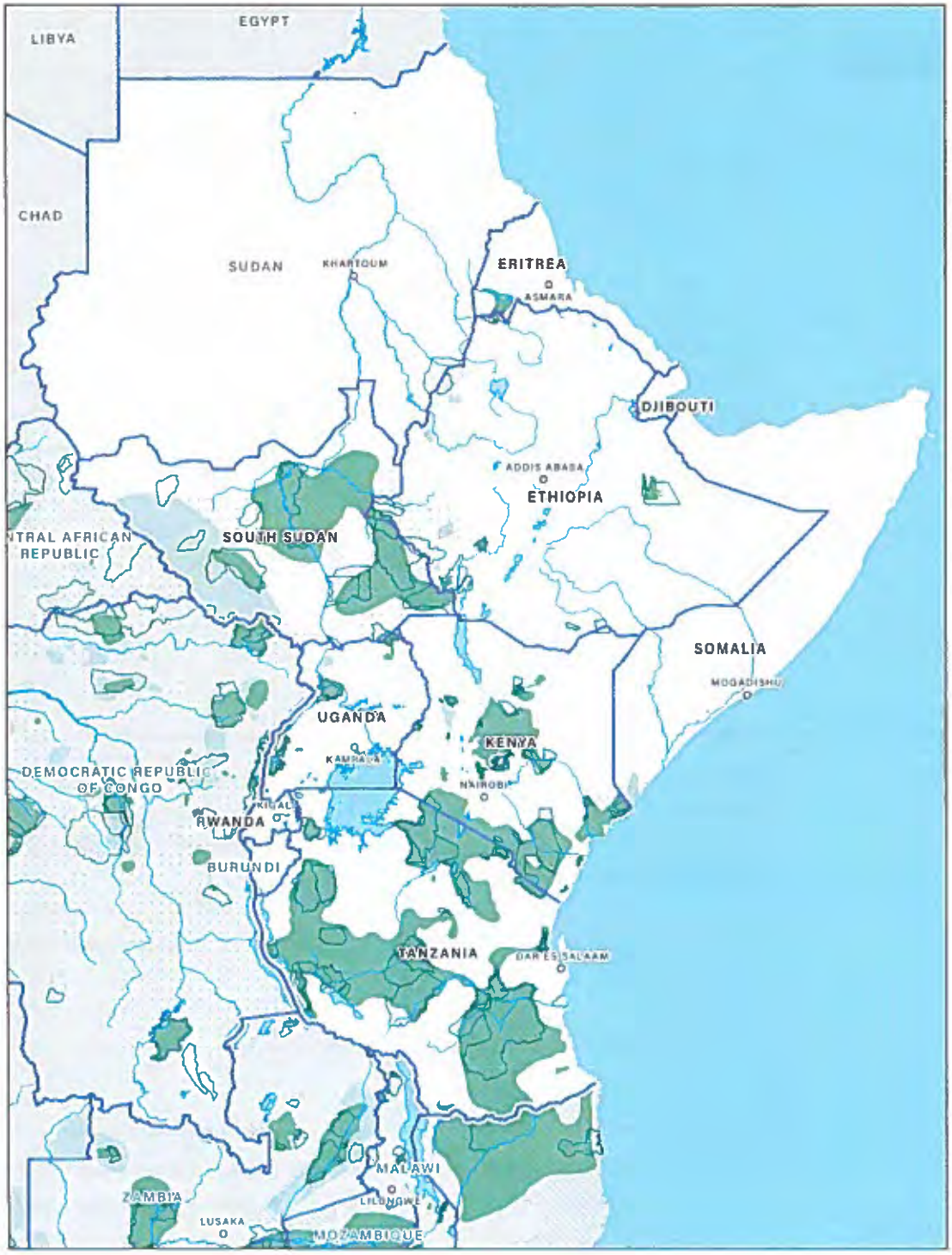
KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Eastern Africa



ABBREVIATIONS AND ACRONYMS

See Appendix III for map titles and abbreviations

AfESG

COUNTRY

Eritrea

ESTIMATED TOTAL ELEPHANTS

0 ± 0

GUESSES

100 - 120

GENERAL STATISTICS

Country Area	121,320 km²
Range Area	5,275 km² (4%)
Protected Range	0 %
Information Quality Index (IQI)	0.00
CITES Appendix	I
Listing Year	1994 (year of accession)

CURRENT ISSUES

Elephants in Eritrea are confined to the small area of Gash-Setit along the Ethiopian border in the southwest of the country. Continued tension between Eritrea and Ethiopia make conservation and research difficult in this area. The elephants are not within a protected area and conflicts with farmers are common (Shoshani et al., 2004).

A study of the genetics of Eritrean elephants indicates that they are savanna elephants, with limited genetic diversity (Brandt et al., 2014).

No elephant action plan has been developed for Eritrea.

NUMBERS AND DISTRIBUTION

There may be 100 to 120 elephants in areas of Eritrea which have not been systematically surveyed. This guess likely represents a minimum number, and actual numbers could be higher than those reported. It applies to 5,275 km², which is the entirety of the estimated known and possible elephant range.

There is very little recent information on the status of Eritrea's elephant population, with no surveys since 1997 (Litoroh, 1997a, 1997b). Brandt et al. (2014) suggested there may be as many as 120 elephants and this has been entered as an **informed guess**, replacing the previous guess of 104 (Shoshani, pers. comm., 2006). Since this is a cross-border population with Kafta Sheraro National Park in Ethiopia, there is a possibility that elephants may have been double counted.

No changes have been made to the range map for this report, which is based on an old study of elephant sign and spoor. There appears to be a regular movement pattern, with elephants spending the dry season (October to March) in Eritrea and crossing the border twice every year to spend the wet season in Ethiopia. The mapped elephant range extends to the Sudanese border, but it is believed that elephants do not cross the border (Shoshani et al., 2004).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Informed Guesses	0	—	100	120	100 %	5,275
Totals 2015	**0**	**0**	**100**	**120**		
Totals 2006	**96**	**0**	**8**	**8**		
Assessed Range					100 %	5,275
Unassessed Range					0 %	0
Total Range					100 %	5,275

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Guess	-96	0	+92	+112	100 %	5,275
Totals	-96	0	+92	+112	100 %	5,275

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Informed Guesses	5,275	0	5,275
Unassessed Range	0	0	0
Totals	5,275	0	5,275

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	REGION	YEAR	ESTIMATE	95% CL			(km²)	LON.	LAT.
Gash-Setit	NG	O	D	2014	100	20*	Brandt et al. 2014	1	5,275	37.3°E	14.8°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season)
—: No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A–E (best to worst)

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Eritrea

0 50 100 150 200 250 300km

ABBREVIATIONS AND ACRONYMS

See appendix III for map abbreviations and acronyms

AfESG

Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

Ethiopia

ESTIMATED TOTAL ELEPHANTS

1,017 ± 0

GUESSES

1,160 - 1,160

GENERAL STATISTICS

Country Area	1,127,127 km²
Range Area	22,264 km² (2%)
Protected Range	56%
Information Quality Index (IQI)	0.39
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Elephant populations in Ethiopia are mostly small and scattered, primarily occurring in the peripheral low-lying parts of the country, or in remnant forests. The formal establishment and gazettement of protected areas in Ethiopia took place in 2014. Delays in this process were in part due to the devolution of authority to a regional level. In many instances boundaries have not been demarcated and people continue to live in protected areas. There is little active management or patrolling of protected areas. Large-scale agricultural developments are a threat to a number of Ethiopia's remaining elephant populations, particularly around Omo and Gambella National Parks in the west of the country.

African Parks Network was responsible for the management of Omo NP (2005-2007) and has provided support to the management of Gambella NP since 2014.

The Ethiopian Elephant Action Plan (EEAP) was drafted in 2015, but remains under review.

In recent analyses of seizure data in ETIS, prepared for CITES, Ethiopia has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). Ethiopia was requested by the CITES Standing Committee, at its 65th meeting, to prepare a National Ivory Action Plan. Ethiopia's plan was submitted in January 2015 (CITES, n.d.-a). In March 2015, Ethiopia destroyed 6.1 tons of ivory from its national stockpile (BBC News, 2015b). Ivory trafficking through Bole Airport remains a concern, since it is an important hub for air traffic from the rest of Africa to the Middle and Far East.

CURRENT ISSUES CONT.

While elephant trophy hunting remains legal in Ethiopia, no quotas were declared to the CITES Secretariat between 2007 and 2015.

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Ethiopia is 1,017 at the time of the last survey for each area. There may be an additional 1,160 elephants in areas not systematically surveyed. This guess probably represents a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 18,598 km^2, which is 84% of the estimated known and possible elephant range. There remains an additional 16% of the estimated range for which no elephant population estimates are available.

There has been an increased estimate of about 700 elephants since the AESR 2007, largely because of the increase in numbers observed in Gambella NP. Previously there had been much uncertainty about the status of the elephant population of Gambella NP, in the far west of the country, and it was not known whether elephants were resident, or only visiting from the Boma area of South Sudan. A reconnaissance survey in 2009 found six elephants, and only four were seen in 2010 (TFCI, 2010). However, during an aerial total count in 2013, 337 elephants were seen (Grossmann et al., 2013). In 2015, 550 elephants were observed in the south-west of the park in an aerial total count, and another 56 were seen during the course of an **aerial sample count** of the wider ecosystem (Mònico & Schapira, 2015). This replaces a guess of 200 from 2002 (Ethiopia Wildlife Conservation Organization, 2002). Radio-collared elephants moved in a single large herd along the southern edge of the park close to the South Sudanese border and south-east to the Akobo CHA (Rolkier et al., 2015); using this information a new area of **known range** has been added to the range map, and the amount of **possible range** reduced. A point record to the north of Gambella has been added for a sighting during the 2015 survey.

While Mizan Teferi Controlled Hunting Area was previously considered to be the main area for elephants in the south-western forests, more recent reports suggest that Chebera Churchura National Park, which was gazetted in 2014, holds the largest remaining population. Ground counts from 2012-14 in Chebera Churchura indicated that there were 420 elephants (Ali, pers. comm., 2016). No details were given so this is treated as an **informed guess**, which replaces the previous informed guess of 60 from 2001 (Chago et al., 2001). The AESR 2007 included an old guess of 500 elephants for Mizan Teferi, which has been replaced by a new **informed guess** of 20 (Ali, pers. comm., 2016).

The elephant population in the Omo Valley is believed to move between Omo and Mago National Parks and the intervening Tama Controlled Hunting Area, and possibly into South Sudan. This population is under pressure from the development of sugar plantations in Tama (Chase et al., 2014a). During a **sample aerial count** in 2014, no elephants were observed on transect but 411 elephants were seen in Omo NP and 32 in Mago NP (Chase et al., 2014a). However, it is thought that there are more elephants in Mago NP and an estimate of 80 has been used (Ali, pers. comm., 2016). The previous guess for both Omo and Mago was 324-524 elephants in 2002 (Demeke, pers. comm., 2006).

NUMBERS AND DISTRIBUTION
CONT.

There have been occasional reports of elephants in the Geralle National Park to the south of the country. It is not known whether this is a resident population, or if it moves between Ethiopia and Kenya. Local residents reported about 50 elephants in this area in 2015 (Ali, pers. comm., 2016). There was no estimate in the AESR 2007. An area of **possible range** has been added.

A helicopter-based aerial survey in 2014, carried out as part of the Great Elephant Census, only located 36 elephants in the Babille Elephant Sanctuary (Chase et al., 2014a), but elephant are difficult to count from the air when they are in thick riverine vegetation. A ground count, also in 2014, estimated 250 elephants, which has been treated as an **informed guess** (Ali, pers. comm., 2016). The previous informed guess was 264 in 2005 (Demeke, pers. comm., 2006).

A ground survey in 2014 of the Kafta-Sheraro National Park (previously Shire Wildlife Reserve) in the north of Ethiopia (a transfrontier population shared with Eritrea) indicated that it contains about 300 elephants (Ali, pers. comm., 2016). This **informed guess** replaces an old total count estimate of 12 for the neighboring Shire and Tekezze Valley areas (Litoroh, 1997b).

It is estimated that there are 20 elephants in the Alitash National Park (Ali, pers. comm., 2016). This is likely to be a transfrontier population with Dinder National Park in Sudan. There was no estimate for this population in the AESR 2007. An area of **possible range** has been added.

There is an **informed guess** of 20 elephants close to the Sudanese border in the Dabus Valley Controlled Hunting Area on the Blue Nile (Ali, pers. comm., 2016). This replaces a guess of 200 from 1998 (Abdi, pers. comm., 1998).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	550	—	—	—	6 %	1,231
Informed Guesses	467	—	1,160	1,160	78 %	17,367
Totals 2015	**1,017**	**0**	**1,160**	**1,160**		
Totals 2006	**310**	**0**	**1,453**	**1,453**		
Assessed Range					84 %	18,598
Unassessed Range					16 %	3,666
Total Range					100 %	22,264

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Population	0	0	+70	+70	18 %	4,095
Different Technique	+606	0	-200	-200	14 %	3,028
Different Area	+411	0	-447	-447	8 %	1,806
New Guess	-310	0	+284	+284	43 %	9,668
Totals	+707	0	-293	-293	84 %	18,598

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	1,231	0	1,231
Informed Guesses	8,911	8,456	17,367
Unassessed Range	782	2,885	3,666
Totals	10,923	11,341	22,264

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS	SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE ± 95% CL			(km²)	LON	LAT
Alitash National Park	NP	O	D	2015	20	Ali, pers. comm., 2016	1	2,600	35.8°E	12.3°N
Babile Elephant Sanctuary	NG	O	D	2015	250	Ali, pers. comm., 2016	1	6,982	42.5°E	8.6°N
Chebera Churchura National Park	NG	O	D	2015	420	Ali, pers. comm., 2016	1	3,160	36.7°E	6.9°N
Dabus Valley Controlled Hunting Area	NG	O	D	2015	20	Ali, pers. comm., 2016	1	2,127	35.1°E	10.6°N
Gambella	DT	AS	D	2015	606	Mönico & Schapira, 2015	1	19,366	34.1°E	7.6°N
Geralle National Park	NP	O	D	2015	50	Ali, pers. comm., 2016	1	4,212	40.1°E	4.5°N
Kafta-Sheraro National Park	NG	O	D	2015	300	Ali, pers. comm., 2016	1	1,130	37.2°E	14.2°N
Mago National Park	DA	O	D	2015	80	Ali, pers. comm., 2016	1		36.2°E	5.6°N
Mizan Teferi Controlled Hunting Area	NG	O	D	2015	20	Ali, pers. comm., 2016	1	3,160	35.7°E	7.4°N
Omo National Park	DA	O	D	2014	411	Chase et al., 2014	1	3,146	35.7°E	5.7°N

RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
—: No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess; Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Ethiopia

0 100 200 300 400 500 600km

ABBREVIATIONS AND ACRONYMS

Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

AfESG

AFRICAN ELEPHANT STATUS REPORT 2016

COUNTRY

Kenya

ESTIMATED TOTAL ELEPHANTS

22,809 ± 0

GUESSES

8,023 - 8,090

GENERAL STATISTICS

Country Area	582,650 km²
Range Area	130,725 km² (22%)
Protected Range	27%
Information Quality Index (IQI)	0.59
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

There was an upsurge in poaching between 2008 and 2012, particularly in Laikipia-Samburu and Tsavo. This had reduced by 2014-15 due to improved law enforcement, and increased penalties for illegal killing of endangered species, including elephants laid out in a new Wildlife Conservation and Management Act (Republic of Kenya, 2013).

In 2012, Kenya adopted the Conservation and Management Strategy for the Elephant in Kenya, 2012 -2021 (Litoroh et al., 2012).

In analyses of seizure data in ETIS, prepared for CITES, Kenya was identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). Kenya was requested by the CITES Standing Committee, at its 65th meeting, to prepare a National Ivory Action Plan, which was submitted to CITES in 2015, and is now in the process of being implemented (CITES, n.d.-a).

In July 2011, Kenya destroyed approximately 5 tonnes of ivory from its national stockpile (BBC News, 2011). In February 2015, Kenya destroyed approximately 15 tonnes of ivory from its national stockpile (BBC News, 2015a) and in April 2016 destroyed a further 105 tonnes of ivory (Gettleman, 2016).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Kenya is 22,809 at the time of the last survey for each area. There may be an additional 8,023 to 8,090 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 104,711 km², which is 80% of the estimated known and possible elephant range. There remains an additional 20% of the estimated range for which no elephant population estimates are available.

Since the AESR 2007, a decrease of about 1,200 elephants has been recorded in population estimates from surveys and an increase of about 1,500-2,400 in guesses. This is largely because of the degrading of data quality from old forest surveys, rather than any real population changes. There was an increase of about 1,100 elephants in areas where repeat surveys had been carried out.

Tsavo National Park and its surrounding areas have the largest elephant population in Kenya. Total and sample aerial counts were carried out nearly simultaneously in 2014 as part of the Great Elephant Census. The **aerial sample count** gave an estimate of 14,087 ± 21% (Chase et al., 2014b) compared to the aerial total count of 11,158 (Kyale et al., 2014). Although sample counts generally give more accurate results than total counts, the total count has been used for consistency with previous estimates. This replaces an estimate from an aerial total count in 2005 of 10,397 elephants (Omondi & Bitok, 2005). An aerial total count was also carried out in 2011, which gave an estimate of 12,182 (Ngene et al., 2013b).

At the end of 2015, there were 1,656 **individually registered** elephants in the Amboseli ecosystem (Fishlock, pers. comm., 2016) compared to 1,417 at the end of 2005 (Poole, pers. comm., 2006). This apparent stability conceals substantial drought mortality in 2009 followed by rapid growth - there has been very little poaching. An aerial total count in 2013 gave an estimate of 1,281 (Kenana et al., 2013) and aerial sample count in 2014 gave an estimate of 1,736 ± 77% (Chase et al., 2014b).

There has been an increase in the number of elephants seen in the Magadi area (which includes part of the Nguruman Hills) together with an expansion of range. Four hundred and forty nine elephants were counted in 2013 in an **aerial total count** (Kenana et al., 2013). This replaces a guess of 120-150 for the Ngurumans from 2005 (Mwathe et al., 2006).

An **aerial total count** of the Masai Mara ecosystem was carried out in 2014 as part of the Great Elephant Census (Mduma et al., 2014) giving an estimate of 1,428 elephants. This replaces a comparable estimate of 2,116 from 2002. However, there was another aerial total count in 2010 which gave a surprisingly high estimate of 3,069 (Kiambi et al., 2012). There were high levels of illegal killing in the Mara ecosystem, which peaked in 2012 (Poole et al., 2016). Elephants move between the Masai Mara and Serengeti National Park in Tanzania (Poole et al., 2016).

The elephants in the TransMara forests to the west of the Masai Mara have come under severe pressure as a result of deforestation and their range has reduced. It is now guessed that there are only 100 elephants in the area (Sitati, pers. comm., 2016) compared to an informed guess of 513 ± 49 from a dung count carried out in 2007 (Sitati & Bitok, 2007). This new **informed guess** replaces one of 200 ± 139 from 1997 (Wamukoya et al., 1997).

There is no new information on elephant numbers from the Mau Forest Complex to the north of the Masai Mara and a guess of 1,003 from the early 1990s has been retained but its reliability degraded due to age (Njumbi et al., 1995). It is likely that there has been a significant reduction in elephant numbers in this area, due to parts of the forest being converted to agriculture.

An **aerial total count** of the Laikipia-Samburu ecosystem was carried out in 2012 which gave an estimate of 6,365 elephants (Ngene et al., 2013a). This replaces another total count estimate of 5,447 from 2002 (Omondi et al., 2002a), although the population estimate had risen to 7,415 in 2008 (Litoroh et al., 2010). The decline between 2008 and 2012 was associated with high reported poaching levels from 2008 to 2014 as well as a drought in 2009 (Ngene et al., 2013a). A combined total and sample count was carried out as part of the Great Elephant Census in 2015, giving an estimate of 7,134 ± 786 (Chase et al., 2014b). However, this survey differed both in methodology and area from previous surveys of the ecosystem, so is not directly comparable.

The old estimate for Loroki Forest, which is part of the Laikipia-Samburu ecosystem, has been replaced by a **other guess** of zero (Thouless, pers comm., 2016) since most of the elephants present in the forest in the dry season would probably have been counted in the wet season surveys of surrounding areas.

Range expansion has taken place in the north-east of the Laikipia-Samburu ecosystem, linked to the development of community based conservation and the recovery of elephants from the poaching of the 1970s to 1980s, which eliminated them from the area (Douglas-Hamilton, pers. comm., 2016b).

A **dung count** was carried out of Mt Marsabit in 2014, giving an estimate of 100 (72–139) elephants (Kiambi et al., 2014). This replaces an informed guess of 150 (Omondi, pers. comm., 2006). Eighty six elephants were counted in an aerial total count in 2012 (Ngene et al., 2013a) and 55 were seen in an aerial total count carried out as part of the Great Elephant Census in 2015 (Chase et al., 2016).

An **aerial total count** was carried out of the core of the Meru ecosystem in 2015 as part of the Great Elephant Census, giving an estimate of 659 animals (Chase et al., 2016). This replaces an estimate of 377 from an aerial total survey in 2002 (Omondi et al., 2002c) although an aerial total count in 2007 gave a total of 747 elephants (Mwangi et al., 2007). It is unlikely that there are significant numbers of elephants left in Kora National Park and Rahole National Reserve but there is a new **guess** of zero (Kiambi, 2016) and an estimate of 27 from 2007 (Mwangi et al., 2007) for these areas.

No detailed survey of the Mt Kenya National Park and Forest Reserve has been carried out since the **dung counts** carried out by Vanleeuwe (2004) which gave an estimate of 2,911 ± 640. This figure is being retained, in preference to a survey from 2009 (Ngoru et al., 2009), which was probably an over-estimate since reconnaissance data was analysed as line transect data. There has never been a full survey of the Aberdares National Park and the surrounding forests, including the Kipipiri Forest Reserve and the combined estimate of 3,553 from the AESR 2007 has been retained (Bitok & Kones, 2005) although this is also likely to be an over-estimate for the same reason as the 2009 Mt Kenya survey.

An **aerial total count** of the small fenced population of elephants in the Mwea National Reserve was carried out as part of the Great Elephant Census in 2016, giving an estimate of 71 elephants (Chase et al., 2016), replacing a ground count estimate of 55 from 1998 (Managene & Musoki, 1998). Another aerial total count in 2012 found 90 elephants (Ngene et al., 2012).

There are a number of small coastal elephant populations, which are difficult to count because they inhabit densely forested areas. An **aerial total count** of Shimba Hills National Reserve, Mkongani Forest Reserve and Mwaluganje Elephant Sanctuary was carried out in 2012, giving an estimate of 274 individuals (Ngene & Mukeka, 2012). This replaces an estimate of 649 ± 151 from a dung count carried out in 2002 (Litoroh, 2002a). One hundred and fifty elephants were translocated out of the Shimba Hills to Tsavo NP after the 2002 survey (Pinter-Wollman et al., 2009).

The Arabuko-Sokoke Forest Reserve is now fenced. The old estimate of 184 ± 43 from a dung count carried out in 2002 has been retained but degraded due to age (Litoroh, 2002b).

A small population of elephants lives in Lamu District along the lower reaches of the Tana River and be-tween the river and the Somali border. An **aerial total count** was carried out as part of the Great Elephant Census in 2015 (Chase et al., 2016) and 60 elephants were counted. However, it is difficult to count elephants in thick woodland, so there may be more elephants here. This replaces a series of guesses amounting to 182 elephants (Knocker, pers. comm., 2003, 2005; Litoroh, pers. comm., 2003). At least one elephant has moved from this area to just across the border in Somalia (Douglas-Hamilton, pers. comm., 2016a).

A **total aerial count** was carried out of the Kerio Valley, and the Nasalot and South Turkana National Reserves in western Kenya in 2015 (Chase et al., 2016). Three hundred and eleven elephants were seen in the Kerio Valley and 351 in South Turkana (total 662). This replaces an estimate of 490 for the whole area in 2002 (Omondi et al., 2002b). Another total aerial count in 2010 gave an estimate of 362 elephants (Edebe et al., 2010). Since the area between South Turkana NR and the Kerio Valley is heavily settled, and no elephants have been seen here in recent surveys, it has been changed to **possible range**.

No systematic surveys have been carried out in the Mt Elgon forests bordering Uganda since the last update. However there are currently thought to be about 200 elephants (Redmond, 2015), compared to a guess of 139 from 2002 (Bitok, pers. comm., 2002).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	21,153	–	–	–	70 %	91,227
Individual Registrations	1,656	–	–	–	3 %	3,553
Informed Guesses	0	–	372	439	3 %	4,465
Degraded Data	–	–	7,651	7,651	4 %	5,466
Totals 2015	**22,809**	**0**	**8,023**	**8,090**		
Totals 2006	**23,994**	**641**	**6,012**	**7,000**		
Assessed Range					80 %	104,711
Unassessed Range					20 %	26,014
Total Range					100 %	130,725

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+1,142	0	0	0	56 %	72,559
New Population	+89	0	0	0	1 %	1,539
Different Technique	+779	0	-513	-476	8 %	10,548
Different Area	-6	0	-100	-100	8 %	11,021
New Guess	-94	0	-60	-60	3 %	3,577
Data Degraded	-3,095	±641	+3,095	+2,137	0 %	0
Totals	-1,185	±641	+2,422	+1,501	76 %	104,711

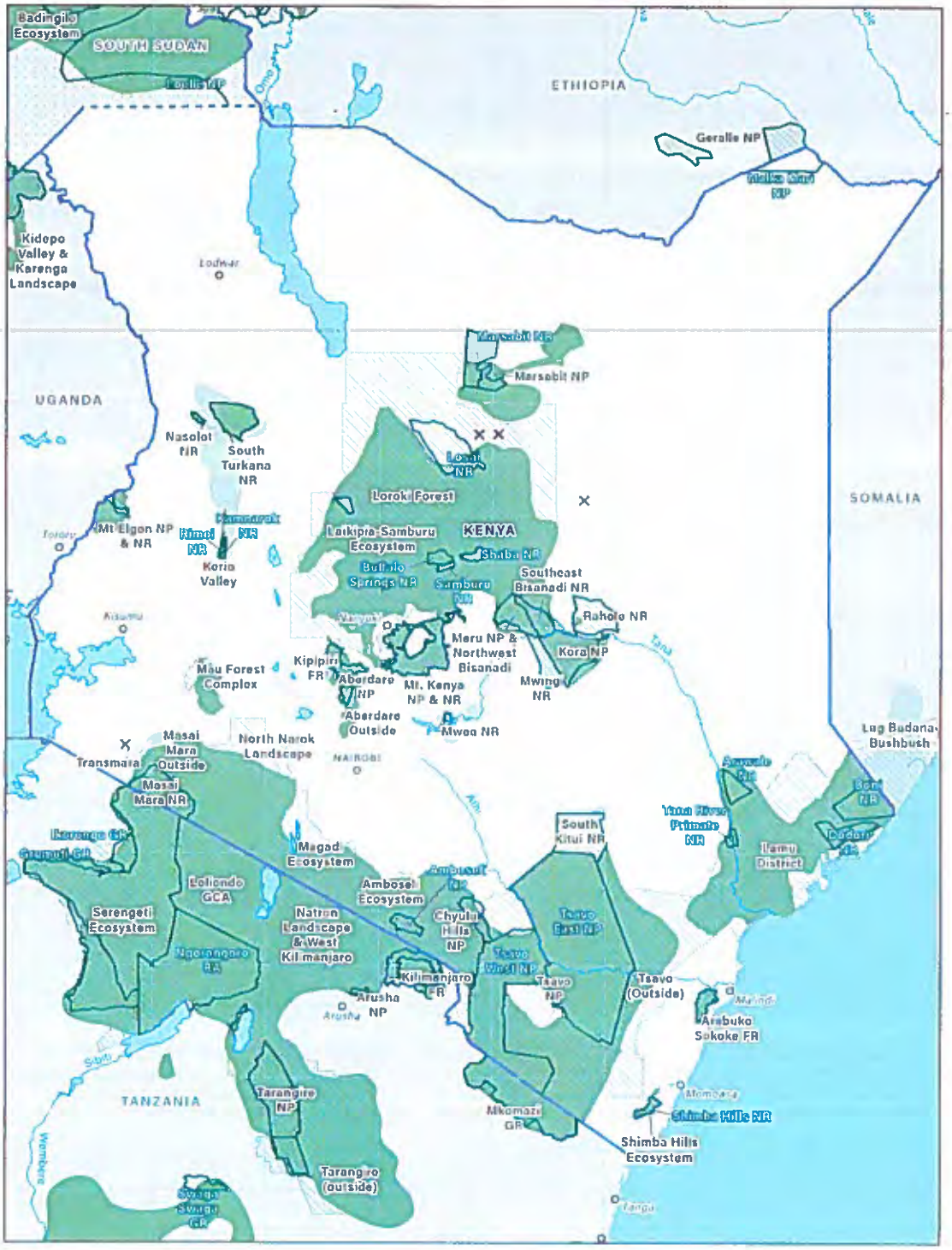
AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	93,803	977	94,780
Informed Guesses	4,465	0	4,465
Other Guesses	5,423	43	5,466
Unassessed Range	20,247	5,767	26,014
Totals	123,937	6,787	130,725

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Aberdares											
Aberdare National Park	-	O	E	2005	1,840	461*	Bitok & Kones, 2005	2	767	36.7°E	0.4°S
Aberdare Outside	-	O	E	2005	1,700	472*	Bitok & Kones, 2005	2	663	36.7°E	0.6°S
Kipipiri Forest Reserve	-	O	E	2005	13	25*	Bitok & Kones, 2005	3	43	36.6°E	0.4°S
Amboseli Ecosystem	DT	IR	A	2015	1,656		Fishlock, pers. comm., 2016	2	5,547	37.3°E	2.5°S
Arabuko Sokoke Forest Reserve	-	DC	E	2002	184	43	Litoroh, 2002b	3	415	39.9°E	3.3°S
Kerio Valley	RS	AT	A	2015	311		Chase et al., 2016	3	122	36.7°E	0.6°N
Laikipia-Samburu Ecosystem	RS	AT	A	2012	6,365		Ngene et al., 2013a	1	35,247	37.3°E	1.0°N
Lamu District	DA	AT	A	2015	60		Chase et al., 2016	1	15,363	36.7°E	0.6°N
Loroki Forest	NG	O	D	2015	0		Thouless, pers. comm., 2016	2	596	36.8°E	1.1°N
Magadi Ecosystem	DT	AT	A	2013	449		Kenana et al., 2013	2	6,348	36.9°E	2.4°S
Mara Ecosystem											
Masai Mara National Reserve	RS	AT	A	2014	876		Mduma et al. 2014	2	1,509	35.6°E	1.3°S
Masai Mara Outside	RS	AT	A	2014	532		Mduma et al. 2014	2	1,978	35.6°E	1.3°S
North Narok Landscape	NP	AT	A	2014	20		Mduma et al. 2014	2	310	35.9°E	1.1°S
Transmara	DT	O	D	2015	100		Sitati, pers. comm., 2016	3	320	34.9°E	1.2°S
Marsabit	DT	DC	D	2014	100	39	Kiambi et al., 2014	3	137	38.0°E	2.3°N
Mau Forest Complex	-	DC	E	1995	1,003		Njumbi, et al., 1995	2	1,267	35.5°E	0.5°S
Meru Ecosystem											
Kora National Park	NG	O	D	2014	0		Kiambi, 2016	2	1,618	38.7°E	0.2°S
Meru National Park and Northwest Bisanadi	DT	AT	A	2015	659		Chase et al., 2016	2	1,005	36.7°E	0.6°N
Mwingi National Reserve	RS	AT	A	2007	0		Mwangi et al., 2007	3	682	37.6°E	0.1°N
Rahole National Reserve	NP	AT	A	2007	27		Mwangi et al., 2007	2	1,477	37.6°E	0.1°N
Southeast Bisanadi National Reserve	DT	O	D	2014	0		Kiambi, 2016	3	593	39.4°E	0.1°N
Mt Elgon National Park & National Reserve	NG	O	D	2015	200		Redmond, pers. comm., 2015	2	1,083	34.6°E	1.0°N
Mt Kenya National Park & National Reserve	-	DC	E	2001	2,911	640	Vanleeuwe, 2004	2	2,007	37.4°E	0.2°S
Mwea National Reserve	DA	AT	A	2015	71		Chase et al., 2016	4	79	36.7°E	0.6°N
Nasolot and S. Turkana	RS	AT	A	2015	351		Chase et al., 2016	3	581	36.7°E	0.6°N
Shimba Hills Ecosystem	DT	AT	A	2012	274		Ngene & Mukeka, 2012	3	274	39.4°E	4.3°S
Tsavo Ecosystem											
Chyulu National Park	NP	AT	A	2014	42		Kyale et al., 2014	3	1,180	38.5°E	2.9°S
South Kitui National Reserve	RS	AT	A	2014	0		Kyale et al., 2014	2	1,930	38.5°E	2.9°S
Tsavo National Park	RS	AT	A	2014	9,504		Kyale et al., 2014	1	20,432	38.5°E	2.9°S
Tsavo (Outside)	RS	AT	A	2014	1,612		Kyale et al., 2014	1	21,081	38.5°E	2.9°S

Kenya



0 50 100 150 200 250 300km

ABBREVIATIONS AND ACRONYMS

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

AfESG

COUNTRY

Rwanda

ESTIMATED TOTAL ELEPHANTS

88 ± 0

GUESSES

37 - 37

GENERAL STATISTICS

Country Area	26,340 km²
Range Area	1,079 km² (4%)
Protected Range	100%
Information Quality Index (IQI)	0.70
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Rwanda is one of Africa's smallest and most densely populated nations and there is little space for wildlife. Only two fragments of elephant range remain: the Akagera National Park on the north-eastern border with Tanzania, to which elephants were translocated in the mid-1970s, and the Volcans National Park on the northern border with the DRC. In 2010, the African Parks Network took over responsibility for the management of Akagera NP (Sullivan, 2014).

Rwanda published an elephant conservation plan in 1991, although this is now 25 years out of date (Office Rwandais du Tourisme et des Parcs Nationaux, 1991).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years and at the time of the last survey in Rwanda is 88. There may be an additional 37 elephants in an area not systematically surveyed. This guess likely represents a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 1,079 km², which is the entirety of the estimated known and possible elephant range.

There have been minor changes in elephant population estimates in Rwanda since AESR 2007. The Akagera population appears to be stable or increasing, although survey methodologies have not been consistent.

NUMBERS AND DISTRIBUTION
CONT.

After the elephant population of Akagera NP in eastern Rwanda was eliminated in the early 1960s, 22 elephants were translocated to Akagera NP from Bugusera, south of Kigali (Van de Weghe, 1990). The number of elephants subsequently increased, despite a reduction in the size of the park. The most recent survey, an **aerial total count** carried out in 2013 (Macpherson, 2013a), provided an estimate of 88 individuals. This replaces a guess of 34-80 from 2002 based on an aerial sample count (Lamprey, 2002). A sample count in 2010 gave an estimate of 27 individuals (Viljoen, 2010). A dung count was also conducted in 2006 (Parker, 2006); the elephant population estimate for the lakeside stratum was 28 (17-45). Due to a low dung encounter rate, it was not possible to calculate dung density and elephant numbers for the highland stratum. Elephants used to move between Akagera and Ibanda, Burigi and Biharamulo in Tanzania, but their passage was restricted by high levels of refugee settlement on the Tanzanian side starting in the mid-1990s (TAWIRI, 2015c) and it is unlikely that such movements continue.

The estimate of 37 for the Volcans NP has been retained (Gray, pers. comm., 2005) but degraded due to age. The range has been left as known because of recent reports that there are still elephants (Kanyesigye, 2013), and confirmed records just across the border in Virunga NP in DRC.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	88	–	–	–	78 %	840
Degraded Data	–	–	37	37	21 %	226
Totals 2015	**88**	**0**	**37**	**37**		
Totals 2006	**34**	**0**	**37**	**83**		
Assessed Range**					99 %	1,066
Unassessed Range					1 %	13
Total Range					100 %	1,079

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Different Technique	+54	0	0	-46	78 %	840
Data Degraded	0	0	0	0	0 %	0
Totals	+54	0	0	-46	78 %	1,066

AREA OF RANGE COVERED BY EACH DATA CATEGORY

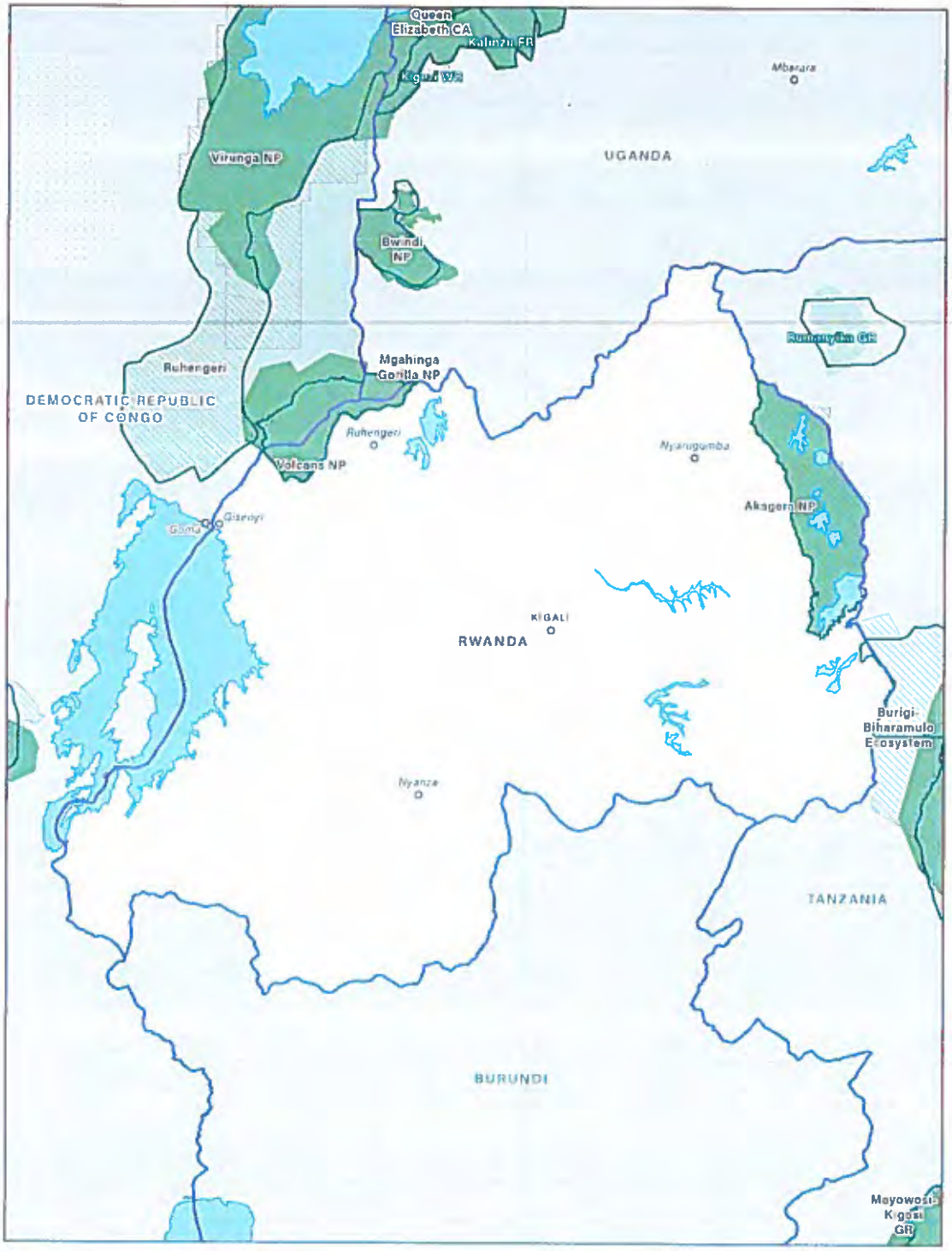
DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	840	0	840
Other Guesses	226	0	226
Unassessed Range	13	0	13
Totals	1,079	0	1,079

***This country is known to have 100% assessed range. Differences in table values exist due to minor variations between map layers.*

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS	SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	PERIOD	YEAR	ESTIMATE	± 95% CL			(km²)	LON	LAT
Akagera National Park	DT	AT	A	2013	88		Macpherson 2013a	1	1,087	30.7°E	1.7°S
Volcans National Park	-	O	E	2003	37		Gray, pers comm., 2005	1	150	29.5°E	1.5°S

Rwanda



0 15 30 45 60 75 90km

ABBREVIATIONS AND ACRONYMS

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

Somalia

ESTIMATED TOTAL ELEPHANTS

0 ± 0

GUESSES

70 - 70

GENERAL STATISTICS

Country Area	637,660 km²
Range Area	4 525 km² (1%)
Protected Range	0 %
Information Quality Index (IQI)	0.00
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Ongoing political instability in Somalia has made conservation assessment work impossible for over 25 years, and it is not known whether there is still a resident elephant population in the country.

It has been suggested that the Al-Shabaab insurgents derive much of their income from the illegal ivory trade. However, a detailed review in 2015 indicated that any Al-Shabaab involvement in the ivory trade is likely to have been opportunistic, ad hoc and small-scale (Maguire & Haenlein, 2015). Ivory was reported to be openly for sale in Mogadishu in 2015 (Amir, pers. comm., 2016).

Somalia published an elephant conservation plan in 1991 (National Range Agency, 1991) and it has not been updated since.

NUMBERS AND DISTRIBUTION

It is unknown whether there is still a resident elephant population in Somalia. There may be 70 elephants in areas not systematically surveyed. This guess applies to 3,089 km², which is 68% of the estimated known and possible elephant range. There remains an additional 32% of the estimated range for which no elephant population estimates are available.

There is only one area, in the far south of the country and adjacent to the border with Kenya, which remains categorised as possible range while the Juba and Webi Shabeelli valleys remain as doubtful range.

NUMBERS AND DISTRIBUTION CONT.

The only estimate remaining, for Lag Badana-Bushbush (Bauer, pers. comm., 1995), has already been degraded to the category of 'other guess'. Local residents reported in 2016 that elephants were regular visitors to the area, but not resident (Amir et al., 2016). A collared elephant from Kenya moved briefly into the border regions of Somali in 2016 (Douglas-Hamilton, pers. comm., 2016a). Press reports in 2015 suggested that security operations in the Boni-Dodori area of Kenya had driven elephants north into Somalia (Mohamed, 2015).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Degraded Data	--	--	70	70	68 %	3,089
Totals 2015	**0**	**0**	**70**	**70**		
Totals 2006	**0**	**0**	**70**	**70**		
Assessed Range					68 %	3,089
Unassessed Range					32 %	1,436
Total Range					100 %	4,525

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	METHOD	YEAR	ESTIMATE	± 95% CL			(km²)	LON	LAT
Lag Badana Bushbush	-	O	E	1995	0	70	Bauer, pers. comm., 1995	1	4,500	41.7°E	1.1°S

RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DI: Different Interpretation; NA: New Analysis; NS: New Species; NF: Range Expansion; PI: Poor Initial Estimate; RS: Repeat Survey (RS+ denotes increase, RS- denotes decrease); UC: Unspecified Change; UI: Unspecified Correction; -: No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DS: Dung Count; GD: Guidance Data; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; II: Individual Interpretation; OG: Other Guess; Survey Methods + Good A.E. Data Available

PFS

Priority for Future Survey (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range at country for by the site in question, PFS is the measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Somalia

0 70 140 210 280 350 420km

ABBREVIATIONS AND ACRONYMS

See Appendix III for map abbreviations and acronyms

AfESG

African Elephant Specialist Group

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE

Known
Possible
Doubtful
Sighting

COUNTRY

South Sudan

ESTIMATED TOTAL ELEPHANTS

7,103 ± 5,911

GUESSES

0 - 0

GENERAL STATISTICS

Country Area	619,745 km²
Range Area	309,811 km² (50%)
Protected Range	26%
Information Quality Index (IQI)	0.23
CITES Appendix	N/A
Listing Year	-

CURRENT ISSUES

South Sudan acquired its independence from Sudan in 2011, after a long running civil war which ended in 2005. Efforts were made by the new country to develop a conservation programme and to support protected areas, but these were suspended when a new civil war broke out in 2013. A series of surveys, which took place from 2007-2010, gave hope that more elephants had survived than was previously thought, but there may have been a reduction in numbers thereafter. A third of the 60 elephants collared by the Wildlife Conservation Society from 2010 were believed to have been poached (Russo, 2014).

An elephant conservation plan was developed for Sudan in 1991 (Winter, 1991), but this has not been updated or replaced and there is no current plan for South Sudan.

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in South Sudan is 7,103 ± 5,911 at the time of the last survey for each area. This estimate applies to 129,362 km², which is 42% of the estimated known and possible elephant range. There remains an additional 58% of the estimated range for which no elephant population estimates are available.

In the AESR 2007, no survey results were reported for Sudan except for a guess for Nimule National Park, so there is no information on change in numbers. Results from the 2007-2010 aerial surveys have allowed a more accurate delineation of range in the eastern part of the country. There is less certainty about range in the west since the surveys were less extensive in this area. With the

outbreak of civil war in late 2013, further survey work was no longer possible, and the planned surveys supported by the Great Elephant Census could not be carried out.

The largest surviving elephant population is in the Jonglei ecosystem, covering the Sudd swamplands of the White Nile. A low-intensity **aerial sample count** in 2007 gave an estimate of 5,462 ± 5,644 elephants (Fay et al., 2007). A sample count was carried out in 2010 of Shambe, a previously unsurveyed area to the south-east of the Sudd. Only five elephants were seen in transects so no estimate was given, but a total of 135 elephants was observed and entered as an **informed guess** (Grossman et al., 2011).

Boma National Park is in the south-east of the country, close to the Ethiopian border. An **aerial sample count** in 2007 gave an estimate of 606 ± 836 elephants (Fay et al., 2007). Radio-collared elephants have moved between Gambella National Park in Ethiopia and the area immediately north of Boma (Rolkier, 2015) and it is possible that elephants have been double-counted on both sides of the border. No elephants were observed in the Badingilo ecosystem to the west during the 2009 survey, but there were many tracks, suggesting that elephants use this area in the wet season (Grossman et al., 2011).

A few elephant signs were seen in 2008 in the Kidepo Game Reserve on the Ugandan border, suggesting that the elephants from this principally Ugandan population occasionally cross the border (Grossmann et al., 2008).

Nimule National Park is a small park on the White Nile, contiguous with the Ugandan border. A total aerial count in 2008 gave a minimum of 69 elephants (Grossmann et al., 2008), and a **dung count** from 2010-2012 indicated a population of 118 (47 to 297) (Tomor, 2015). This dung count replaces the 300 estimated in 2002 (Ojok, pers. comm., 2002) for the AESR 2007. Elephants move from here to the Otze Forest in Uganda (Tomor, 2015).

Southern National Park is in the south-west of the country. An **aerial sample count** in 2007 gave an estimate of 782 ± 1,425 elephants (Fay et al., 2007). This shows a significant reduction from the estimated 15,000 elephants in the area in the late 1970s (Boitani, 1981).

There have been recent camera trap photographs of what appear to be forest elephants in Western Equatoria (Flora & Fauna International, 2015). This is shown on the range map as a point record, with an approximate location.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Sample Counts	6,850	5,911	–	–	35 %	109,417
Reliable Dung Counts	118	–	–	–	0 %	132
Informed Guesses	135	–	0	0	6 %	19,813
Totals 2015	**7,103**	**5,911**	**0**	**0**		
Totals 2006	**20**	**0**	**280**	**280**		
Assessed Range					42 %	129,362
Unassessed Range					58 %	180,449
Total Range					100 %	309,811

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Population	+6,985	±5,911	0	0	42 %	129,230
Different Technique	+98	0	-280	-280	0 %	132
Totals	+7,083	±5,911	-280	-280	42 %	129,362

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	95,130	14,419	109,549
Informed Guesses	19,813	0	19,813
Unassessed Range	74,975	105,474	180,449
Totals	189,918	119,893	309,811

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON	LAT
Badingilo-Boma Corridor	NP	AS	B	2009	0		Grossmann et al., 2011	2	10,468	33.2°E	5.9°N
Badingilo Ecosystem	NP	O	D	2009	0		Grossmann et al., 2011	2	16,897	31.9°E	5.8°N
Boma National Park	NP	AS	B	2007	606	836	Fay et al., 2007	1	30,801	34.0°E	6.7°N
Jonglei Ecosystem	NP	AS	B	2007	5,462	5,644	Fay et al., 2007	1	70,456	32.9°E	7.0°N
Kidepo Game Reserve	NP	AS	B	2008	0		Grossman et al., 2008	2	530	33.4°E	4.0°N
Nimule National Park	DT	DC	B	2012	118	179	Tomor, 2015	5	400	32.0kE	3.7°N
Shambe Area	NP	O	D	2010	135		Grossmann et al., 2011	2	13,610	30.7°E	7.0°N
Southern National Park	NP	AS	B	2007	782	1,425	Fay et al., 2007	1	26,711	28.7°E	6.3°N

*RANGE OF INFORMED GUESS

*KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).

— : No Change

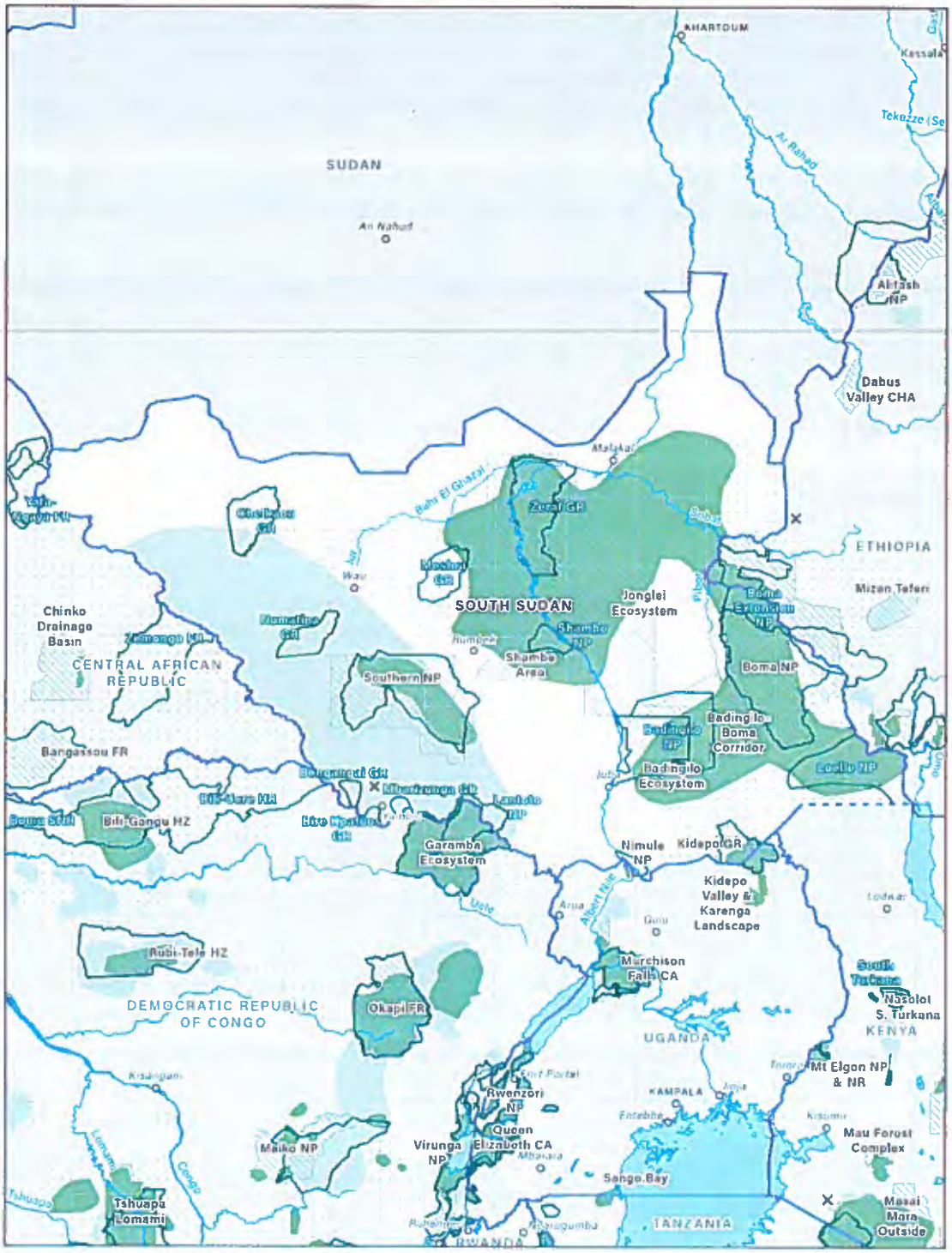
*KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

*PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

South Sudan



0 90 180 270 360 450 540km

ABBREVIATIONS AND ACRONYMS

AfESG

AFRICAN ELEPHANT STATUS REPORT 2016

Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

Tanzania

ESTIMATED TOTAL ELEPHANTS

50,433 ± 8,502

GUESSES

1,930 - 1,930

GENERAL STATISTICS

Country Area	945,090 km²
Range Area	389,921 km² (41%)
Protected Range	43%
Information Quality Index (IQI)	0.58
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Tanzania still has important elephant populations, a large elephant range and significant coverage of protected areas, despite heavy losses of elephants in the west and south of the country. With a rapidly growing human population, the country faces serious challenges in conserving elephant populations. The loss of connectivity between core wildlife habitat areas is a growing concern as corridors are becoming blocked by expanding agriculture, human settlements and livestock grazing, and destruction of habitats for logging and charcoal production (TAWIRI, 2010).

In response to the poaching crisis, Tanzania adopted a national strategy to combat poaching and illegal wildlife trade in 2014 (Ministry of Natural Resources and Tourism, 2014). The country launched a major anti-poaching operation - Operation Tokomeza, in 2013, which was halted after a few months due to allegations of human rights abuses (Legal and Human Rights Centre, 2015). In 2015 there were significant successes in anti-trafficking efforts, with some arrests of middlemen and poachers (John, 2016; Saria & Tesha, 2016).

Tanzania's most recent conservation plan, the Tanzania Elephant Management Plan, covered the period from 2010 to 2015 (TAWIRI, 2010).

In recent analyses of seizure data in ETIS, prepared for CITES, Tanzania was identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). Tanzania was requested by the CITES Standing Committee to prepare a National Ivory Action Plan. The plan was finalized in May 2013, and a number of progress reports have been submitted to CITES (CITES, n.d.-a). Information from DNA analyses have indicated that

ivory from many large-scale ivory seizures has originated from Tanzania (Milliken et al., 2013; Wasser et al., 2015).

Tanzania is the only country in Eastern Africa with active legal trophy hunting of African elephants, declaring an annual export quota of 400 tusks (as hunting trophies from 200 animals) from 2007 to 2013, and a decreased annual quota of 200 tusks (as hunting trophies from 100 animals) in 2014 and 2015. The United States and the European Union have suspended imports of elephant trophies from Tanzania (EU, 2015; USFWS, 2015b).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Tanzania is 50,433 ± 8,502 at the time of the last survey for each area. There may be an additional 1,930 elephants in areas not systematically surveyed in the country. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 273,031 km^2, which is 70% of the estimated known and possible elephant range. There remains an additional 30% of the estimated range for which no elephant population estimates are available.

Tanzania has lost the majority of its estimated elephant population in the last ten years, with a reduction of more than 90,000 elephants from areas with repeat surveys. Some doubts have been expressed about the previous high estimates, particularly in the Selous and Ruaha-Rungwa ecosystems, but even so, there has been a large decline in numbers as a result of poaching for ivory.

Substantial changes have been made to the range map, primarily resulting from better knowledge coming from survey work done by the Tanzania Mammal Atlas Project (Foley, pers. comm., 2016). These include an increase in **known range** in the Longido area to the north, continuous range between Saadani National Park and Mikumi National Park and an extension of **known range** in the west towards Mahale National Park and south towards Zambia.

A 2014 **aerial sample count** of the Moyowosi-Kigosi ecosystem as part of the Great Elephant Census gave an estimate of 1,645 ± 2,389 (TAWIRI, 2015d), which replaces an estimate of 9,541 ± 3,657 in 2006 (TAWIRI, 2007b). To the south is the Sagara-Nyamagoma ecosystem, and the same survey gave an estimate of 503 ± 592, which replaces the 2007 estimate of 4,635 ± 3,028 (Tanzania Wildlife Research Institute, 2007). For Ugalla Game Reserve the estimate was 659 ± 549, with a very high carcass ratio of 26%, which replaces the 2007 figure of 4,133 ± 1,778 (TAWIRI, 2007b). For areas outside Ugalla Game Reserve, an estimate of 146 ± 278 replaces 1,352 ± 837 (TAWIRI, 2007b). Not all of these areas show a statistically significant decline, but the combined results point to a collapse in elephant numbers.

The 2014 **aerial sample count** of Katavi National Park and Rukwa Game Reserve, part of the Great Elephant Census (TAWIRI, 2015a) gave an estimate of 5,738 ± 2,993 for the entire ecosystem. This estimate replaces one of 6,261 ± 1,344 from 2006 (TAWIRI, 2007b). However, it should be noted that the 'outside' survey covered a larger area in 2014 so this estimate is not directly comparable. Other surveys were carried out in 2009 giving an estimate of 6,396 ± 3,763 (TAWIRI, 2009b) and again in 2012 giving an estimate of 7,107 ± 5,149 (TAWIRI, 2015a). None of these surveys have

provided statistically different estimates, suggesting that the population has been relatively stable over this period. However, the carcass ratio of 10% in 2014 (TAWIRI, 2015a) is a cause for concern.

The 2015 **aerial sample count** of the Ruaha-Rungwa ecosystem gave an estimate of 14,283 ± 6,123 (TAWIRI, 2015f) which replaces the 2006 figure of 35,409 ± 11,507 (TAWIRI, 2007b). A high carcass ratio of 15% supported the evidence of a substantial decline in numbers (TAWIRI, 2015f). Two intermediate surveys were carried out. An aerial sample count conducted in 2013 gave an estimate of 20,090 ± 6,433 (TAWIRI, 2013b), with a carcass ratio of 15%. Another aerial sample count conducted in 2014 as part of the Great Elephant Census gave a much lower estimate of 8,272 ± 3,181 (TAWIRI, 2015f) and a carcass ratio of 29%. This is believed to have underestimated true numbers, as elephants appeared to have moved out of Ruaha-Rungwa to an area in the west which was not surveyed (TAWIRI, 2015f). A survey in 2009 gave an estimate of 34,664 ± 8,188 (TAWIRI, 2009b), indicating that the major decline took place after this date. The 2015 survey also covered the Itigi Extension, which had not previously been surveyed, giving an estimate of 1,553 ± 2,956.

Figures from two areas not surveyed in 2014 have been retained from the AESR 2007. These are a guess of 600 from the Inyonga Game Conservation Area between Rungwa and Rukwa from 2002 (Angelides, pers. comm., 2003) and a guess of 200-300 from the Piti East Hunting Block just to the south of Inyonga from 2002 (Hurt, pers. comm., 2002).

The **aerial sample count** of the Selous-Mikumi ecosystem carried out in 2014 as part of the Great Elephant Census gave an estimate of 14,040 ± 3,252 with a very high carcass ratio of 40% (TAWIRI, 2015b), which replaces the estimate of 70,406 ± 24,843 in 2006 (TAWIRI, 2007a). However, there are concerns that the 2006 survey may have been an over-estimate (TAWIRI, 2009a) and the confidence limits allow for a wide range of population values. Other surveys carried out in 2009 and 2013 gave estimates of 38,975 ± 5,182 with a 2% carcass ratio and 13,084 ± 3,559 with a 30% carcass ratio (TAWIRI, 2009a, 2013a). The combination of a reduction in estimates together with a high carcass ratio indicates that the Selous elephant population has been significantly reduced in the last ten years.

In 2014 there was an estimate of 16 ± 31 from an **aerial sample count** in the Masasi area south of Selous (TAWIRI, 2015b) and 1,161 ± 1,341 in the Selous Niassa corridor (TAWIRI, 2015b) which replace estimates of 1,076 ± 107 from 2000 (Mduma, pers. comm., 2002a) and 0 from 2000 (TAWIRI, 2001) respectively, although somewhat different areas were surveyed. There was an additional estimate for Selous Niassa, of 4,577 ± 1,126, from 2009 (TAWIRI, 2009a).

During the course of an **aerial sample count**, part of the Great Elephant Census, of the Burigi-Biharamulo ecosystem in 2014, no elephants were counted in the sampling strips, but a single observation was made of 110 elephants (TAWIRI, 2015c). This replaces a previous estimate of 761 ± 821 from 2000 (Mduma, pers. comm., 2002b). Another count was carried out in 2012 in which 30 elephants were seen (TAWIRI, 2013a). The area has been under constant threat since 1994, with refugee incursions and invasions by cattle (TAWIRI, 2015c).

An **aerial total count** of Tarangire National Park and surrounding areas in northern Tanzania

was carried out in 2014 as part of the Great Elephant Census, giving an estimate of 3,282 for the Tarangire NP and 797 for surrounding areas (TAWIRI, 2015e). These estimates replace 1,119 for the Tarangire NP and 183 for the surrounding areas from 2006 (TAWIRI, 2007b).

An additional 19 elephants were recorded for Mto wa Mbu, an area which had not previously been counted. The population increase is too high to be explained solely through natural increase, and is probably affected by immigration. Lake Manyara National Park was counted in the same **aerial total count** in 2014 (TAWIRI, 2015e) giving an estimate of 104, which replaces the previous estimate of 36 (TAWIRI, 2007b); there was also a count of 94 in 2009 (TAWIRI, 2009b).

An **aerial total count** of the Serengeti ecosystem was carried out as part of the Great Elephant Census in 2014, giving an estimate of 6,087 (Mduma et al., 2014) replacing the estimate of 1,472 from 2006 (TAWIRI, 2007b). An aerial total count in 2009 gave an estimate of 2,941 (TAWIRI, 2009b). Movement from Kenya's Masai Mara ecosystem may account for some of this increase, as well as higher intensity surveys, additional blocks counted and the possibility of immigration of elephants from unsurveyed adjoining areas. An **aerial total count** of the adjoining Loliondo Game Controlled Area gave a zero estimate in 2009 (TAWIRI, 2009b), compared to one of 88 in 2006 (TAWIRI, 2007b).

An **aerial total count** of the West Kilimanjaro/Lake Natron system, which connects with Amboseli in Kenya, was carried out in 2013 and gave an estimate of 200 elephants (Kenana et al., 2013). This replaces an aerial total count of 79 from 2002 (TAWIRI, 2003). An old guess of 793 for the adjoining Kilimanjaro Forest Reserve has been retained (Munishi & Maganga, 2003).

The Arusha NP elephant population was estimated at 200 individuals in 2014 (TAWIRI, 2015a), and was not in the AESR 2007, so it is recorded as a **new population**.

Mkomazi National Park shares an elephant population with the much larger Tsavo National Park in Kenya, and elephant numbers are affected by movements across the border. In 2014 an **aerial total count** gave an estimate of 59 (Kyale et al., 2014), which replaces a count of 41 from 2005 (Omondi & Bitok, 2005).

A single herd of 30 elephants was seen in the coastal Saadani NP in 2014 (TAWIRI, 2015a), replacing a previous guess of 55 from 1998 (Mduma, pers. comm., 2002b).

Rubondo Island in Lake Victoria has an introduced population of elephants. A **dung count** was conducted in 2014, resulting in an estimate of 102 ± 35 (Mwambola et al., 2016). This replaces a guess of 20 from 2002 (Borner, pers. comm., 2003).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	10,548	—	—	—	14 %	55,562
Aerial Sample Counts	39,745	8,502	—	—	52 %	201,377
Other Dung Counts	0	—	137	137	0 %	188
Informed Guesses	140	—	200	200	2 %	7,255
Degraded Data	—	—	1,593	1,593	2 %	8,649
Totals 2015	**50,433**	**8,502**	**1,930**	**1,930**		
Totals 2006	**136,753**	**27,936**	**2,013**	**2,313**		
Assessed Range					70 %	273,031
Unassessed Range					30 %	116,890
Total Range					100 %	389,921

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	-89,504	±28,943	-400	-600	56 %	218,050
New Population	+1,572	±2,956	+200	+200	1 %	2,865
Different Technique	-676	±821	+82	+82	1 %	3,539
Different Area	+2,288	±2,373	0	0	10 %	39,928
Data Degraded	0	0	0	-100	0 %	0
Totals	-86,320	±29,202	-118	-418	68 %	273,031

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	55,562	0	55,562
Direct Sample and Reliable Dung	201,377	0	201,377
Informed Guesses	7,255	0	7,255
Other Dung Counts	188	0	188
Other Guesses	8,649	0	8,649
Unassessed Range	116,639	0	116,890
Totals	389,670	0	389,921

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	95% CI			(km²)	LON.	LAT.
Arusha National Park	NP	O	D	2014	200		TAWIRI 2015a	4	322	36.8°E	3.2°S
Burigi-Biharamulo Ecosystem	DT	O	D	2014	110		TAWIRI 2015c	2	4,713	30.9°E	2.1°S
Inyonga Game Conservation Area	-	O	E	2002	600		Angelides, pers. comm. 2003	2	6,050	32.8°E	6.8°S
Katavi-Rukwa Ecosystem											
Katavi National Park	RS	AS	B	2014	3,128	1,944	TAWIRI 2015a	2	4,187	31.7°E	7.2°S
Katavi Rukwa (Outside)	DA	AS	B	2014	2,488	1,859	TAWIRI 2015a	2	11,673	31.7°E	7.2°S
Rukwa Game Reserve	RS	AS	B	2014	122	131	TAWIRI 2015a	2	4,092	31.7°E	7.2°S
Kilimanjaro Forest Reserve	-	O	E	2003	793		Mulnshi & Mugunga, 2003	3	499	37.2°E	3.0°S
Mkomazi Game Reserve	RS	AT	A	2014	59		Kyale et al. 2014	2	3,509	38.3°E	4.2°S
Moyowosi-Kigosi Game Reserve	RS	AS	B	2014	1,645	2,389	TAWIRI 2015d	1	19,520	31.7°E	5.2°S
Natron Landscape and West Kilimanjaro	RS	AT	A	2013	200		Kennay et al. 2013	2	10,060	36.7°E	2.6°S
Piti East Hunting Block	-	O	E	2002	200	100*	Hall, pers. comm. 2002	2	2,223	33.3°E	7.1°S
Ruaha-Rungwa Ecosystem											
Ifigi Extension	NP	AS	B	2015	1,553	2,956	TAWIRI 2015f	2	2,596	34.3°E	6.9°S
Ruaha-Rungwa Ecosystem	RS	AS	B	2015	14,284	6,123	TAWIRI 2015f	1	50,608	34.3°E	6.9°S
Rubondo Island National Park	DT	DC	C	2014	102	35	Mwambola et al. 2016	4	210	31.8°E	2.3°S
Saadani National Park	DT	O	D	2014	30		TAWIRI 2015a	4	2,502	38.8°E	6.0°S
Sagara Nyamagoma Ecosystem	RS	AS	B	2014	503	592	TAWIRI 2015d	2	11,922	31.7°E	5.2°S
Selous-Mikumi Ecosystem											
Masasi	DA	AS	B	2014	16	31	TAWIRI 2015b	2	5,726	37.3°E	8.9°S
Selous-Mikumi Ecosystem	RS	AS	B	2014	14,040	3,252	TAWIRI 2015b	1	83,907	37.3°E	8.9°S
Selous-Niassa	DA	AS	B	2014	1,161	1,341	TAWIRI 2015b	2	16,097	37.3°E	8.9°S
Serengeti Ecosystem											
Loliondo Game Controlled Area	RS	AT	A	2009	0		TAWIRI 2015b	2	5,356	35.0°E	2.5°S
Serengeti Ecosystem	RS	AT	A	2014	6,087		Mduma et al. 2014	2	23,660	34.8°E	2.6°S
Tarangire Ecosystem											
Lake Manyara	RS	AT	A	2014	104		TAWIRI 2015e	3	882	36.2°E	4.0°S
Mto wa Mbu	NP	AT	A	2014	10		TAWIRI 2015e	4	191	36.2°E	4.0°S
Tarangire National Park	RS	AT	A	2014	3,282		TAWIRI 2015e	2	2,637	36.2°E	4.0°S
Tarangire (Outside)	DA	AT	A	2014	797		TAWIRI 2015e	2	13,657	36.2°E	4.0°S
Ugalla East	RS	AS	B	2014	146	278	TAWIRI 2015d	2	6,391	31.7°E	5.2°S
Ugalla Game Reserve	RS	AS	B	2014	659	549	TAWIRI 2015d	2	4,857	31.7°E	5.2°S

Tanzania

0 80 160 240 320 400 480km

ABBREVIATIONS AND ACRONYMS

AfESG

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Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Uganda

ESTIMATED TOTAL ELEPHANTS

4,923 ± 2,012

GUESSES

653 - 653

GENERAL STATISTICS

Country Area	236,040 km²
Range Area	17,048 km² (7%)
Protected Range	73%
Information Quality Index (IQI)	0.51
CITES Appendix	I
Listing Year	1991 (year of accession)

CURRENT ISSUES

Elephant numbers in Uganda were reduced to a very low level by the late 1980s as a result of poaching for ivory and conflict for land with Uganda's dense human population (Uganda National Parks, 1991). Since then elephant populations, which are mostly confined to a small number of protected areas, are believed to have slowly increased.

Elephant poaching is currently at a significantly lower level than it was during the years of civil unrest and insecurity during the late 1970s and early 1980s but an upward trend has been detected in recent years (Harrison et al., 2015).

In recent analyses of seizure data in ETIS, prepared for CITES, Uganda has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). Uganda was requested to prepare a National Ivory Action Plan which was finalized in May 2013 and a number of progress reports have been submitted (CITES, n.d.-a).

In 2015, as part of the Elephant Protection Initiative, Uganda developed a draft national strategy for elephant management.

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Uganda is 4,923 ± 2,012 at the time of the last survey for each area. There may be an additional 653 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 13,455 km², which is 79% of the estimated known and possible elephant range. There remains an additional 21% of the estimated range for which no elephant population estimates are available.

Although there has been an increase of nearly 1,000 elephants in the estimates for Uganda, confidence limits associated with these surveys are high, and this increase is not statistically significant.

Elephants in Uganda are largely confined to protected areas in the western region of the country, and most are thought to be savanna elephants. Some forest-savanna hybrids have been found in the south-west (Mondol et al., 2015).

An **aerial total count** of Kidepo Valley (including the Kidepo Valley NP and Karenga Community Wildlife Area) in the extreme north-east of Uganda was carried out in 2014, giving an estimate of 621 elephants (Wanyama et al., 2014c). This replaces a total count estimate of 454 from 2005 (Rwetsiba & Wanyama, 2005). Other aerial total counts were con-ducted in 2008 (WCS Flight Programme, 2008) and 2012 (Wanyama, 2012) giving estimates of 387 and 502 respectively. An aerial sample count carried out in 2012 gave an estimate of 656 ± 663 (Wanyama et al., 2014c). In the 1990s, elephants of Kidepo mostly occurred in a single group in the vicinity of the park headquarters, but as numbers have increased, their range has expanded into the Kidepo Valley to the east of the park, and into the Karenga corridor to the south. The range map has been amended and a new area of **known range** was added to show this. There are believed to be movements between Kidepo NP and adjacent range in southern Sudan and, sporadically, into north-western Kenya (Grossmann et al., 2008).

There are still small numbers of elephants in the Otze Forest but they are probably not resident and come from Nimule National Park in South Sudan (Tomor, 2015). A **guess** of six from 2004 (Lamprey, pers. comm., 2015) replaces the earlier guess of 200 from 1998 (Michelmore, pers. comm., 1998).

An **aerial sample count** was conducted in the Murchison Falls Conservation Area (including Murchison Falls National Park) in 2014, resulting in an estimate of 1,352 ± 900 (Wanyama, et al., 2014b). This estimate replaces a comparable one of 516 ± 635 from 2005 (Rwetsiba & Wanyama, 2005). Additional aerial sample count surveys were conducted in 2010 (Rwetsiba & Wanyama, 2010) and 2012 (Rwetsiba et al., 2012) giving estimates of 904 ± 333 and 1,617 ± 1,174 respectively. The majority of elephants are found on the north bank of the Victoria Nile, but there are extensive patches of woodland on the south bank and elephants there may be under-recorded in aerial surveys. Oil exploration has been carried out in the northern part of Murchison Falls NP and some road and well infrastructure has been constructed. In order to study the impact of this development, a number of elephants were fitted with radio collars (Plumptre et al., 2015a) and the **known range** has been extended to the north-east using information from this study.

NUMBERS AND DISTRIBUTION
CONT.

The status of elephants in East Madi and the Madi corridor, north of Murchison Falls National Park, is uncertain. An aerial sample survey carried out in 2008 found no elephants in the area (WCS Flight Programme, 2008) but 19 were reported as having been seen in the corridor in 2009 (Edward, 2009). Radio-collared elephants have been recorded moving north from Murchison NP but not as far as East Madi, so this area has been changed to **possible range** (Rwetsiba et al., 2012).

An **aerial sample count** of the Queen Elizabeth Conservation Area (including Queen Elizabeth National Park) was carried out in 2014 giving an estimate of 2,904 ± 1,800 (Wanyama et al., 2014a). This replaces a comparable 2006 estimate of 2,959 ± 1,476. Another sample count was carried out in 2010, giving an estimate of 2,502 ± 1,440 (Plumptre et al., 2010). Total counts were conducted in 2010, 2012 and 2014 giving estimates of 1,570, 3,018 and 2,561 respectively (Plumptre et al., 2010; Wanyama, 2012; Wanyama et al., 2014a). Part of the reason for this variability in numbers may be movements of elephants between Queen Elizabeth NP and Virunga National Park across the border in the DRC. This has been demonstrated by movements of elephants fitted with radio collars in Virunga NP in 2015 (Douglas-Hamilton, pers. comm., 2016b).

An aerial total count was carried out in the Toro Semliki Wildlife Reserve in 2013, giving a minimum estimate of 27 elephants (Wanyama, 2013) and the UWA provides an **informed guess** of 27 (Uganda Wildlife Authority, 2016). This replaces a guess of 80 from 1998 (Michelmore, pers. comm., 1998). Forty- seven elephants were counted in another aerial total count in 2010 (Wanyama, 2013).

There are some new **guesses** from other areas of elephant range in the vicinity of Queen Elizabeth NP, including 11 in the Mgahinga Gorilla National Park and 43 in Bwindi National Park (Uganda Wildlife Authority, 2016). A guess of 30 from the Semliki National Park (Michelmore, pers. comm., 1998) and one of 20 in Rwenzori National Park (Keigwin, pers. comm., 2005) have been retained from the AESR 2007.

There is a new estimate of 487 elephants in Kibale National Park from a **dung count** in 2010 (Uganda Wildlife Authority, 2016) which replaces an estimate of 393 ± 210 (Wanyama, 2005). There is a remnant population of perhaps 20 elephants in the Katonga Game Reserve, east of Kibale NP (Uganda Wildlife Authority, 2016). These elephants are thought to have once been part of a larger population extending to Kibale NP, but are now isolated.

Elephants are still believed to occur in the Sango Bay area in the south of Uganda and there is a new **guess** of 36 (Uganda Wildlife Authority, 2016) replacing an old guess of 30 (Michelmore, pers. comm., 1998).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	621	–	–	–	13 %	2,252
Aerial Sample Counts	4,256	2,012	–	–	39 %	6,696
Informed Guesses	46	–	597	597	19 %	3,185
Degraded Data	–	–	56	56	8 %	1,322
Totals 2015	**4,923**	**2,012**	**653**	**653**		
Totals 2006	**3,944**	**1,607**	**1,007**	**1,017**		
Assessed Range					79 %	13,455
Unassessed Range					21 %	3,593
Total Range					100 %	17,048

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+948	±2,575	0	0	53 %	8,948
New Population	+19	0	0	0	4 %	705
New Guess	+12	0	-145	-155	16 %	2,679
Data Degraded	0	0	0	0	0 %	0
Totals	+979	±2,575	-145	-155	73 %	13,455

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	2,252	0	2,252
Direct Sample and Reliable Dung	6,435	261	6,696
Informed Guesses	2,872	313	3,185
Other Guesses	1,322	0	1,322
Unassessed Range	1,874	1,719	3,593
Totals	14,755	2,293	17,048

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB	YEAR	ESTIMATE	± 95% CI			(km²)	LON	LAT
Bwindi National Park	NG	O	D	2015	43		UWA, 2016	2	336	29.7°E	1.0°S
Katonga Game Reserve	NG	O	D	2015	20		UWA, 2016	2	214	30.8°E	0.2°N
Kibale National Park	NG	O	D	2010	487		UWA, 2016	1	795	30.4°E	0.5°N
Kidepo Valley National Park and Karenga Wildlife Community Area	RS	AT	A	2014	621		Wanyama et al., 2014c	1	2,398	33.8°E	3.6°N
Madi East	NP	O	D	2009	19		Edward, 2009	2		31.5°E	2.7°N
Mgahinga Gorilla National Park	NG	O	D	2015	11		UWA, 2016	2	67	29.6°E	1.4°S
Murchison Falls Conservation Area	RS	AS	B	2014	1,352	900	Wanyama et al., 2014b	1	6,235	31.8°E	2.2°N
Otze Forest	NG	O	E	2004	6		Lamprey, pers. comm., 2015	2	200	31.9°E	3.7°N
Queen Elizabeth Conservation Area	RS	AS	B	2014	2,904	1,800	Wanyama et al., 2014a	1	2,259	29.9°E	0.3°S
Rwenzori National Park	-	O	E	2003	20		Keigwin, pers. comm., 2005	1	929	30.0°E	0.4°N
Sango Bay	NG	O	D	2015	36		UWA, 2016	2	305	31.7°E	0.9°S
Semliki National Park	-	O	E	1998	30		Michelmore, pers. comm., 1998	2	195	30.0°E	0.8°N
Toro Semliki Wildlife Reserve	NG	O	D	2015	27		UWA, 2016	2	784	30.4°E	1.0°N

RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).
— No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A–E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Uganda

0 40 80 120 160 200 240km

ABBREVIATIONS AND ACRONYMS

See Appendix III for map abbreviations and acronyms

AfESG

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Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

Southern

REGION

Southern Africa

ESTIMATED TOTAL ELEPHANTS

293,447 ± 16,682

GUESSES

15,157 - 16,672

GENERAL STATISTICS

Region Area	5,973,020 km²
Range Area	1,325,998 km² (22%)
Protected Range	23 %
Information Quality Index (IQI)	0.50

CURRENT ISSUES

Southern Africa continues to hold by far the largest number of elephants on the continent, and nearly 75% of southern Africa's elephants occur as part of a single population in the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA), some 520,000 km² in extent. Whereas conservation challenges associated with high elephant densities in large protected areas were common in the region a decade ago, contemporary elephant conservation in southern Africa is now also faced with the emergence of a growing poaching threat (UNEP et al., 2013). While overall, poaching has not had the same impact in Southern Africa as in other regions, it has severely affected populations in Zimbabwe, Angola, Mozambique, and to a lesser extent, Zambia.

As human population growth has often not been matched by regional economic growth, many unemployed people either remain at or have returned to their rural homes from urban areas (Taylor, 2009). These communally owned unprotected areas have previously provided up to 60% or more of elephant range (Blanc et al., 2007; Cumming & Jones, 2005). However, habitat encroachment and transformation, together with ivory poaching, growing human-wildlife conflict and unsustainable bushmeat harvesting increasingly threaten the survival of elephant populations in these areas (Ripple et al., 2015). Poor governance could become potentially threatening for the long-term survival of elephants in southern Africa (CITES Secretariat, 2014).

Under the Convention on International Trade in Endangered Species of Fauna and Flora (CITES), there are ten sites in Southern Africa for Monitoring the Illegal Killing of Elephants (MIKE). Elephant carcass data from these sites can be used to calculate the Proportion of Illegally Killed Elephants (PIKE). For Southern Africa between 2007 and 2015 the PIKE values show an increasing

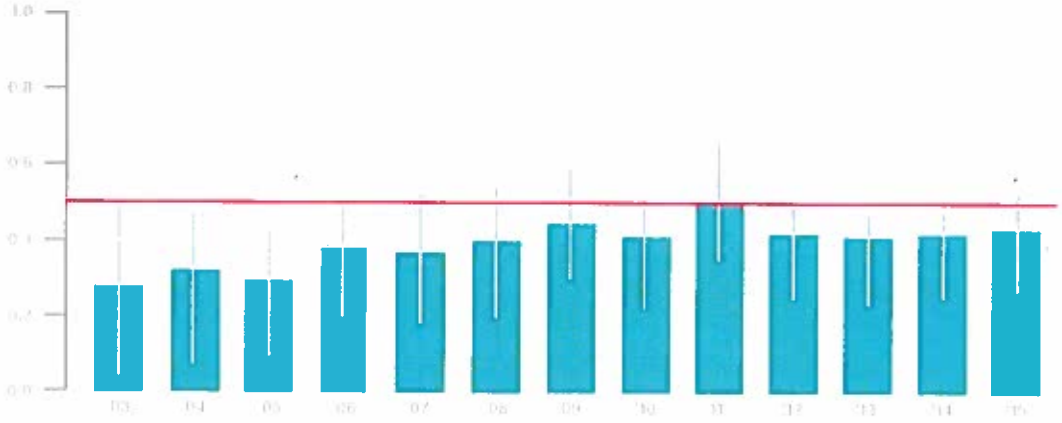


FIGURE 1: *Southern African PIKE trends with 95% confidence intervals (CITES Secretariat, 2016)*

trend, with a spike of 0.5 in 2011. PIKE levels above 0.5 (i.e. where half of dead elephants found are deemed to have been illegally killed) are considered to be unsustainable and Southern Africa is the only region whose overall PIKE values have not risen above 0.5 since 2003 (Figure 1) (CITES Secretariat, 2016).

In response to the challenge of increased poaching of elephants, rhinos and other wildlife, in 2015 the Southern African Development Community (SADC) ministers responsible for environment and natural resources approved the SADC Law Enforcement and Anti-Poaching Strategy 2016-2021 (SADC, 2015). The 2005 Southern Africa Regional Elephant Conservation and Management Strategy (SADC, 2007) is in need of revision.

In recent analyses of seizure data from the Elephant Trade Information System (ETIS), prepared for CITES, a number of countries in Southern Africa have been identified as having a worrying involvement in illegal ivory trade (CITES, 2012; Milliken et al., 2013, 2016). Angola and Mozambique have been requested to prepare and implement National Ivory Action Plans.

Whereas all populations of the African elephant have been listed in CITES Appendix I since 1989, those of Botswana, Namibia and Zimbabwe were transferred to Appendix II in 1997 and South Africa's was transferred in 2000. In 2008, these four elephant range states conducted a one-off legal sale of 101,766 kg of raw ivory to approved trading partners in China and Japan (CITES, 2009; Wijnstekers, 2011) (Table 1).

		Weight (kg)	*Price USD*
Sellers	Botswana	43,153	$7,093,551
	Namibia	7,583	$1,147,369
	South Africa	47,348	$6,702,695
	Zimbabwe	3,764	$487,162
Buyers	Japan	39,434	$6,545,374
	China	62,333	$8,990,622

TABLE 1: *Ivory sales in 2008 (Wijnstekers, 2011)*

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Southern Africa is 293,447 ± 16,682 at the time of the last survey for each area. There may be an additional 15,157 to 16,672 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 734,824 km², which is 55% of the estimated known and possible elephant range. There remains an additional 45% of range for which no elephant population estimates are available.

Between the AESR 2007 and this report, elephant numbers in Southern Africa have declined by almost 30,000, on the basis of updated estimates for sites where comparable survey techniques were employed. However, some populations have been surveyed for the first time and this has led to an increase of approximately 3,000 in the 'new population' category. The result is that the current total number of elephants from surveyed populations represents a smaller estimated reduction of about 27,000 elephants. Although there have been real declines in Mozambique and Zimbabwe, the main contributor to this decline is a reduction in the estimate for Botswana, which may be the result of uncounted elephants, range expansion, increased poaching or methodological differences between surveys.

Southern Africa has a relatively high reliability and quantity of elephant information, especially for the larger populations. Although overall survey coverage has increased since 2007, largely as a result of the Great Elephant Census carried out in 2014-2015, there is still wide variation amongst countries.

One population was recorded as having been lost from Angola.

The proportion of elephant range for which elephant estimates are available currently stands at 55%, an increase from 53% in the previous report. The overall quality of information, as measured by the IQI, has increased from 0.48 to 0.50.

There is reliable information available for Botswana, Namibia, Swaziland, South Africa, Zambia and Zimbabwe. In Angola, only the south east region of the country has been surveyed, and one population in the Bongola area on the Angola-Namibia international border has been reported as lost (Vaz Pinto & Verissimo, pers. comm., 2014). Detailed nationwide surveys of elephant abundance and distribution are urgently needed in Angola. Surveys in Mozambique, although improved, have been spatially and temporarily variable and have used different techniques, apart from in the Niassa ecosystem in the north. Malawi with its high human population and small fragmented elephant population has relied mostly on total counts or informed guesses.

Southeast Angolan and southwest Zambian elephant populations continue to experience losses to poaching (Chase & Schlossberg, 2016, DNPW, 2016). Population trends from repeat surveys in northern Botswana remain equivocal. Mozambique's elephant population has been reduced by an estimated 25%, mostly in the north due to severe poaching.

In Namibia the elephant population has increased, notably in the north-east Kavango and Zambezi Regions. South Africa's elephant population, mostly contained within Kruger National Park, is

NUMBERS AND DISTRIBUTION
CONT.

increasing, with small but growing numbers of elephants in other provincial and private reserves. Zambia's elephant population appears to be relatively stable apart from losses in the south-west of the country which amount to approximately 2% of the overall population. Zimbabwe's elephant population has declined due to reductions in two populations, partially compensated by increases in two other populations.

The current range area for Southern Africa is 1,325,998 km^2, a slight increase from the 1,305,000 km^2 recorded in the AESR 2007, and the percentage of this which is known range has increased from 53% to 60%. There has been no major loss of elephant range, and one notable expansion of range in Botswana where elephants were observed in large groups for the first time in the Central Kalahari Game Reserve (DWNP, 2016). Other changes result from improved information, particularly in Angola.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	21,937	–	–	–	2 %	29,142
Ground Total Counts	133	–	–	–	0 %	136
Individual Registrations	39	–	–	–	0 %	22
Aerial Sample Counts	270,769	16,683	–	–	36 %	471,590
Informed Guesses	569	–	9,514	9,824	5 %	73,310
Other Guesses	–	–	5,371	6,576	12 %	158,161
Degraded Data	–	–	272	272	0 %	2,462
Totals 2015	**293,447**	**16,682**	**15,157**	**16,672**		
Totals 2006	**320,690**	**23,132**	**11,197**	**13,253**		
Assessed Range					55 %	734,824
Unassessed Range					45 %	591,174
Total Range					100 %	1,325,998

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	-29,913	±28,372	-56	-56	28 %	377,379
New Population	+2,978	±1,398	+787	+802	5 %	66,100
Different Technique	+3,292	±1,194	-8,847	-8,557	4 %	49,760
Different Area	+1,004	±2,255	-3	+36	4 %	50,641
New Guess	-4,551	±92	+10,094	+11,209	14 %	188,481
Population Lost	0	0	-60	-60	0 %	0
Data Degraded	-53	0	+53	+53	0 %	0
Totals	-27,243	±28,520	+3,968	+3,427	55 %	734,824

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	26,963	2,338	29,301
Direct Sample Reliable Dung	410,768	60,822	471,590
Informed Guesses	61,375	11,935	73,310
Other Guesses	130,779	29,844	160,623
Unassessed Range	166,452	424,722	591,174
Totals	796,337	529,661	1,325,998

ELEPHANT ESTIMATES

COUNTRY	# OF ELEPHANTS		GUESSES		RANGE			PFS	IQI
	ESTIMATE	± 95% CI	MIN	MAX	AREA (km²)	% REGIONAL	% ASSESSED		
Angola	3,396	1,562	96	111	323,270	24 %	13 %	1	.09
Botswana	131,626	12,508	0	0	228,073	17 %	56 %	1	.52
Malawi	1,307	0	398	398	7,789	1 %	72 %	3	.55
Mozambique	10,884	2,229	4,293	5,519	320,402	24 %	82 %	1	.48
Namibia	22,754	4,306	90	90	164,069	12 %	51 %	1	.43
South Africa	18,841	0	8,425	8,435	30,651	2 %	92 %	2	.64
Swaziland	42	0	0	0	50	0 %	100 %	5	.00
Zambia	21,967	4,704	214	314	170,466	13 %	62 %	1	.50
Zimbabwe	82,630	8,589	1,635	1,805	81,228	6 %	97 %	2	.86
Totals	293,447	16,683	15,157	16,672	1,325,998	100 %	55 %	1	.50

RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA Different Area; DD Data Degraded; DT Different Technique; NA New Analysis; NG New Guess; NP New population; PL Population Lost; RS Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).
— No Change

KEY TO SURVEY REPORT

AS Aerial Sample Count; AT Aerial Total Count; DC Dung Count; GD Genetic Dung Count; GS Ground Sample Count; GT Ground Total Count; IG Informed Guess; IR Individual Registration; OG Other Guess. Survey Reliability is keyed A–E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Southern Africa

0 200 400 600 800 1000 1200km

ABBREVIATIONS AND ACRONYMS

See Appendix II for map abbreviations and acronyms

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Angola

ESTIMATED TOTAL ELEPHANTS

3,396 ± 1,562

GUESSES

96 - 111

GENERAL STATISTICS

Country Area	1,246,700 km²
Range Area	323,270 km² (26%)
Protected Range	15 %
Information Quality Index (IQI)	0.03
CITES Appendix	I
Listing Year	2013 (year of accession)

CURRENT ISSUES

Although elephant conservation and monitoring started in Angola after the end of the civil war in 2002, it has concentrated largely in the south-east of the country. A detailed nationwide study of elephant distribution and density is urgently required. Threats include poaching, illegal wildlife trade, human population expansion and settlement together with subsistence agriculture, fire and logging activities. There are weak incentives for elephant conservation and law enforcement is poor due to limited staff and capacity.

Wildlife legislation in Angola is limited largely due to the challenges of rebuilding administrative and governmental infrastructure after decades of conflict. Angola published an elephant conservation plan in 1991, although this is now seriously out of date (Instituto de Desenvolvimento Florestal, 1991). The development of a new plan was underway as of June 2016.

A study in Luanda in 2006 (Milliken et al., 2006) exposed a large and unregulated domestic ivory market in Luanda and eight years later this market was still flourishing with over 10,000 recently carved and illegal ivory items reported (Svensson et al., 2014; Vigne & Martin, 2014). It is believed that the majority of this ivory comes from forest elephants in countries such as the DRC. The increased demand for worked ivory was believed to be linked to the rising number of Chinese citizens working in Angola.

In recent analyses of seizure data in ETIS, prepared for CITES, Angola has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al.,

2013, 2016). Angola, a Party to CITES since 2013, was requested by the CITES Standing Committee to prepare a National Ivory Action Plan which it submitted in February 2015 (CITES, n.d.-a). Commencing in May 2016, the Government of Angola enacted a ban on domestic trade of ivory (Hungerford, 2016).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Angola is 3,396 ± 1,562 at the time of the last survey for each area. There may be an additional 96 to 111 elephants in areas not systematically surveyed in Angola. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 41,847 km², which is 13% of the estimated known and possible elephant range. There remains an additional 87% of the estimated range for which no elephant population estimates are available.

The national totals show an increase of nearly 2,000 in estimated numbers. However, this is a result of a larger proportion of the main elephant population being covered than in earlier surveys, rather than a real increase.

Elephants are believed to be present in the far north and far south of the country, with forest elephants in the north-west and savanna elephants in the north-east and south (Enock, pers. comm., 2002), although the genetic status of these elephants has not been confirmed.

In 2015 an **aerial sample count** survey was carried out between the Kwando and Cuito-Kavango rivers in the south-east of Angola (Chase & Schlossberg, 2016). Elephants in this area form part of the KAZA transboundary population. The survey gave an overall estimate of 3,396 ± 1,562 elephants. This replaced an estimate of 1,827 ± 598 from the Luiana Partial Reserve in 2005 (Chase & Griffin, 2011). The 2015 survey expanded the range covered to include Cubango Game Reserve in the west and Mavinga on the Kwando to the north (though no elephants were sighted there). Data extracted by Chase and Schlossberg (Chase & Schlossberg, 2016) from their 2015 dataset for Luiana PR only, provided a comparable estimate of 1,437 ± 600 elephants, which although lower than the 2005 results, was not significantly so. The overall carcass ratio from the 2015 survey was 30%, suggesting a high level of mortality.

Thirty two elephants from South Africa were introduced to the Quiçama National Park by the Kissama Foundation in 2000 and 2001 and put into a 10,000-hectare, fenced, "soft release" area in the north of the park. In a 2015 survey 89 elephants were counted in the release area (Carmignani, 2015), and there were believed to be another 50 individuals in the rest of the park in 2002 (Vaz Pinto, pers. comm., 2003).

There is a small population of perhaps 10-25 elephants living on the escarpment to the east of Luanda in the Kambondo forest (Hines, pers. comm. 2015) and sightings of these elephants are marked as point records.

Reports were received in 2012 of more than 20 elephants moving across the border from Angola, spending time in the south-western part of Congo (Mbende et al., 2012) and this area is marked as **known range**.

NUMBERS AND DISTRIBUTION
CONT.

In the AESR 2007 there was an estimate of 60 elephants in the Bongola area on the Namibia border from 1992, but since this is no longer marked as elephant range, it has been removed and this is recorded as a **lost population**.

There is also a small area of elephant range in the Cabinda Enclave, a separate section of Angola surrounded by DRC and the Republic of Congo (Heffernan, 2005) but there is no estimate for this area.

Substantial changes have been made to the range map (Vaz Pinto & Verissimo, pers. comm., 2014). These include the removal of a large area of **possible range** in the dry south-west part of the country, the addition of a new area of **possible range** on the Zambian border, and a more defined range, including some **known range**, both east of Luanda and on the border with the DRC.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Sample Counts	3,396	1,562	—	—	13 %	41,342
Informed Guesses	0	—	10	25	0 %	75
Degraded Data	—	—	86	86	0 %	429
Totals 2015	**3,396**	**1,562**	**96**	**111**		
Totals 2006	**1,619**	**800**	**110**	**110**		
Assessed Range					13 %	41,847
Unassessed Range					87 %	281,423
Total Range					100 %	323,270

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Population	0	0	+10	+25	0 %	75
Different Area	+1,813	±1,756	0	0	13 %	41,342
Population Lost	0	0	-60	-60	0 %	0
Data Degraded	-36	0	+36	+36	0 %	0
Totals	+1,777	±1,756	-14	+1	13 %	41,847

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	36,253	5,089	41,342
Informed Guesses	75	0	75
Other Guesses	410	19	429
Unassessed Range	50,937	230,486	281,423
Totals	87,675	235,595	323,270

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CI			(km²)	LON	LAT
Bongola Area	PL	O	D	2014	0		Vaz Pinto & Verissimo, pers. comm., 2014	3	1,505	17.6°E	17.3°S
Cáua Camp	-	IR	E	2002	36		Vaz Pinto, pers. comm., 2003	3	9,500	13.3°E	9.3°S
Kambondo Forest	NP	O	D	2015	10	15*	Hines, pers. comm., 2015	4	75	14.7°E	9.1°S
Quiçama National Park	-	O	E	2002	50		Vaz Pinto, pers. comm., 2003	2	9,500	13.6°E	9.8°S
Southeast Angola	DA	AS	B	2015	3,396	1,562	Chase & Schlossberg, 2016	1	41,542	21.3°E	17.0°S

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
– : No Change

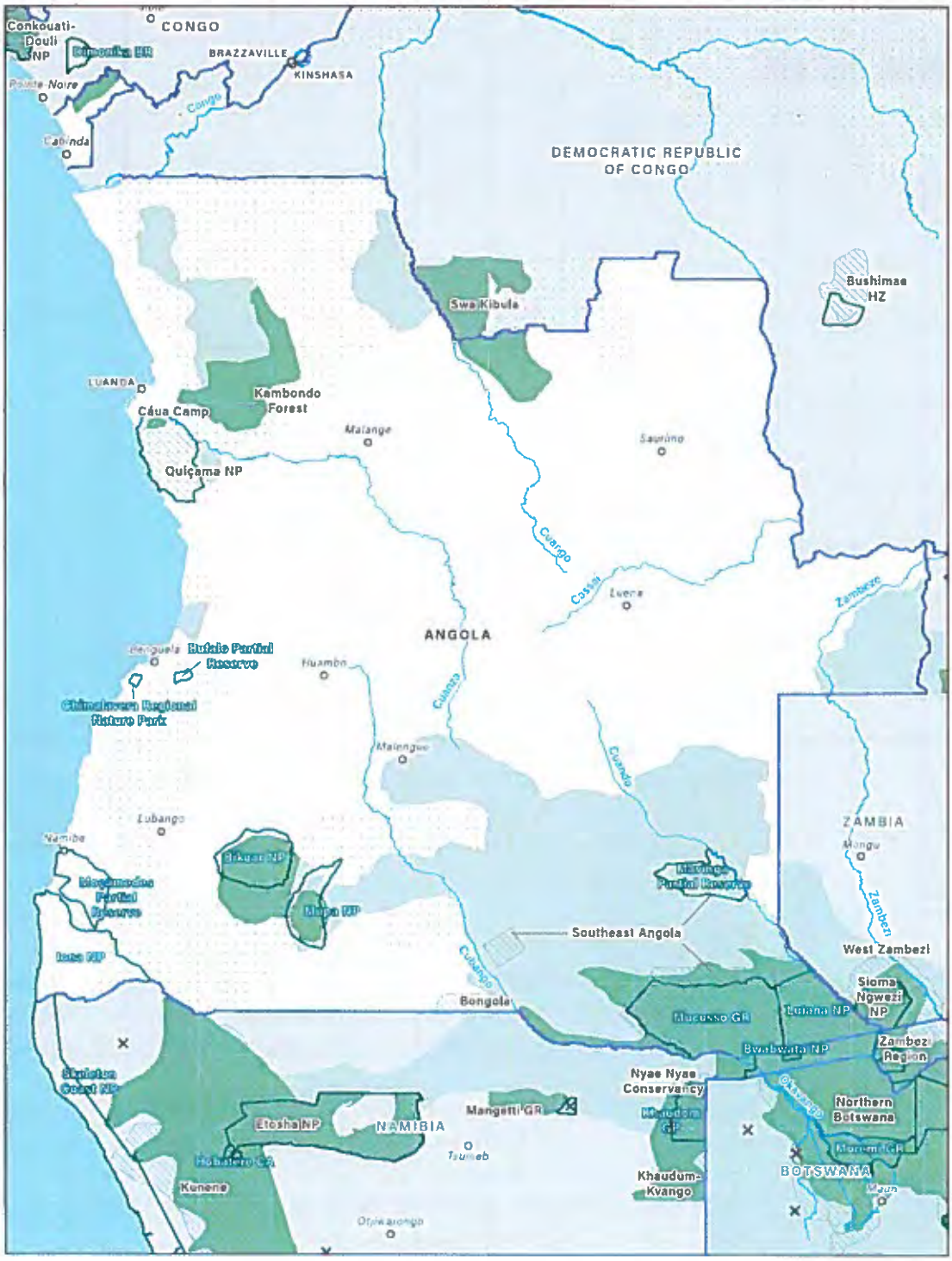
KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Angola



0 90 180 270 360 450 540km

ABBREVIATIONS AND ACRONYMS

Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

AfESG

COUNTRY

Botswana

ESTIMATED TOTAL ELEPHANTS

131,626 ± 12,508

GUESSES

0 - 0

GENERAL STATISTICS

Country Area	600,370 km²
Range Area	228,073 km² (38%)
Protected Range	16 %
Information Quality Index (IQI)	0.52
CITES Appendix	II
Listing Year	1997

CURRENT ISSUES

Botswana has by far the largest elephant population of any country in Africa. The vast majority occur in the north of Botswana within the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA), shared by Botswana, Namibia, Zambia, Zimbabwe and Angola, and elephants move between these countries.

Poaching of elephants by armed gangs has become an increasing threat in northern Botswana. Anti-poaching is undertaken by the Department of Wildlife and National Parks (DWNP), the Botswana Defence Force (BDF) and the Botswana Police (KAZA Secretariat, 2014a). DWNP has recently produced an approved National Anti-Poaching Strategy (Blackbeard, pers. comm., 2014).

The National Policy and Strategy for the Conservation and Management of the African Elephant was published in 2003 (DG Ecological Consulting, 2003). It is now outdated and in need of revision.

In 2008, Botswana undertook an approved one-off sale of 43,153 kg of ivory to Japan and China, at a total price of USD $7,093,551 (Wijnstekers, 2011).

Botswana declared an export quota of 600 tusks and other hunting trophies in 2007. The annual export quota for tusks and other hunting trophies fluctuated from 600 to 800 between 2009 and 2014. However, in 2014 a ban was placed on trophy hunting in the country and in 2015 a zero quota for exports of elephant hunting trophies was declared (CITES, n.d.-a).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Botswana is 131,626 ± 12,508 at the time of the last survey for each area. This estimate applies to 128,856 km², which is 57% of the estimated known and possible elephant range. There remains an additional 43% of the estimated known and possible elephant range for which no elephant population estimates are available.

The movement of elephants between northern Botswana and neighbouring countries requires that coordinated, simultaneous surveys are conducted to avoid the possibility of double counting or of missing animals entirely (KAZA Secretariat, 2014b). Counts flown of contiguous range in neighbouring countries were not synchronized with the 2014 Botswana survey.

The Botswana elephant population appeared to increase substantially from about 50,000 in 1990 to over 150,000 in 2006. However, this increase has been disputed (Junker et al., 2008). The estimate used in the AESR 2007 was the previously accepted national total of 154,658 ± 21,253 (Department of Wildlife and National Parks, 2006). More recent surveys have provided incompatible results. In 2010 and 2014 **aerial sample counts** of northern Botswana were undertaken by Elephants without Borders (Chase et al., 2015; Songhurst & Chase, 2010) and in 2012 and 2013 surveys were conducted by DWNP (DWNP, 2012). Results from the 2013 survey have not been released. The other surveys gave estimates of 128,340 ± 9,938 (2010), 207,545 ± 21,771 (2012) and 129,939 ± 12,501 (2014). These differences are so great that they are more likely to result from differences in survey technique or calculations rather than real population change or elephant movements.

Although a new total of 129,939 ± 12,501 from the Great Elephant Census in 2014 (Chase et al., 2015) has been included in the AED, this result raises questions with respect to the 2010 and 2012 surveys. It indicates no significant change since 2010 although a population that shows no evidence of serious poaching, excessive natural mortality or high levels of net emigration would be expected to show some increase. Compared to the 2012 survey results, the 2014 estimate would indicate a marked decline that is unlikely in the absence of any other indicators. Given that the KAZA TFCA transboundary population is the largest elephant population in Africa, of which the majority is within Botswana, it remains of the highest priority to carry out a simultaneous and coordinated count of the entire population.

The 2014 survey report gave a carcass ratio of 7% for northern Botswana (Chase et al., 2015), which is not considered exceptionally high, as carcass ratios of up to 8% are considered typical of a stable or increasing elephant population (Douglas-Hamilton & Burrill, 1991). However, it shows a notable increase over the earlier carcass ratio of 2% in 2010 and 2012.

Botswana is one of the few countries in Africa with confirmed elephant range expansion for elephants. In recent years the range has increased to the west towards Namibia (Songhurst, pers. comm. 2016) as well as southwards with large herds sighted for the first time in the Central Kalahari Game Reserve (CKGR) (Mokhandla, pers. comm., 2016). The 2015 dry season **aerial sample count** in Ghanzi District estimated 797 ± 437 (DWNP, 2016) of which 411 ± 252 were in CKGR. This is the first time that elephants have been counted in this area.

NUMBERS AND DISTRIBUTION
CONT.

There is a population estimated at 890 elephants from an **aerial total count** in 2014 in the Tuli Block in the extreme eastern part of the country (Selier & Page, 2015). This is part of a larger transboundary population in the Greater Mapungubwe Transfrontier Conservation Area that includes South Africa and Zimbabwe. This replaces an estimate of 1,038 ± 685 (Department of Wildlife and National Parks, 2006).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	890	—	—	—	1 %	1,389
Aerial Sample Counts	130,736	12,508	—	—	56 %	127,467
Totals 2015	**131,626**	**12,508**	**0**	**0**		
Totals 2006	**154,658**	**21,253**	**0**	**0**		
Assessed Range					57 %	128,856
Unassessed Range					43 %	99,218
Total Range					100 %	228,073

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	-23,681	±24,283	0	0	42 %	95,331
New Population	+797	±437	0	0	14 %	32,136
Different Technique	-148	±685	0	0	1 %	1,389
Totals	-23,032	±24,296	0	0	57 %	128,856

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	1,389	0	1,389
Direct Sample and Reliable Dung	87,990	39,477	127,467
Unassessed Range	14,844	84,374	99,218
Totals	104,222	123,851	228,073

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Ghanzi District	NP	AS	B	2015	797	437	DWNP, 2018	1	51,269	22.5°E	23.7°S
Northern Botswana	RS	AS	B	2014	129,939	12,501	Chase et al., 2015	1	98,387	24.0°E	19.2°S
Tuli Game Reserve	DT	AT	A	2014	890		Selier & Page, 2015	2	1,456	28.9°E	22.3°S

*RANGE OF INFORMED GUESS

*KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— : No Change

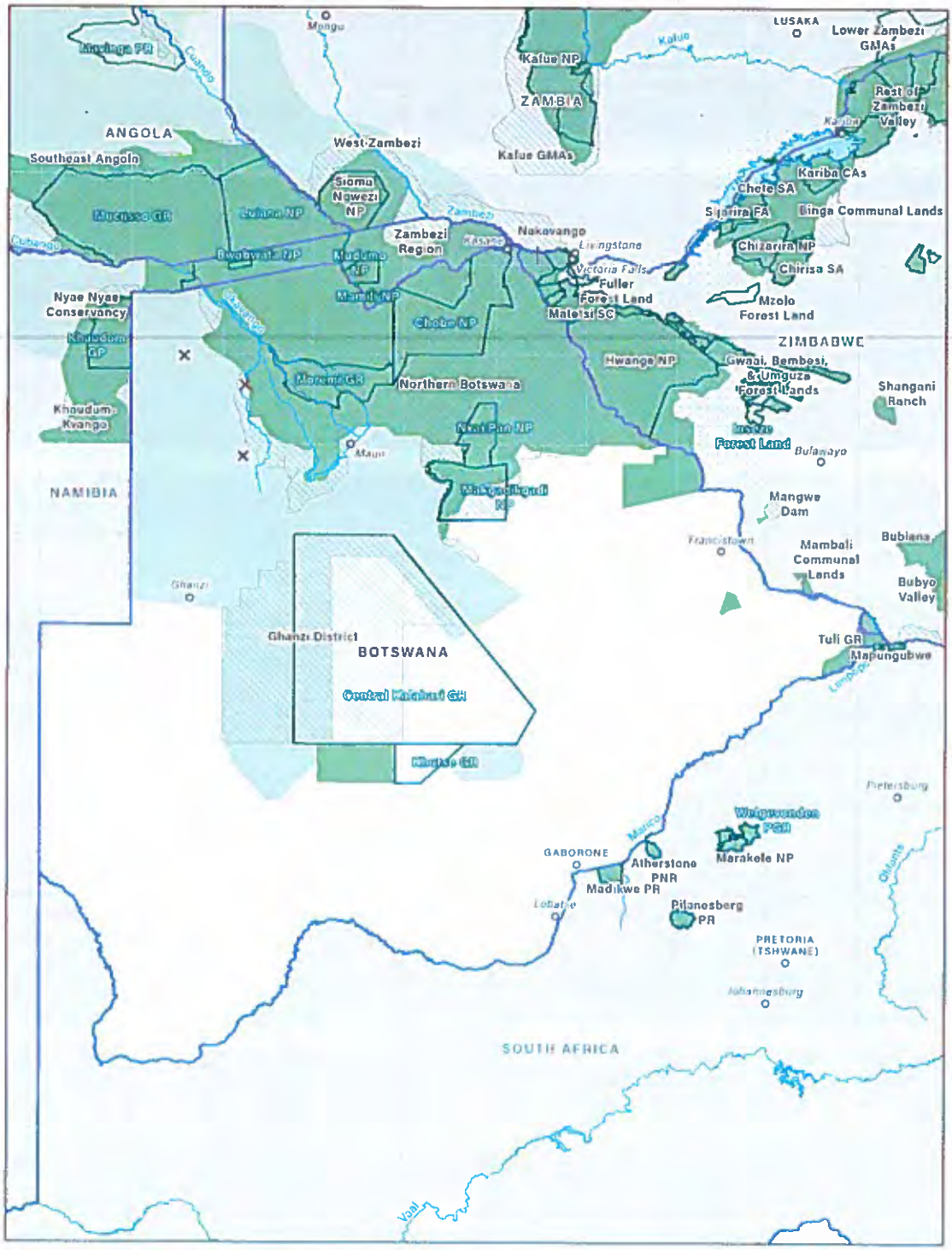
KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

*PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Botswana



0 70 140 210 280 350 420km

ABBREVIATIONS AND ACRONYMS

AfESG

AFRICAN ELEPHANT STATUS REPORT 2016

Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

BOTSWANA

COUNTRY

Malawi

ESTIMATED TOTAL ELEPHANTS

1,307 ± 0

GUESSES

398 - 398

GENERAL STATISTICS

Country Area	118,480 km²
Range Area	7,789 km² (7%)
Protected Range	89 %
Information Quality Index (IQI)	0.55
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Because of the country's high human population density, Malawi's elephants are almost entirely confined to protected areas. As a consequence, elephant populations in Malawi are small and fragmented. Human-elephant conflict is prevalent as a result, and poaching for meat and ivory is believed to be further reducing certain populations.

In an attempt to manage these populations a number of translocations have taken place in the last ten years. In 2006, 70 elephants were moved into Majete Wildlife Reserve from Liwonde National Park and a further 64 were moved in 2008 (Macpherson, 2012). In 2009, 83 elephants were moved into Majete WR from Phirilongwe Forest (Cunliffe, 2010).

Co-management of protected areas in Malawi is well established with the African Parks Network taking contractual responsibility for the management of Majete WR in 2003, and Liwonde NP and Nkhotakota Game Reserve in 2015.

In 2015, as part of the Elephant Protection Initiative, Malawi developed a draft 10-year national action plan for elephant management. This strategy is still under review. In addition Malawi is undertaking a review of the national wildlife policy (Ministry of Information, Tourism and Culture, 2014) as well as an illegal wildlife trade assessment (Lewis & Clark Law School, 2014).

In recent analyses of seizure data in ETIS, prepared for CITES, Malawi has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al.,

2013, 2016). Malawi has formed an Inter-Agency Committee to Combat Wildlife Crime (The Times Group, 2016) and in 2013, suspended its domestic ivory trade. In March 2016, following a national ivory inventory, Malawi destroyed approximately 2.6 tonnes of ivory (Reuters, 2016).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Malawi is 1,307 at the time of the last survey for each area. There may be an additional 398 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 5,616 km^2, which is 72% of the estimated known and possible elephant range. There remains an additional 28% of the estimated range for which no elephant population estimates are available.

An **aerial total count** was conducted by helicopter in Nyika National Park in 2013 in which 47 elephants were seen (Macpherson, 2013c). However, because elephants occur in heavily wooded and rugged country, it is likely that some were missed. This replaces a sample count estimate of 339 ± 239 from 1997 (Gibson, 1997). A ground survey in 2005 in part of the Nyika NP resulted in a zero estimate (Ferreira et al., 2005) and a total aerial count in 2009 also gave a zero estimate (WCS Flight Programme, 2009), showing the difficulty of carrying out surveys in Nyika NP. Since elephants were observed in the south-west of the park in the 2013 survey, an additional area of **known range** was added. This population extends a short distance into Zambia (Macpherson, 2013c).

In Vwaza Marsh Wildlife Reserve to the south-west of Nyika NP 310 elephants were observed during an **aerial total count** in 2013 (Macpherson, 2013d). This replaces a guess of 270 (Ferreira et al., 2005) based on an uncompleted survey. A lower intensity total count was carried out in 2009 with 151 elephants observed (WCS Flight Programme, 2009).

Kasungu National Park used to hold Malawi's largest elephant population. However, in 2014, only 40 elephants were counted in Kasungu NP during an **aerial total count** (Macpherson, 2015a) which was part of the Great Elephant Census. Elephants now only occur in the immediate vicinity of the park headquarters and the area of **known range** has been adjusted accordingly. This replaces an estimate from 2005 of 58 ± 218 (Ferreira et al., 2005).

A **ground sample count** of Nkhotakota Wildlife Reserve in 2013 provided an estimate of 92 elephants, compared to 169 in 2011 (Sichali & Mkumbwa, 2014). The 2013 estimate replaces one of 1,037 ± 1,511 from a sample block count in 1995 (Japan Overseas Forestry Consultants Association & Pasco International Incorporated, 1997). There are doubts as to the validity of the 1995 numbers, since even in the 1980s there were thought to be no more than 300 elephants in the reserve. The northern section has been changed to **doubtful range** (Macpherson, 2013b).

The Thuma and Dedza-Salima Forest Reserves lie on the escarpment between Lilongwe and Lake Malawi. In 2015 a minimum of 133 elephants were observed during a **ground total count** (Clifford, 2016). This replaces a guess of 30-50 from 1998 (Munthali, pers. comm., 1998). The area of **known range** has been refined to fit the actual distribution.

It is believed that six elephant remained in the Phirilongwe Forest after the translocation exercise (Kaunga-Nyirenda, pers. comm., 2014). This replaces a guess of 50 elephants from 1998 (Munthali, pers. comm., 1998).

Liwonde NP on the Shire River close to Lake Malawi holds Malawi's largest population. Seven hundred and seventy seven elephants were observed in an **aerial total count** in 2014, which was part of the Great Elephant Census (Macpherson, 2015b). This replaces a guess of 530 from 2006 (African Parks Foundation, 2006). Aerial surveys were carried out on an annual basis from 2007 to 2012, giving estimates from 404 to 696 (Macpherson, 2015b). This increase in numbers has taken place despite 134 elephants being translocated out of Liwonde. Variations in numbers may be due to seasonal movements to the north-east into the Mangochi Forest Reserve, which has been changed to **known range** (Macpherson, pers. comm., 2015c).

All of the elephants in the Majete WR were believed to have been exterminated by 2002. Two hundred seventeen elephants were translocated into the reserve between 2006 and 2009. A total aerial survey was carried out in 2012 during which 163 elephants were counted (Macpherson, 2012), but there are currently believed to be about 300 (Fearnhead, pers. comm., 2015), which seems more reasonable given the number brought in, and the limited amount of poaching. This **guess** replaces one of 70 from 2006 (African Parks Foundation, 2006). The **known range** has been expanded to cover the whole reserve, since the fenced elephant release area has been extended to include the whole reserve.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	1,174	–	–	–	49 %	3,842
Ground Total Counts	133	–	–	–	2 %	136
Informed Guesses	0	–	398	398	21 %	1,637
Totals 2015	**1,307**	**0**	**398**	**398**		
Totals 2008	**508**	**323**	**1,876**	**1,898**		
Assessed Range					72 %	5,616
Unassessed Range					28 %	2,173
Total Range					100 %	7,789

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Different Technique	+869	±323	-1,734	-1,754	60 %	4,706
New Guess	-70	0	+256	+256	12 %	910
Totals	+799	±323	-1,478	-1,498	72 %	5,616

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	1,641	2,338	3,979
Informed Guesses	1,637	0	1,637
Unassessed Range	1,716	457	2,173
Totals	4,994	2,795	7,789

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB	YEAR	ESTIMATE	± 95% CL			(km²)	LON	LAT
Kasungu National Park	DT	AT	A	2014	40		Macpherson, 2015a	1	2,316	33.1°E	12.9°S
Liwonde National Park	DT	AT	A	2014	777		Macpherson, 2015b	1	675	35.3°E	14.9°S
Majete Wildlife Reserve	NG	O	D	2015	300		Fearnhead, pers. comm., 2015	1	860	34.6°E	15.9°S
Nkhotakota Wildlife Reserve	DT	GS	D	2013	92		Sichali & Mkumbwa, 2014	1	747	34.1°E	13.0°S
Nyika National Park	DT	AT	A	2013	47		Macpherson, 2013c	1	1,679	33.8°E	10.6°S
Phirilongwe Forest Reserve	NG	O	D	2009	6		Kaunga-Nyirenda, pers. comm., 2014	1	640	35.0°E	14.5°S
Thuma and Dedza Salima Forest Reserves	DT	GT	A	2015	133		Clifford, 2016	1	418	34.3°E	14.0°S
Vwaza Marsh Wildlife Reserve	DT	AT	A	2013	310		Macpherson, pers. comm., 2013c	1	978	33.4°E	11.0°S

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).

—: No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question. PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Malawi

0 40 80 120 160 200 240km

ABBREVIATIONS AND ACRONYMS

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

AfESG

COUNTRY

Mozambique

ESTIMATED TOTAL ELEPHANTS

10,884 ± 2,228

GUESSES

4,299 - 5,519

GENERAL STATISTICS

Country Area	801,590 km²
Range Area	320,402 km² (40%)
Protected Range	17 %
Information Quality Index (IQI)	0.48
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Mozambique has been severely affected by the recent upsurge in elephant poaching. This has been particularly striking in the country's largest population in the Niassa ecosystem (WCS, 2015b).

The Wildlife Conservation Society (WCS) co-manages Niassa National Reserve with the National Administration of Conservation Areas (ANAC) (WCS, 2015b). Considerable effort has gone into the rehabilitation of Gorongosa National Park, under joint venture arrangements with a private sector partner and foreign investor (Wilson, 2013).

In 2014 a new Biodiversity Law, which criminalises poaching, imposes deterrent sentences, and allows asset seizure, was signed into law (WCS, 2015b).

A five year strategy and action plan for the conservation and management of elephants in Mozambique was developed in 2010 (National Directorate of Conservation Areas, 2010).

Sport hunting of elephants is permitted in Mozambique. From 2007 to 2010, Mozambique's declared annual export quota increased from 80 (tusks as hunting trophies from 40 animals) to 200 (tusks as hunting trophies from 100 animals). The annual export quota of 200 remained from 2010 to 2015 (CITES, n.d.-b).

In recent analyses of seizure data in ETIS, prepared for CITES, Mozambique has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). Mozambique was requested by the CITES Standing Committee, at its 65th

meeting, to prepare a National Ivory Action Plan. Mozambique's plan was submitted in January 2015 (CITES, n.d.-a). In July 2015, Mozambique destroyed 2.4 tonnes of ivory from its national stockpile (Vaughan, 2015).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Mozambique is 10,884 ± 2,228 at the time of the last survey for each area. There may be an additional 4,299 to 5,519 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 261,669 km², which is 82% of the estimated known and possible elephant range. There remains an additional 18% of the estimated range for which no elephant population estimates are available.

A country-wide aerial survey was carried out in 2008 (Agreco, 2008) and while it was undertaken at a low sampling intensity and did not cover all areas, it provided an important baseline. The country's most important population is in the far north, in and around the Niassa NR. Smaller populations occur in the west and centre of the country in Tete and Sofala Provinces and in the south in Gaza Province. The range map has been substantially altered using the information from the 2008 survey. Because surveys have been conducted using a variety of different techniques, it is not easy to compare the national estimates with those from the AESR 2007. The number of elephants estimated from systematic surveys in Mozambique has declined by about 4,000. However, this includes elephants in some areas that had not been previously surveyed, and there has actually been a decrease of about 9,000 in populations which have been surveyed using comparable techniques. There has also been a decline of about 3,000 in the guessed number of elephants.

An **aerial sample count** was conducted in the Niassa Ecosystem in 2014 as part of the Great Elephant Census, giving an estimate of 4,441 ± 1,360 (Grossman et al., 2014d), which replaces an estimate of 12,477 ± 2,111 from 2004 (Craig & Gibson, 2004). In 2009 and 2011 aerial sample count estimates of 20,118 ± 2,701 and 12,029 ± 2,531 were obtained (Craig, 2011a, 2009). There appears to have been a substantial population decline, which is supported by a carcass ratio of 42% in 2014. The 2009 result may have been an over-estimate (Booth & Dunham, 2014) or the result of elephants having moved into the area due to disturbance elsewhere (Craig, 2009).

The 2008 national elephant census (Agreco, 2008) indicated that there were elephants just to the south of Niassa. An additional 1,015 ± 591 elephants were counted in an extension zone on the southern boundary of Niassa in 2014 (Grossman et al., 2014d). In 2011 an **aerial sample count** gave an estimate of 333 ± 309 in the Chipanje Chetu area to the west of the Niassa Reserve, which was not counted in 2014 (Craig, 2012a).

The Quirimbas National Park to the south-east of Niassa was surveyed in 2011, in 2013 (Craig, 2012b, 2013) and in 2014 as part of the Great Elephant Census (Grossman et al., 2014c) giving estimates of 555 ± 448, 560 ± 460 and 328 ± 361 elephants respectively. The 2014 estimate replaces a guess of 2,000 from 2005 (Cumming & Jones, 2005). Estimates in a corridor linking Quirimbas NP to Niassa NR were 294 ± 231 and 306 ± 365 elephants respectively in 2013 and 2014 (Craig, 2013; Grossman et al., 2014c). The estimate for the Palma area of the Quirimbas ecosystem was 58 ± 83 (Craig, 2012b). The confidence limits associated with all these elephant estimates are too wide to draw

any conclusions about changes in numbers. However the carcass ratios were very high at 15% in 2011, 49% in 2013 and 45% in 2014, indicating an unsustainable offtake.

A ground survey of Gilé National Reserve was carried out in 2011-12 (Ntumi et al., 2012) which gave an **informed guess** of 21-166 elephants. This replaces a guess of 15-33 from 2002 (Ntumi, pers. comm., 2003).

Gorongosa National Park lost most of its large mammals during the civil conflict of 1977-1992. There were believed to be 2,000 elephants before the war compared to about 200 in 1994 (Cumming et al., 1994). An **aerial total count** in 2014 covering 50% of Gorongosa NP estimated at least 535 elephants (Stalmans et al., 2014), replacing an estimate of 22 from 2004 (Dunham, 2004), which suggests that numbers may be increasing (WCS, 2015).

A series of total counts, carried out in Marromeu Game Reserve since the mid-1960s (Bento et al., 2010), had been previously overlooked and thus no estimate was provided in the AESR 2007. In 2014, an **aerial sample count** was carried out as part of the Great Elephant Census, a few weeks after a helicopter count. The aerial sample count gave an estimate of 606 ± 634, which serves as the estimate for Marromeu GR, compared to 350 from the helicopter count (Grossman et al., 2014a).

An **aerial sample count**, which was part of the Great Elephant Census, estimated the elephant population in the Magoe area south of Lake Cahora Bassa in 2014 at 1,051 ± 721 and that of southern Tete Province further east at 604 ± 431 (Grossman et al., 2014b). These estimates replace an estimate of 1,628 ± 794 from 2003 (Dunham, 2004) and a guess of 2,260 to 3,910 from 1998 (Direcção Nacional de Florestas e Fauna Bravia, 1999) respectively. The 2014 survey had a high carcass ratio of 15%. Another aerial sample count in 2010 gave an estimate of 1,985 ± 1,102 (Dunham, 2010), suggesting that there had been no significant change between 2010 and 2014. No elephants were observed in the area north-west of Lake Cahora Bassa in 2014, compared to 90 in 2003 (Dunham, 2004). Note that the AESR 2007 incorrectly recorded an estimate of 1,718 elephants in this area. The 2014 survey did not cover the area between Lake Cahora Bassa and the Zambian border to the north, but there is recent evidence for the continued survival of elephants here (Jacobson, pers. comm., 2015) and the map shows the revised range based on this information.

An **aerial sample count** of Limpopo National Park and a southern extension along the South African border was carried out in 2014 as part of the Great Elephant Census (Grossmann et al., 2014e). This survey covered the entire national park and gave an estimate of 1,081 ± 641 elephants, which replaces an estimate of 630 (Whyte & Swanepoel, 2006) from a survey that covered only a section of the park. A further 173 ± 259 were estimated in the southern extension in 2014. There was a high carcass ratio of 17%. Fixed wing surveys were carried out in 2010 and 2013 but the results were considered unreliable (Grossmann et al., 2014e). A 2010 helicopter survey (Swanepoel, 2010) gave a minimum count of 1,007 elephants.

There are new records of elephants from the area north-east of the Limpopo Transfrontier Conservation Area, which includes Banhine National Park. In the AESR 2007, Banhine NP was shown as non-range with an estimate of zero. Five elephants were seen in an **aerial total count** of Banhine NP in 2012 (Stalmans, pers. comm., 2012) and further evidence of the survival of elephants

in this area was collected during the course of predator surveys (Andresen, pers. comm., 2015), so the area of **known range** has been modified accordingly. The numbers are likely to be low, however, as the 2014 Great Elephant Census survey of Gonarezhou in Zimbabwe covered the adjoining Massangena West area in Mozambique and no elephants were seen there (Dunham & van der Westhuizen, 2015).

Helicopter based counts were carried out in the Maputo Special Reserve in 2004, 2006, 2008, 2011 and 2012. During this period the maximum number counted was 348 in 2008 (Matthews, 2008) with a minimum of 80 in 2004. Although Bodasing and Cumbane (2013) counted 264 elephants in 2012, the authors considered that there were at least 400 elephants in the population (Bodasing & Cumbane, 2013). This count also included the Futi Corridor extension to Tembe Elephant Park in South Africa. The 2008 figure has been used in the report, since it is considered to be closer to the true number.

Some areas surveyed in 2008 have not been surveyed more recently, and a figure for the rest of Mozambique of 4,278 has been extracted from this dataset (Agreco, 2008). However, because of the uncertain overlaps in time and space with the other surveys this has been treated as an **informed guess**.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	883	–	–	–	1 %	2,422
Aerial Sample Counts	9,996	2,229	–	–	29 %	93,274
Informed Guesses	5	–	21	166	5 %	16,336
Other Guesses	–	–	4,278	5,353	47 %	149,636
Totals 2015	**10,884**	**2,228**	**4,299**	**5,519**		
Totals 2006	**14,847**	**2,260**	**7,149**	**9,072**		
Assessed Range					82 %	261,669
Unassessed Range					18 %	58,732
Total Range					100 %	320,402

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	-8,613	±2,730	0	0	14 %	43,933
New Population	+2,127	±1,326	0	0	6 %	19,581
Different Technique	+2,608	±918	-5,130	-6,830	12 %	37,099
Different Area	-90	±149	0	0	1 %	2,195
New Guess	+5	0	+2,280	+3,277	50 %	158,861
Totals	-3,963	±3,175	-2,850	-3,553	82 %	261,669

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	2,422	0	2,422
Direct Sample and Reliable Dung	90,528	2,746	93,274
Informed Guesses	15,708	628	16,336
Other Guesses	121,485	28,151	149,636
Unassessed Range	53,243	5,489	58,732
Totals	283,387	37,014	320,402

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CI			(km²)	LON.	LAT.
Banhine National Park	NG	O	D	2012	5		Stalmans, pers. comm., 2012	2	6,510	32.9°E	22.8°S
Cahora Bassa											
Cahora Bassa North	DA	AS	D	2014	0		Grossmann et al., 2014b	2	3,028	31.7°E	15.9°S
Magoe District	RS	AS	B	2014	1,051	721	Grossmann et al., 2014b	2	2,290	31.7°E	15.9°S
Tete Province-South	DT	AS	B	2014	604	431	Grossmann et al., 2014b	1	14,500	31.7°E	15.9°S
Gilé National Reserve	NG	O	D	2012	21	145*	Ntumi et al., 2012	2	2,456	38.4°E	16.6°S
Gorongosa National Park	DT	AT	A	2014	535		Stalmans et al., 2014	3	1,832	34.4°E	18.9°S
Limpopo											
Limpopo Extension	NP	AS	B	2014	173	259	Grossman et al., 2014a	2	3,240	32.0°E	23.7°S
Limpopo National Park	DT	AS	B	2014	1,081	641	Grossman et al., 2014a	2	11,971	32.0°E	23.7°S
Maputo Elephant Reserve	DT	AT	A	2008	348		Matthews, 2008	3	827	32.8°E	26.5°S
Marromeu Game Reserve	NP	AS	B	2014	606	634	Grossmann et al., 2014a	2	2,307	35.9°E	18.7°S
Massangena West	NP	AS	B	2014	0		Dunham & van der Westhuizen, 2015	3	1,574	32.1°E	21.7°S
Northern											
Chipanje Chetu	NP	AS	B	2011	333	309	Craig, 2012a	2	6,641	35.2°E	12.3°S
Niassa Adjacent Blocks	NP	AS	B	2014	1,015	591	Grossman et al., 2014d	2	6,697	37.3°E	12.2°S
Niassa Ecosystem	RS	AS	B	2014	4,441	1,360	Grossman et al., 2014d	1	42,168	37.3°E	12.2°S
Quirimbas Corridor	DT	AS	B	2014	306	365	Grossmann et al., 2014c	2	3,605	39.6°E	12.5°S
Quirimbas National Park	DT	AS	B	2014	328	361	Grossmann et al., 2014c	2	11,298	39.6°E	12.5°S
Palma	DT	AS	B	2011	58	83	Craig, 2012b	2	3,816	39.6°E	12.0°S
Rest of Mozambique range	NG	O	E	2008	4,278	1,075*	Agrieco, 2008	1	333,225	35.8°E	18.3°S

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
—: No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A–E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Mozambique

0 80 160 240 320 400 480km

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

ABBREVIATIONS AND ACRONYMS

AfESG

COUNTRY

Namibia

ESTIMATED TOTAL ELEPHANTS

22,754 ± 4,305

GUESSES

90 - 90

GENERAL STATISTICS

Country Area	825,418 km²
Range Area	164,069 km² (20%)
Protected Range	18 %
Information Quality Index (IQI)	0.43
CITES Appendix	II
Listing Year	1997

CURRENT ISSUES

Namibia's elephants occur across the northern region of the country, mostly in national parks and community areas. Their range encompasses a wide variety of habitats, from the extremely arid north-west Kunene Region to the well-watered Zambezi (formerly Caprivi) Region, where the elephants form part of the KAZA transfrontier population. Although poaching has increased in the Zambezi Region in the past ten years, it is not seen as a significant threat in Etosha National Park or for populations in Khaudum National Park and Kunene Region.

Elephant hunting takes place in Namibia, and the revenue generated provides significant income to community conservancies (Naidoo et al., 2006). From 2007 to 2015, Namibia declared an annual export quota of elephant hunting trophies of 180, defined as tusks from 90 animals (CITES, n.d.-a).

Namibia's elephant management plan was published in 2007 (Ministry of Environment and Tourism, 2007).

In 2008, Namibia undertook an approved one-off sale of 7,503 kg of ivory to Japan and China, at a price of USD $1,147,369 (Wijnstekers, 2011).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Namibia is 22,754 ± 4,305 at the time of the last survey for each area. There may be an additional 90 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 84,283 km^2, which is 52% of the estimated known and possible elephant range. There remains an additional 48% of the estimated range for which no elephant population estimates are available.

The elephant population of Namibia has continued to increase although, with wide confidence limits in aerial surveys and elephants moving across international borders, it is not possible to be precise about how great the increase in the national population has been.

There are four main populations, the transfrontier population (with Zambia, Angola, Botswana and Zimbabwe) in the Zambezi Region, in Khaudum National Park in the north-east, the Etosha National Park population, and the Kunene population in the north-west which includes the "desert" elephants.

There has been an increasing trend in elephant numbers in the Zambezi Region since surveys started in the 1980s. This is likely to have been a result of both natural growth and movement from neighbouring countries. **Aerial sample counts** were carried out in 2007, 2011, 2013, 2014, and 2015, giving estimates of 8,380, 10,847 ± 3,580, 9,165 ± 2,016, 14,097 ± 2,678 and 13,116 ± 3,413 (Chase, 2007; Craig & Gibson, 2013b, 2014; Craig, 2011b; Gibson & Craig, 2015a). The previous estimate in the AESR 2007 was 8,725 ± 2,206 (Kolberg, 2004). There was also a total count carried out in 2007 (Chase, 2007) and a sample count in 2008 (Kolberg, 2008). However the latter was carried out with an inexperienced crew and the results were thought to be a considerable underestimate (Kolberg, 2008).

The elephant population of Khaudum NP and the neighbouring community conservancies of Nyae Nyae and N≠a Jaqna have been established since the 1980s, with the provision of artificial water and movements across the border from Botswana. Three **aerial sample counts** were carried out in 2011, 2013 and 2015 giving estimates of 4,731 ± 1,940, 3,638 ± 1,164, and 6,413 ± 2,566 (Craig & Gibson, 2013a; Gibson & Craig, 2015b; MET, 2012). The 2015 figure replaces an estimate of 3,758 ± 2,289 for Khaudum, 61 ± 115 for N#a Jaqna (Kolberg, 2004) and 967 ± 481 for Nyae Nyae (Stander, 2004). None of these are significant differences.

There is a limited movement of elephants between Angola and the Kavango region to the north-west of Khaudum (Terblanche, 2016).

There is a small elephant population in the Mangetti area between Khaudum and Etosha. The AESR 2007 indicated that they occupy the Mangetti Game Reserve, whereas their range is actually concentrated around the Mangetti Cattle Ranch to the west, and also probably extends into the Ukwuangali communal area to the north. Ninety individuals were observed in Mangetti in 2015 (Lindeque, pers. comm., 2016). This **informed guess** replaces one of 20 from 2005 (Ministry of Environment and Tourism, 2005).

NUMBERS AND DISTRIBUTION
CONT.

Etosha National Park in northern Namibia has an increasingly isolated elephant population, since the perimeter fencing has been upgraded in recent years. There has been a gradual increase in elephant numbers, moderated by deaths from anthrax and poaching. Aerial sample counts were carried out in 2011 and 2012, giving estimates of 3,378 ± 1,756 and 2,810 (confidence limits not available) (Kolberg, 2012; MET, 2012). The most recent **aerial sample count** from 2015 gave an estimate of 2,911 ± 637 (Kilian, 2015) and replaces an estimate of 2,057 ± 598 from 2004 (Kilian & Kolberg, 2004).

It is technically very difficult to count the widely scattered elephant population in the Kunene Region, which includes the 'desert elephants' in the dry, western extremity of the range and there has been controversy about the numbers in this area. A combined sample block count and **aerial total count** was carried out by helicopter in 2011, giving an estimate of 314 ± 154 (MET, 2012). This replaces an estimate of 210 ± 157 from a 2005 survey (Ministry of Environment and Tourism, 2005). It should be noted that the count did not include the extreme northern part of the range around Opuwo, nor the farms to the south of Etosha. There has been some range expansion to both the south and north, with elephants now being resident in the Ugab river basin and about ten elephants resident in the northern Etanga area (Owen-Smith, pers. comm., 2014). The area of **known range** has been changed, and the Etanga group is shown as a point record on the map. The Kunene population appears to have been increasing in numbers and range, despite evidence that the 'desert elephant' sub-population in the Houanib and Houarusib dry riverbeds reduced from 42 to 31 between 2002 and 2015 (Ramey & Brown, 2015).

There are occasional sightings of elephants in livestock ranching areas to the south of their normal range in the area north and east of Windhoek. These are shown as point records on the range map (Hartman, 2014; The Namibian, 2014).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Sample Counts	22,754	4,306	—	—	42 %	68,121
Informed Guesses	0	—	90	90	10 %	16,162
Totals 2015	**22,754**	**4,305**	**90**	**90**		
Totals 2006	**15,807**	**3,276**	**20**	**20**		
Assessed Range					52 %	84,283
Unassessed Range					48 %	79,786
Total Range					100 %	164,069

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+6,947	±5,410	0	0	50 %	81,727
New Guess	0	0	+70	+70	2 %	2,556
Totals	+6,947	±5,410	+70	+70	52 %	84,283

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	65,438	2,683	68,121
Informed Guesses	15,903	259	16,162
Unassessed Range	31,130	48,655	79,786
Totals	112,471	51,598	164,069

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Etosha National Park	RS	AS	B	2015	2,911	637	Kilian, 2015	1	18,549	15.8°E	19.0°S
Khaudum-Kavango	RS	AS	B	2015	4,149	1,864	Gibson & Craig, 2015b	2	5,843	20.7°E	19.3°S
Kunene	RS	AS	B	2011	314	154	MET, 2012	1	40,887	14.1°E	20.0°S
Mangetti Area	NG	O	D	2015	90		Lindeque, pers. comm., 2010	2	2,558	18.5°E	18.6°S
Nyae Nyae Conservancy	RS	AS	B	2015	2,264	1,729	Gibson & Craig, 2015b	2	7,001	20.7°E	19.3°S
Zambezi Region	RS	AS	B	2015	13,116	3,413	Gibson & Craig, 2015a	1	17,473	23.5°E	17.9°S

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).
— : No Change

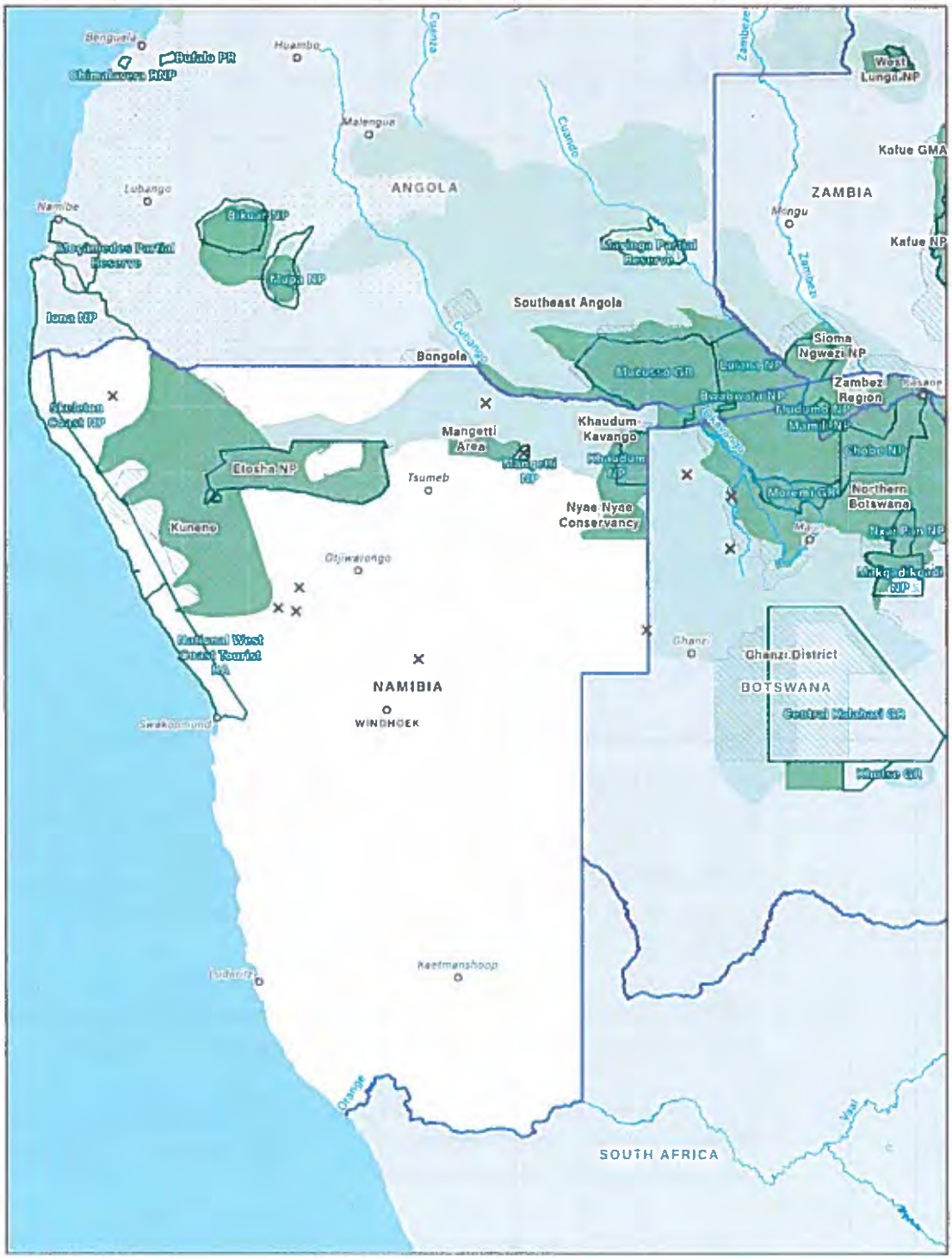
KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A–L (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Namibia



0 90 180 270 360 450 540km

ABBREVIATIONS AND ACRONYMS

See Appendix III for map abbreviations and acronyms

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

South Africa

ESTIMATED TOTAL ELEPHANTS

18,841 ± 0

GUESSES

8,425 - 8,435

GENERAL STATISTICS

Country Area	2,345,410 km²
Range Area	30,651 km² (3%)
Protected Range	93 %
Information Quality Index (IQI)	0.64
CITES Appendix	II
Listing Year	2000

CURRENT ISSUES

Apart from the large population of elephants in the Kruger National Park, most of South Africa's elephant populations exist in relatively small fenced areas (Department of Environmental Affairs and Tourism, 2008), many of which are privately owned. In some places, local elephant overabundance has led to adverse impacts on other biodiversity and a number of management approaches have been undertaken. These include the use of immuno-contraception to control reproduction (Delsink et al., 2013).

Until 2008, there was little elephant poaching in South Africa. However this has recently changed, with increased poaching for ivory, particularly in Kruger National Park (AFP, 2014).

South Africa published a set of Norms and Standards for Managing African Elephants in 2008 (Department of Environmental Affairs and Tourism, 2008) and these were under review in 2014 (Department of Environmental Affairs, 2014).

In 2008, South Africa undertook an approved one-off sale of 47,346 kg of ivory to Japan and China, at a price of USD $6,702,695 (Wijnstekers, 2011). Trophy hunting of elephants is legal in South Africa, and from 2007 to 2015, the declared annual quota increased from 200 tusks as hunting trophies (from 100 animals) to 300 (CITES, n.d.-b).

In recent analyses of seizure data in ETIS, prepared for CITES, South Africa has been identified as a country with a worrying involvement in illegal ivory trade (Milliken et al., 2013, 2016).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in South Africa is 18,841 at the time of the last survey for each area. There may be an additional 8,425 to 8,435 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 28,203 km^2, which is 92% of the known and possible elephant range. There remains an additional 8% of the estimated range for which no population estimates are available.

There has been a reported increase of about 1,000 elephants in the form of estimates, and about 8,000 in guesses since the AESR 2007. While the major population in Kruger NP has increased substantially, the quality of information for other areas is lower than in the AESR 2007, and many areas that previously had documented surveys now have unsupported population figures, which means that elephant numbers are recorded as guesses.

South Africa's elephants are confined to protected areas, private reserves and other privately-owned properties, largely in the north and east of the country, though some populations remain – or are being newly established – in the far south. The largest population of elephants is found within and around Kruger NP, from where most of the elephants in other populations have been translocated.

Following implementation of a policy of managing landscapes rather than managing elephants, and the cessation of culling in 1994, the elephant population of Kruger NP has increased. Annual total counts were carried out until 2012, followed by an **aerial total count** in 2015 which gave an estimate of 17,086 (Ferreira et al., 2015). This replaces a count of 12,427 from 2006 (Whyte, 2007). Since 2003 the growth rate has slowed to 4.2% and this may be connected to the closure of artificial water sources in the park (Ferreira et al., 2015). Fences between Kruger and many neighboring private reserves have been removed, allowing free movement of elephants. However, there is no figure for the entire Kruger ecosystem, since one major private reserve has asked for its numbers to be aggregated with private reserves in other parts of the country (Garai, pers. comm., 2016). Elephants from Kruger NP move into adjacent areas of Mozambique, especially the adjoining Limpopo National Park. One radio-collared elephant from northern Kruger moved through Mozambique as far as Gonarezhou National Park in Zimbabwe (Henley, 2011).

The population at Addo Elephant National Park has increased slightly, with an overall count of 595 in 2012 (Ferreira et al., 2012), replacing one of 459 in 2005.

In Eastern Cape province there are two elephants in Knysna and two in the Great Fish River Provincial Reserve (Selier, pers. comm., 2016). In KwaZulu Natal, Hluhluwe-Imfolozi Game Reserve has 700 elephants, Ithala Game Reserve has 162, uMkhuze Game Reserve has 90 and Tembe Elephant Reserve, linked via the Futi Corridor to Maputo Special Reserve in Mozambique, supports at least 220 elephants (EKZNW, 2016). The St Lucia Reserves have 110 elephants (EKZNW, 2016). These are all **informed guesses** and reflect increased numbers compared to earlier estimates, with the exception of Hluhluwe GR from where elephants have been translocated (EKZNW, 2016).

NUMBERS AND DISTRIBUTION
CONT.

In Mpumalanga Province, there are 57 elephants in the Mthetomusha Provincial Reserve and 105 in Songimvelo Game Reserve (Garaï, pers. comm., 2016); these are both **informed guesses** and represent increases on previous estimates.

In North West Province both Madikwe Provincial Nature Reserve (1,006 elephants) and Pilanesberg Provincial Nature Reserve (240 elephants) show increases based on **informed guesses** (Garaï, pers. comm., 2016). In Limpopo Province **informed guesses** indicate that Atherstone Provincial Nature Reserve holds 105 elephants, Letaba Provincial Nature Reserve 621, Makuya Provincial Nature Reserve nine (Garaï, pers. comm., 2016), and Manyeleti Game Reserve 222 (SANParks, 2009). Marakele National Park has 171 elephants (Ferreira et al., 2012).

As part of a total count survey of the Greater Mapungubwe Transfrontier Conservation Area (Selier & Page, 2015), 347 elephants were counted in Mapungubwe National Park and three in the surrounding area.

Information on elephants in private reserves and other privately-owned elephant properties has been obtained from the Elephant Management and Owners Association (Garaï, pers. comm., 2016). At the request of their owners, some private reserves are grouped under one overall estimate and are not shown on the map. This **guess** totals 2,482 elephants. Other private nature reserves for which numbers are available are Maremani (64), Kwandwe (57), Kariega (41) and Balule, Timbavati, Umbabat and Klaserie combined (2,772).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	18,421	–	–	–	67 %	20,563
Informed Guesses	420	–	8,423	8,433	25 %	7,515
Other Guesses	–	–	2	2	0 %	125
Totals 2015	**18,841**	**0**	**8,425**	**8,435**		
Totals 2008	**17,847**	**0**	**638**	**660**		
Assessed Range					92 %	28,203
Unassessed Range					8 %	2,448
Total Range					100 %	30,651

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+4,810	0	0	0	63 %	19,184
New Population	0	0	+64	+64	0 %	0
Different Technique	+231	0	+162	+172	10 %	3,121
Different Area	+286	0	0	0	1 %	247
New Guess	-4,333	0	+7,561	+7,539	18 %	5,651
Totals	+994	0	+7,787	+7,775	92 %	28,203

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	20,563	0	20,563
Informed Guesses	7,515	0	7,515
Other Guesses	125	0	125
Unassessed Range	2,448	0	2,448
Totals	30,651	0	30,651

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB	YEAR	ESTIMATE	+/-95% CI			(km²)	LON	LAT
Central Highveld Populations											
Atherstone Provincial Nature Reserve	NG	O	D	2015	105		Garai pers. comm. 2016	2	240	26.8°E	24.5°S
Madikwe Provincial Reserve	NG	O	D	2015	1,006		Garai, pers. comm., 2016	2	605	26.3°E	24.8°S
Marakele National Park	DT	AT	A	2012	171		Ferreira et al. 2012	2	380	27.7°E	24.4°S
Pilanesberg Provincial Reserve	NG	O	D	2015	240		Garai, pers. comm., 2016	2	491	27.1°E	25.2°S
Eastern Cape Populations											
Addo Elephant National Park	DT	AT	A	2012	595		Ferreira et al., 2012	2	1,250	25.5°E	33.3°S
Great Fish River Provincial Reserve	NG	O	D	2015	2		Selier, pers. comm. 2016	2	450	26.8°E	33.1°S
Kariega Private Game Reserve	NG	O	D	2015	41		Selier, pers. comm. 2016	2	190	26.7°E	33.5°S
Knysna Forest	NG	O	E	2015	2		Selier, pers. comm. 2016	2	126	23.0°E	34.0°S
Kwandwe Private Game Reserve	NG	O	D	2015	57		Selier, pers. comm., 2016	3	158	26.6°E	33.1°S
Eastern Lowveld Populations											
Balule, Timbavati Umbabat and Klaserie	NG	O	D	2015	2,772		Garai, pers. comm., 2016	1	1,666	31.2°E	24.2°S
Kruger National Park	RS	AT	A	2015	17,086		Ferreira et al. 2015	1	19,073	31.5°E	24.3°S
Letaba Provincial Nature Reserve	NG	O	D	2015	621		Garai, pers. comm., 2016	2	420	31.1°E	23.7°S
Makuya National Park	NG	O	D	2015	9		Garai, pers. comm., 2016	2	165	30.9°E	22.6°S
Manyeleti Game Reserve	RS	AT	A	2009	222		SANParks, 2009	2	228	31.2°E	24.1°S
Maremani	NP	O	D	2015	64		Garai, pers. comm., 2016	2	400	30.2°E	22.4°S
Mthetomusha Provincial Reserve	NG	O	D	2015	57		Garai, pers. comm. 2016	3	72	31.3°E	25.5°S
Songimvelo Game Reserve	NG	O	D	2015	105		Garai pers. comm. 2016	2	490	31.0°E	26.0°S
Greater Mapungubwe Ecosystem											
Mapungubwe Ecosystem	DA	AT	A	2014	347		Selier & Page 2015	2	279	29.3°E	22.2°S
KwaZulu-Natal Populations											
Hluhluwe Imfolozi Game Reserve	NG	O	D	2015	700		EKZNW, 2016	2	965	31.9°E	28.3°S
Ithala Game Reserve	DT	O	D	2015	162		EKZNW, 2016	2	297	31.3°E	27.5°S
St. Lucia Reserves	DT	O	D	2015	110		EKZNW, 2016	2	539	32.5°E	27.9°S
Tembe Elephant Park	DT	O	D	2015	220	10*	EKZNW, 2016	2	285	32.5°E	26.9°S
uMkhuze Game Reserve	NG	O	D	2015	90		EKZNW, 2016	2	380	32.3°E	27.7°S
Other Private Reserves											
Other Private Reserves	NG	O	D	2015	2,482		Garai, pers. comm., 2016	3		24.6°E	29.1°S

South Africa

ABBREVIATIONS AND ACRONYMS

AfESG

Swaziland

ESTIMATED TOTAL ELEPHANTS

42 ± 0

GUESSES

0 - 0

GENERAL STATISTICS

Country Area	17 360 km²
Range Area	50 km² (0%)
Protected Range	80 %
Information Quality Index (IQI)	0
CITES Appendix	I
Listing Year	1997 (year of accession)

CURRENT ISSUES

Swaziland has only two small fenced populations of elephants and concerns have been raised about their impact on the biodiversity of these areas. In 2016, the U.S. Fish and Wildlife Service approved an application to import 18 African elephants from Swaziland to three zoos in the United States. In March 2016 the elephants were flown to the US despite a pending legal challenge to block the importation (Peters, 2016).

There is no current or past action plan or strategy for the management of African elephants in Swaziland.

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Swaziland is 42 at the time of the last survey for each area. This number applies to 50 km², which is 100% of the estimated known and possible elephant range in Swaziland.

Elephant distribution is well known in Swaziland, being mainly restricted to fenced enclosures within Hlane Royal National Park and Mkhaya Game Reserve. The enclosures only occupy a fraction of the reserves (6% and 19% respectively). **Individual registration** of all elephants is maintained for the Hlane Royal NP and Mkhaya GR populations. There were 25 elephants in Hlane in 2015 compared to 13 in 2005, and 14 in Mkhaya in 2015 compared to 15 in 2005 (Reilly, pers. comm., 2016).

Three elephants originating from the Songimvelo Game Reserve in South Africa are regularly seen in the Mololotja Nature Reserve in north-western Swaziland (Reilly, pers. comm., 2012). During 2014, two elephants, a cow and a sub-adult crossed from Mozambique into Swaziland at Lomahasha. Over a period of three days they traveled across Hlane Royal NP and west to the escarpment, west of eBuhleni, traversing communal areas. They then returned along a similar route, crossing Hlane Royal NP and Mlawula Nature Reserve, returning to Mozambique via the Umbuluzi river gorge (Reilly, pers. comm., 2016).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CI	FROM	TO	PERCENT (%)	AREA (km²)
Individual Registrations	39	–	–	–	45 %	22
Informed Guesses	3	–	0	0	55 %	28
Totals 2015	**42**	**0**	**0**	**0**		
Totals 2006	**31**	**0**	**0**	**0**		
Assessed Range					100 %	50
Unassessed Range					0 %	0
Total Range					100 %	50

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CI	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+11	0	0	0	45 %	22
New Guess	0	0	0	0	55 %	28
Totals	+11	0	0	0	100 %	50

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	22	0	22
Informed Guesses	28	0	28
Unassessed Range	0	0	0
Totals	50	0	50

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CI			(km²)	LON.	LAT.
Hlane Royal National Park	RS	IR	A	2015	25		Reilly pers. comm., 2016	1	142	31.9°E	26.3°S
Malolotja Nature Reserve	NG	O	D	2012	3		Reilly pers. comm., 2012	1	28	31.1°E	26.1°S
Mkhaya Nature Reserve	RS	IR	A	2015	14		Reilly pers. comm., 2016	1	65	31.7°E	26.6°S

RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
– : No Change

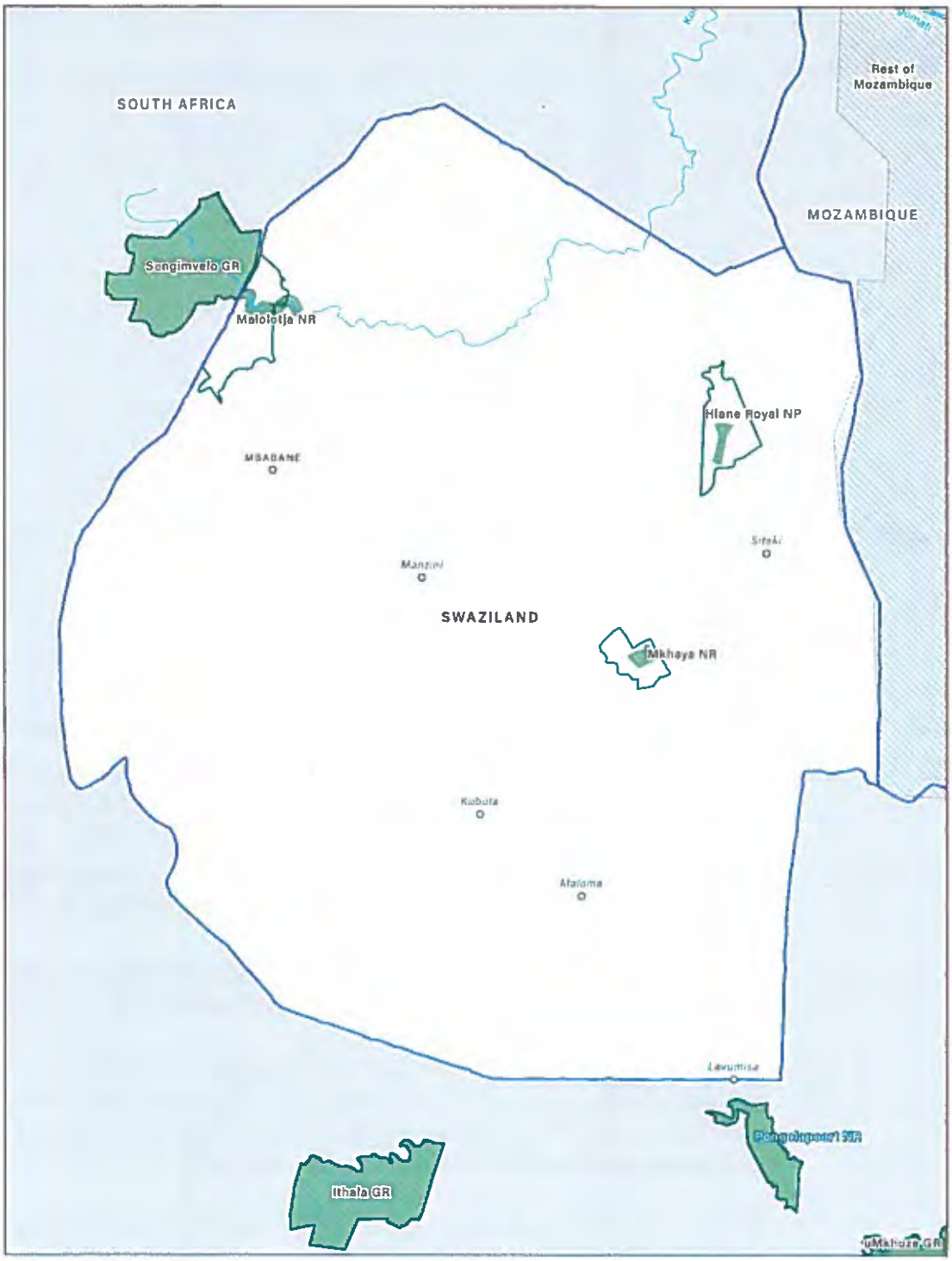
KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Swaziland



0 10 20 30 40 50 60km

ABBREVIATIONS AND ACRONYMS

See Appendix III for complete abbreviations and acronyms

AfESG

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Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Zambia

ESTIMATED TOTAL ELEPHANTS

21,967 ± 4,703

GUESSES

214 - 314

GENERAL STATISTICS

Country Area	752,610 km²
Range Area	170,406 km² (23%)
Protected Range	27%
Information Quality Index (IQI)	0.50
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Zambia has a number of large protected areas, and much of the country is covered by game management areas. However, wildlife densities are generally low. Elephant populations were badly affected by poaching in the late 1970s and poaching for ivory continues to be a problem (Nyirenda et al., 2015). The large size of the national parks and particularly of the game management areas makes it difficult to manage them effectively with limited resources (Lindsey et al., 2014).

The Bangweulu Wetlands are being co-managed by the African Parks Network and North Luangwa National Park is being co-managed by the Frankfurt Zoological Society.

The Zambia Wildlife Act (1998), which established the parastatal Zambia Wildlife Authority, was repealed by the Zambia Wildlife Act (2015), which placed responsibility for wildlife management under the National Parks and Wildlife Department. Zambia published a national policy and action plan for elephant management in 2003 (Ministry of Tourism, 2003).

Trophy hunting of elephants is legal in Zambia. From 2007 to 2012, Zambia increased its annual export quota of elephant hunting trophies from 40 (tusks and other hunting trophies from 20 animals) to 160 (tusks and other trophies from 80 animals) (CITES, n.d.-b). Zambia declared a temporary suspension of elephant hunting in 2013, and the quota declared to CITES in 2013 and 2014 was zero. There appears to be some confusion about whether the suspension had been lifted in late 2014 (Kunda, 2014). The declared quota to CITES for 2015 and 2016 was 160 (CITES, n.d.-b).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Zambia is 21,967 ± 4,703 at the time of the last survey for each area. There may be an additional 214 to 314 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 105,461 km², which is 62% of the estimated known and possible elephant range. There remains an additional 38% of the estimated range for which no elephant population estimates are available.

Elephant numbers in Zambia have changed little since the last update. The main changes have been a reduction in guesses from isolated small populations such as West Lunga and Bangweulu. There has been a substantial reduction in numbers in Sioma Ngwezi National Park but this makes up a small proportion of the national population.

A country wide aerial survey was carried out in 2015 as part of the Great Elephant Census, covering the four major elephant range areas (DNPW, 2016): the Luangwa Valley, the Kafue ecosystem, the Lower Zambezi Valley and Sioma Ngwezi NP and surrounding game management areas (GMAs). A 2013 countrywide survey was carried out but the results were not released. The previous country-wide survey was carried out in 2008 (Simukonda, 2009), but it is unclear how comparable the methods were to the 2015 survey.

The Luangwa Valley includes South Luangwa National Park, North Luangwa NP, Luambe National Park, Lukusuzi National Park and a number of GMAs. In the 1970s this area held a population of perhaps 100,000 elephants (Caughley & Goddard, 1975), but this was greatly reduced by poaching in the late 1970s and 1980s (Jachmann & Billiouw, 1997). Aerial sample counts have been carried out since the 1970s but they have been inconsistent in coverage and methodology, making comparisons difficult.

An **aerial sample count** was carried out in the Luangwa ecosystem in 2015 as part of the Great Elephant Census (DNPW, 2016). The total estimate was 13,898 ± 3,555 (DNPW, 2016). A series of earlier surveys had appeared to show a decline in numbers, going from 18,634 ± 3592 in 2008 (Simukonda, 2009) to 10,649 ± 2,205 in 2011 and 6,361 ± 1652 in 2012 (DNPW, 2016) so the higher figure in 2015 was unexpected.

The sub-total for North Luangwa NP in 2015 was 4,673 ± 1,788 elephants (DNPW, 2016). This replaces an estimate of 3,235 ± 695 from 2003 (van der Westhuizen, 2003). The estimate for South Luangwa NP in 2015 was 3,302 ± 1,194 (DNPW, 2016) which replaces an estimate of 4,459 ± 695 from 2002 (Dunham & Simwanza, 2002).

There was no estimate for Luambe NP in the AESR 2007, whereas the 2015 survey gave an estimate of 54 ± 77. No elephants were seen in Lukusuzi National Park in the 2015 survey, nor in the preceding 2005 count of the area (Fourie & Ferreira, 2005). West Petauke and Luano GMAs were not covered in the 2015 survey, so a zero estimate from 2009 (WCS Flight Programme, 2009) and guess of 150 from 1996 (Jachmann, 1996) have been retained.

Some changes have been made to the range map for the Luangwa ecosystem on the basis of these surveys. The southern GMA of West Petauke has been changed from known range to **possible range** as has much of the eastern part of the ecosystem.

Kafue National Park and adjoining GMAs hold the country's second largest elephant population. The 2015 **aerial sample count** gave an estimate of 6,689 ± 1,418 (4,813 ± 2,265 in the NP and 1,876 ± 2,064 in the surrounding GMAs (DNPW, 2016). These replace a 2004 estimate of 6,306 ± 5,227 in the park only (Simwanza, 2004). The carcass ratio for Kafue NP was only 1% in 2008 and increased to 7% by 2015 (DNPW, 2016) giving some cause for concern, despite the apparent stability of the population. Minor changes have been made to the range map (Beattie, pers. comm., 2015).

The 2015 survey gave an estimate for the Lower Zambezi system, comprising the Lower Zambezi National Park and surrounding GMAs, of 973 ± 589 for the park and 153 ± 172 for the surrounding GMAs (DNPW, 2016). This replaces a 2003 estimate of 1,477 ± 744 for the park, and 45 ± 53 for the GMAs (Dunham, 2004). Another count in 2008 gave an estimate of 1,298 ± 438 (Simukonda, 2009). The elephants in Lower Zambezi NP are confined to a fairly small area along the Zambezi River below the escarpment and the area of known range has been reduced on the basis of sightings from aerial surveys and mortality records (Stevenson, pers. comm., 2015).

Sioma Ngwezi National Park is surrounded by GMAs in the south-west close to the Namibian and Angolan borders. The 2015 **aerial sample count** gave an estimate of 48 ± 78 for the park and a zero estimate for the GMAs (DNPW, 2016). This replaces an estimate of 385 ± 371 from 2005 (Chase & Griffin, 2005). There were also aerial sample counts in 2008 (Simukonda, 2009), 2009 and 2013 (Chase et al., 2013) which gave estimates of 2,433 ± 2,210, 400 (no confidence limits given) and 133 ± 149, respectively. The carcass ratio increased dramatically from 3% to 85% between 2008 and 2015 (DNPW, 2016) indicating either high levels of poaching and/or a seasonally varying population. Elephants move between Sioma Ngwezi, Namibia and Botswana (Chase et al., 2013).

There is a small population of elephants in the Mosi-oa-Tunya National Park next to Victoria Falls. An **aerial total count** of 31 in 2008 (Simukonda, 2009) replaces a guess of 306 from 2006 (Chase, 2006). No elephants were observed in the adjoining Kazungula ecosystem in an **aerial sample count** in 2008 (Simukonda, 2009). This area had not previously been surveyed.

There are only five resident elephants (Willems, pers. comm., 2016) in the Bangweulu Wetlands, contributing to an **informed guess** of 45 for the entire Bangweulu/Kasanka/Lavusha Manda system close to the DRC border. This replaces a series of old guesses amounting to 144 from the 1990s (Blanc et al., 2007). The area of **known range** has been increased.

There is a small isolated elephant population on the north bank of Lake Kariba, in the Kotakota area. An estimate of 19 animals from 1991 has been retained from the AESR 2007 (Tembo, pers. comm., 1993).

There are about 100 elephants in Nsumbu National Park (Tanganyika ecosystem) on the southern shores of Lake Tanganyika. In the past this was thought to be connected to the elephant population in Katavi and there was an annual migration to the southern region of the DRC but this has not

taken place since 2007, after a major poaching incident on the border. The elephants are now restricted to part of the park and the area of **known** and **possible range** has been reduced accordingly (Zytkow, pers. comm., 2016).

West Lunga National Park is in the far west, close to the Angolan border. There were estimated to be over 500 elephants in 1996, but numbers appear to have dropped considerably since then. There were sightings of 21 individuals in 2014 as well as a number of other scattered recordings (Tilbury, pers. comm., 2015; ZAWA & WWF, 2014). The area of **known range** has been expanded to the area of these sightings.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	85	—	—	—	0 %	107
Aerial Sample Counts	21,761	4,704	—	—	45 %	75,884
Informed Guesses	121	—	45	145	16 %	27,780
Degraded Data	—	—	169	169	1 %	1,691
Totals 2015	**21,967**	**4,703**	**214**	**314**		
Totals 2006	**22,251**	**5,891**	**870**	**870**		
Assessed Range					62 %	105,461
Unassessed Range					38 %	65,005
Total Range					100 %	170,466

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+933	±7,405	-56	-56	43 %	73,313
New Population	+54	±76	0	0	6 %	9,745
Different Technique	-275	0	0	0	0 %	75
Different Area	-1,025	±1,408	0	0	4 %	6,823
New Guess	+29	±92	-592	-492	8 %	13,814
Totals	-284	±7,539	-648	-548	61 %	105,461

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	107	0	107
Direct Sample and Reliable Dung	65,184	10,700	75,884
Informed Guesses	16,765	11,015	27,780
Other Guesses	17	1,674	1,691
Unassessed Range	10,602	54,403	65,005
Totals	92,674	77,793	170,466

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON	LAT.
Bangweulu System	NG	O	D	2015	45		Willems, pers. comm., 2016	1	15,115	30.2°E	12.0°S
Chete and Sekula Islands	RS	AT	A	2008	54		Simukonda, 2009	4	32	27.5°E	17.4°S
Kafue Ecosystem											
Kafue Game Management Areas	RS	AS	B	2015	1,876	2,064	DNPW 2016	1	22,800	25.9°E	15.3°S
Kafue National Park	RS	AS	B	2015	4,813	2,265	DNPW 2016	1	22,230	25.9°E	15.3°S
Kotakota Game Ranch	-	AT	E	1991	19		Tembo, pers. comm., 1993	4	15	28.0°E	16.8°S
Lower Zambezi											
Lower Zambezi National Park	RS	AS	B	2015	973	589	DNPW 2016	2	1,145	29.7°E	14.0°S
Lower Zambezi Game Management Areas	RS	AS	B	2015	153	172	DNPW 2016	2	1,383	29.5°E	15.7°S
Luangwa Ecosystem											
Luambe National Park	NP	AS	B	2015	54	77	DNPW 2016	3	344	29.7°E	14.0°S
Luangwa Game Management Areas	RS	AS	B	2015	5,869	3,108	DNPW 2016	1	16,754	32.2°E	12.4°S
Luano	-	O	E	1996	150		Jachmann, 1998	1	8,930	29.6°E	14.8°S
Lukusuzi National Park	RS	AS	B	2015	0		DNPW 2016	2	2,610	29.7°E	14.0°S
North Luangwa National Park	RS	AS	B	2015	4,673	1,788	DNPW 2016	2	4,676	29.7°E	14.0°S
South Luangwa National Park	RS	AS	B	2015	3,302	1,194	DNPW 2016	2	8,646	29.7°E	14.0°S
West Petauke Game Management Area	DA	AS	D	2009	0		WCS Flight Programme, 2009	2	8,143	32.1°E	12.6°S
Tanganyika Ecosystem	NG	O	D	2016	100	100*	Zytkow pers. comm., 2016	2	7,082	30.0°E	8.8°S
West Lunga National Park	NG	O	D	2014	21		Tilbury pers. comm. 2016	2	1,684	24.8°E	12.8°S
West Zambezi											
Kazungula Landscape	NP	AS	B	2008	0		Simukonda, 2009	2	5,112	29.8°E	14.2°S
Mosi-oa-Tunya National Park	DT	AT	A	2008	31		Simukonda, 2009	4	67	25.8°E	17.9°S
Sioma Ngwezi National Park	RS	AS	B	2015	48	78	DNPW 2016	2	4,482	29.7°E	14.0°S
West Zambezi	NP	O	D	2015	0		WWF Zambia, 2016	2	7,143	23.7°E	17.0°S

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— : No Change

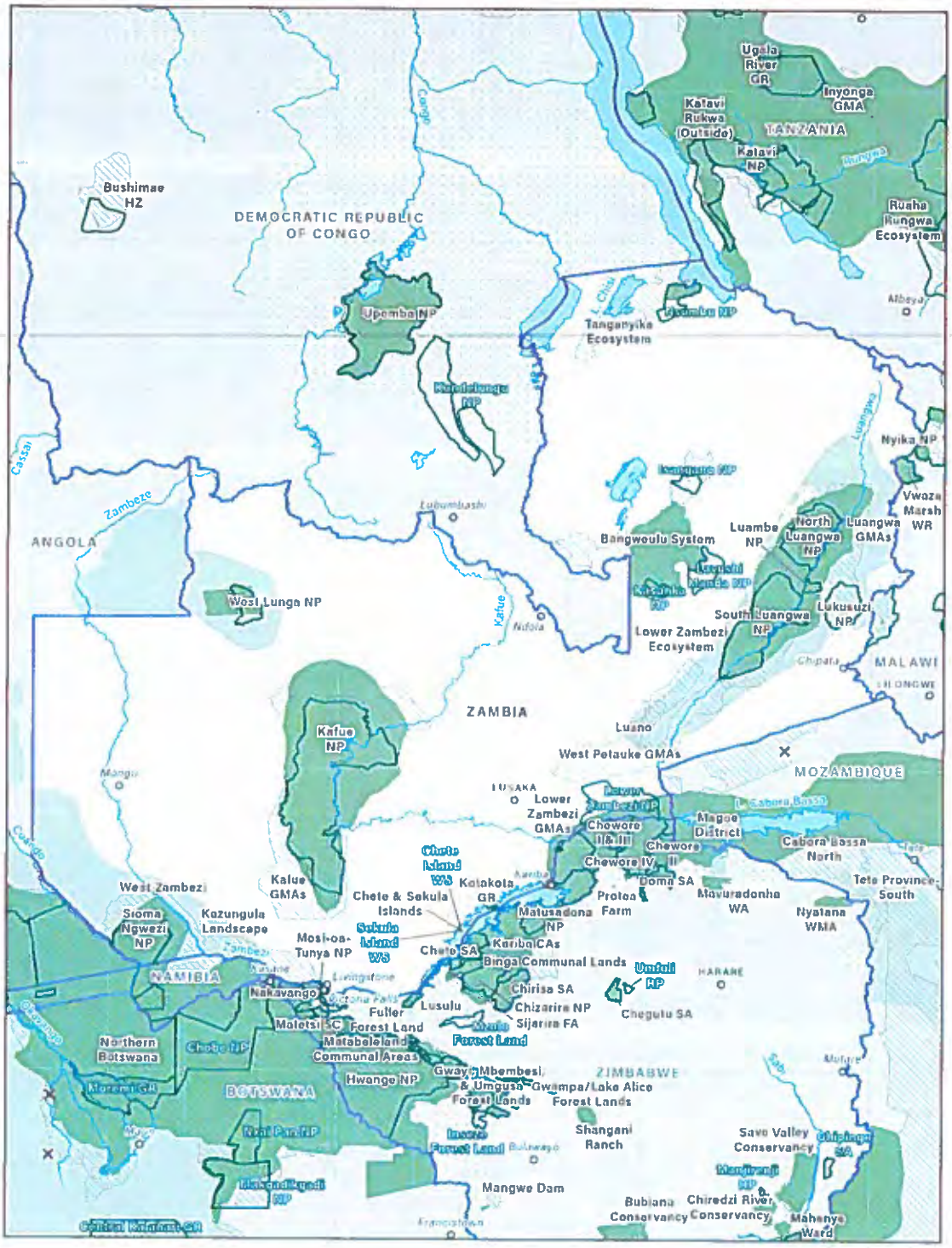
KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A–E (best to worst)

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question. PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Zambia



ABBREVIATIONS AND ACRONYMS

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Zimbabwe

ESTIMATED TOTAL ELEPHANTS

82,630 ± 8,589

GUESSES

1,635 - 1,805

GENERAL STATISTICS

Country Area	390,580 km²
Range Area	81,228 km² (21%)
Protected Range	61%
Information Quality Index (IQI)	0.86
CITES Appendix	II
Listing Year	1997

CURRENT ISSUES

Poaching of elephants for ivory has escalated in the past ten years and has become a major problem in Zimbabwe. A worrying recent development has been the emergence of poisoning as a poaching technique. Just over 100 elephants were killed in a single cyanide poisoning incident in Hwange National Park in late 2013 (Muboko et al., 2014). The impact of poaching has been highest in the north of the country, particularly in the Sebungwe Region to the south of Lake Kariba, and the Lower Zambezi Region (Dunham et al., 2015c). Although elephant numbers have increased in Gonarezhou National Park, it too experienced an increase in poaching in 2015 (Dunham & van der Westhuizen, 2015).

Concern has been expressed about the impact of high numbers of elephants on vegetation and other biodiversity in Zimbabwe's protected areas. Despite the increase in poaching, this remains a problem in protected areas such as Hwange NP, where the provision of artificial water supplies has led to high elephant densities (ZPWMA, 2015).

Zimbabwe published a national elephant management plan covering the period 2015 to 2020 (ZPWMA, 2015).

In 2008, Zimbabwe undertook an approved one-off sale of 3,764 kg of ivory to Japan and China, at a price of USD $487,162 (Wijnstekers, 2011).

Zimbabwe's annual declared export quota of elephant trophies remains unchanged since 2007 at 1,000 (tusks as hunting trophies from 500 animals) (CITES, n.d.-b). In 2015, the US Fish and Wildlife Service removed its 'non-detriment' finding, thus banning the import of elephant trophies into the USA (USFWS, 2015a).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Zimbabwe is 82,630 ± 8,589 at the time of the last survey for each area. There may be an additional 1,635 to 1,805 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 78,839 km², which is 97% of the estimated known and possible elephant range. There remains an additional 3% of the estimated range for which no elephant population estimates are available.

There has been a decline of just over 10,000 elephants from surveyed populations since the AESR 2007 and an increase of about 1,000 in guesses, mostly from previously unsurveyed areas in North West Matabeleland. Although there have been large losses from the Sebungwe and Lower Zambezi populations, these have been partially compensated by increases in Gonarezhou and North West Matabeland.

The major populations of the Lower Zambezi Valley (including Mana Pools National Park), Sebungwe (including Matusadona and Chizarira National Parks), North-west Matabeleland (including Hwange and Zambezi National Parks) and the south-east Lowveld (including Gonarezhou NP) were surveyed in 2014 using **aerial sample counts** (including block counts in hilly areas) as part of the Great Elephant Census.

The estimate from the Lower Zambezi Valley in 2014 was 11,656 ± 2,259 (Dunham et al., 2015c). The previous comparable estimate was 19,297 ± 2,527 in 2001 (Mackie, 2002). The 2014 figure replaces an estimate from the AESR 2007 of 19,981 ± 2,392 from 2003 (Dunham, 2004). This survey was less comparable than the 2001 one because it covered a slightly smaller area. There was an approximately 40% decline in the 13 years between 2001 and 2014. The observed carcass ratio of 6% is not as high as one would expect given the rate of population reduction and might suggest that the level of poaching has reduced in recent years. The corridor between the Mavuradonha Wilderness Area and the rest of the Zambezi Valley range has been changed to **possible range** (Packenham quoting Varden, pers. comm., 2016).

The 2014 estimate for Sebungwe was 3,407 ± 1,215 (Dunham et al., 2015b) which replaces an estimate of 15,024 ± 2,133 from a 2006 survey (Dunham et al., 2006a). The observed carcass ratio of 30% indicates an unsustainably high offtake of elephants. There were almost no elephants left in the communal areas, with the main surviving sub-populations in Matusadona and Chizarira National Parks and the Chirisa Safari Area. Wildlife scouts reported 70-100 elephants in Kavira Forest Land at the western end of Sebungwe (M. Sebele pers. comm. in Dunham et al., 2015b).

The 2014 estimate for North-west Matabeleland was 53,991 ± 7,711 (Dunham et al., 2015a), which replaces an estimate of 49,310 ± 7,051 from 2001 (Dunham & Mackie, 2002). There was no significant difference between the totals although the increased carcass ratio of 7% from 3% in 2001 is a worrying sign. Other aerial sample counts were carried out in 2006 and 2007 but they were not

suitable for comparative purposes (Dunham et al., 2007; Dunham et al., 2006b). Since the 2014 Botswana survey was carried out a month earlier than the north-west Matabeleland survey there is a possibility of double-counting or missing animals that had moved from Hwange into Botswana. There was a surprisingly large number of elephants seen in the Ngwasho/Sepako stratum in Botswana adjoining the southern half of Hwange NP (estimate 11,744) (Chase et al., 2015) and evidence from radio-tracking shows that elephants do move out of Hwange into adjoining areas of Botswana (Chamaillé-Jammes, pers. comm., 2016; Ferguson & Chase, 2010).

Elephant range in North-west Matabeleland has probably increased. Water hole counts and scout reports indicated 308 elephants in the Fuller Forest Land, 165 in Gwaai, Bembezi and Umguza Forest Lands (which has been marked as new **known range**) and 150 in Gwampa/Lake Alice Forest Reserves (M. Sebele pers. comm in Dunham et al., 2015a) which are all recorded as **new populations**. I. Du Preez (pers. comm. in Dunham et al., 2015a) reported an **informed guess** of 36 elephants in the privately owned Stanley & Livingstone Game Reserve (Nakavango).

The estimate for Gonarezhou NP from the 2014 survey was 11,120 ± 2,709 (Dunham & van der Westhuizen, 2015). This replaces an estimate of 4,987 ± 1,577 from a comparable 2001 survey. Another survey in 2009 gave an estimate of 9,123 ± 1,898 (Dunham et al., 2010). The elephant population of Gonarezhou NP is continuing to increase, and is at its highest level since surveys started in 1980. There was a relatively low carcass ratio of 4%. There are limited movements of elephants from Gonarezhou into adjoining parts of Mozambique, and one radio-collared elephant moved from Kruger to Gonarezhou (Henley, 2011).

The 2014 survey of the south east Lowveld included some neighbouring areas. No elephants were observed in the Malapati Safari Area immediately south-west of Gonarezhou but there was an estimate of 332 ± 519 in the Mahenye communal land to the north-east of Gonarezhou, which replaces a zero estimate from the 2001 survey. The 2014 survey gave an estimate of 1,585 ± 1,295 for the Savé Valley Conservancy. This replaces an estimate of 527 ± 310 (Dunham, 2003). There is no statistical difference between the two results. Aerial total counts were carried out in 2013 and 2015 (Jooste & Lenton, 2015; Joubert & Joubert, 2013), which did not cover the entire area: 1,538 and 1,490 elephants were counted respectively. Sengwe, further to the south-west, adjoining the northern boundary of Kruger National Park in South Africa, was not counted in the 2014 survey, but there was an estimate of 35 ± 99 in 2013 (Dunham et al., 2013). In the Malilangwe Conservancy 272 elephants were counted using a helicopter in 2013 (Clegg, 2013). This replaces an estimate of 116 from an aerial total count in 2001 (Dunham, 2002). There was an estimate of 55 in 2014 for the Chiredzi River Conservancy (Warth in Dunham & van der Westhuizen, 2015) compared to 28 in 2001 (Dunham, 2002). Although Chipinge Safari Area is marked as possible elephant range, this is now highly unlikely.

There are a number of small isolated populations in other parts of Zimbabwe, which have updated estimates for 2014. There is an informed guess of 150 elephants for Chegutu Safari Area (Mwale, pers. comm. in Dunham, 2015), formerly Hartley Safari Area, west of Harare and this replaces a guess of 100 from 2001 (Dunham & Mackie, 2002). Some 30 elephants reportedly move from the Nyatana Wildlife Management Area in the north east of the country into Mozambique and this replaces a guess of 150 from 2001 (Dunham & Mackie, 2002).

NUMBERS AND DISTRIBUTION
CONT.

Some 20 bull elephants were photographed, and there was a further unverified report of 40 elephants, near Mangwe Dam in the vicinity of Home Farm and Greystone Ranches, across the border from Francistown in Botswana (Robertson and Winch, pers. comm. in Dunham, 2015) replacing a guess of three from 2002 (Dunham & Mackie, 2002). A helicopter total count enumerated 174 elephants on Shangani Ranch near Bulawayo (Edwards, pers. comm. in Dunham, 2015) and this replaces a guess of 60 from 2001 (Dunham & Mackie, 2002).

There was a **total aerial count** of 212 elephants in 2014 in the Zimbabwe section of the Mapungubwe Transfrontier Conservation Area which includes Tuli Safari Area, Sentinel, Nottingham and River Ranches (Selier & Page, 2015). This replaces an estimate of 82 from 2001 (Dunham & Mackie, 2002).

There were **informed guesses** in 2014 of 500-600 in Bubye Valley (Leathem & English pers. comm. in Dunham, 2015), and 100 on Bubiana Conservancy (Drummond pers. comm. in Dunham, 2015) in the south of Zimbabwe, replacing guesses of 53 and 50 respectively (Dunham & Mackie, 2002). An old estimate of ten elephants in the Mambali Communal Lands on the Botswana border has been retained from the AESR 2007 (Dunham & Mackie, 2002). A report of 54 elephants on Nuanetsi Ranch is recorded as a **new population**.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	484	–	–	–	1 %	819
Aerial Sample Counts	82,126	8,589	–	–	81 %	65,502
Informed Guesses	20	–	527	567	5 %	3,777
Other Guesses	–	–	1,091	1,221	10 %	8,399
Degraded Data	–	–	17	17	0 %	342
Totals 2015	**82,630**	**8,589**	**1,635**	**1,805**		
Totals 2006	**93,122**	**7,068**	**534**	**625**		
Assessed Range					97 %	78,839
Unassessed Range					3 %	2,389
Total Range					100 %	81,228

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	-10,320	±11,124	0	0	79 %	63,868
New Population	0	0	+713	+713	6 %	4,563
Different Technique	+7	±99	-145	-145	4 %	3,370
Different Area	+20	0	-3	+36	0 %	33
New Guess	-182	0	+519	+559	8 %	6,662
Data Degraded	-17	0	+17	+17	0 %	0
Totals	-10,492	±11,124	+1,101	+1,180	97 %	78,839

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	819	0	819
Direct Sample and Reliable Dung	65,375	127	65,502
Informed Guesses	3,745	32	3,777
Other Guesses	8,741	0	8,741
Unassessed Range	1,533	857	2,389
Totals	80,213	1,016	81,228

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON	LAT
Chegutu Safari Area	NG	O	E	2014	150		Dunham, 2015	2	445	29.6°E	17.9°S
Greater Mapungubwe											
Tuli, Maramani, Sentinel, Nottingham	RS	AT	A	2014	212		Selier & Page, 2015	2	1,192	29.4°E	22.0°S
Lower Zambezi Valley											
Chewore II	RS	AS	B	2014	594	333	Dunham et al., 2015c	2	1,058	29.9°E	16.1°S
Chewore I & III	RS	AS	B	2014	2,709	851	Dunham et al., 2015c	2	1,773	29.9°E	16.1°S
Chewore IV	RS	AS	B	2014	0		Dunham et al., 2015c	3	472	29.9°E	16.1°S
Doma Safari Area	RS	AS	B	2014	153	194	Dunham et al., 2015c	2	991	29.9°E	16.1°S
Mavuradonha Wilderness Area	RS	AS	B	2014	0		Dunham et al., 2015c	2	652	29.9°E	16.1 S
Mukwiche Area	RS	AS	B	2014	0		Dunham et al., 2015c	3	337	29.9°E	16.1 S
Protea Farm	-	O	E	2001	7		Dunham & Mackie, 2002	4	14	29.6°E	16.5°S
Rest of Zambezi valley	RS	AS	B	2014	8,200	2,029	Dunham et al., 2015c	1	11,720	29.9°E	16.1 S
Mambali Communal Lands	-	AT	E	2001	10		Dunham & Mackie, 2002	2	327	28.4°E	21.5°S
Mangwe Dam	DA	O	D	2014	20	40*	Dunham, 2015	3	291	28.1°E	20.7°S
Northwest Matabeleland											
Fuller Forest Land	NP	O	D	2014	308		Dunham, 2015	3		25.9°E	18.1°S
Gwaai, Bembesi, and Umguza Forest Lands	NP	O	D	2014	165		Dunham, 2015	2	1,442	28.0°E	19.3°S
Gwampa/Lake Alice Forest Lands	NP	O	E	2014	150		Dunham, 2015	2	860	28.5°E	19.1°S
Hwange National Park	RS	AS	B	2014	45,846	6,244	Dunham et al., 2015a	1	15,168	26.4°E	18.8°S
Matabeleland Communal areas	RS	AS	B	2014	2,201	3,062	Dunham et al., 2015a	2	3,075	26.4°E	18.8°S
Matetsi Safari Complex	RS	AS	B	2014	4,843	2,968	Dunham et al., 2015a	1	4,384	26.4°E	18.8°S
Nakavango	NP	O	E	2014	36		Dunham, 2015	3		25.8°E	18.0°S
Ngamo & Sikumi Forest Areas	RS	AS	B	2014	1,101	993	Dunham et al., 2015a	2	2,332	26.4°E	18.8°S
Nyatana Wildlife Management Area	NG	O	E	2014	30		Dunham, 2015	2	651	32.5°E	16.7°S
Sebungwe											
Binga Communal Lands	RS	AS	B	2014	86	162	Dunham et al., 2015b	2	2,201	28.2°E	17.4°S
Chete Safari Area	RS	AS	B	2014	278	222	Dunham et al., 2015b	2	1,242	28.2°E	17.4°S
Chirisa Safari Area	RS	AS	B	2014	1,200	755	Dunham et al., 2015b	2	1,530	28.2°E	17.4°S
Chizarira National Park	RS	AS	B	2014	747	767	Dunham et al., 2015b	2	2,096	28.2°E	17.4°S
Kariba Communal Areas	RS	AS	B	2014	411	364	Dunham et al., 2015b	2	3,198	28.2°E	17.4°S
Kavira Forest Land	NG	O	E	2014	70	30*	Dunham et al., 2015b	2	287	27.0°E	18.1°S
Lusulu	RS	AS	B	2014	0		Dunham et al., 2015b	2	537	28.2°E	17.4°S

ELEPHANT ESTIMATES (CONT.)

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Matusadona National Park	RS	AS	B	2014	669	251	Dunham et al., 2015b	2	1,366	28.2°E	17.4°S
North Gokwe Communal Lands	RS	AS	B	2014	0	21	Dunham et al., 2015b	2	3,096	28.2°E	17.4°S
Sijarira Forest Area	RS	AS	B	2014	16		Dunham et al., 2015b	3	261	28.2°E	17.4°S
Shangani Ranch	NG	O	E	2014	174		Dunham, 2015	2	628	29.3°E	19.6°S
Southeast Lowveld											
Bubiana Conservancy	NG	O	E	2014	100		Dunham, 2015	2	1,772	29.8°E	21.1°S
Bubye Valley Conservancy	NG	O	E	2014	500	100*	Dunham, 2015	1	2,895	30.1°E	21.5°S
Chiredzi River Conservancy	DT	O	E	2014	55		Dunham, 2015	2	895	31.6°E	20.8°S
Gonarezhou National Park	RS	AS	B	2014	11,120	2,709	Dunham & van der Westhuizen, 2015	1	4,941	31.9°E	21.5°S
Mahenye Ward	RS	AS	B	2014	332	519	Dunham & van der Westhuizen, 2015	3	221	31.9°E	21.5°S
Malapati Safari Area	RS	AS	B	2014	0		Dunham & van der Westhuizen, 2015	3	177	31.9°E	21.5°S
Malilangwe Conservancy	RS	AT	A	2013	272		Clegg, 2013	3	425	31.9°E	21.1°S
Matibi II Communal Lands	-	AS	E	1996	0		Davies et al., 1996	3	400	31.7°E	21.5°S
Nuanetsi Ranch	NP	O	D	2014	54		Dunham, 2015	2		30.8°E	21.6°S
Save Valley Conservancy	RS	AS	B	2014	1,585	1,295	Dunham & van der Westhuizen, 2015	2	3,496	32.1°E	20.4°S
Sengwe Communal Land	DT	AS	B	2013	35	99	Dunham et al., 2013	2	2,488	31.8°E	21.6°S

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— : No Change

KEY TO SURVEY REPORT

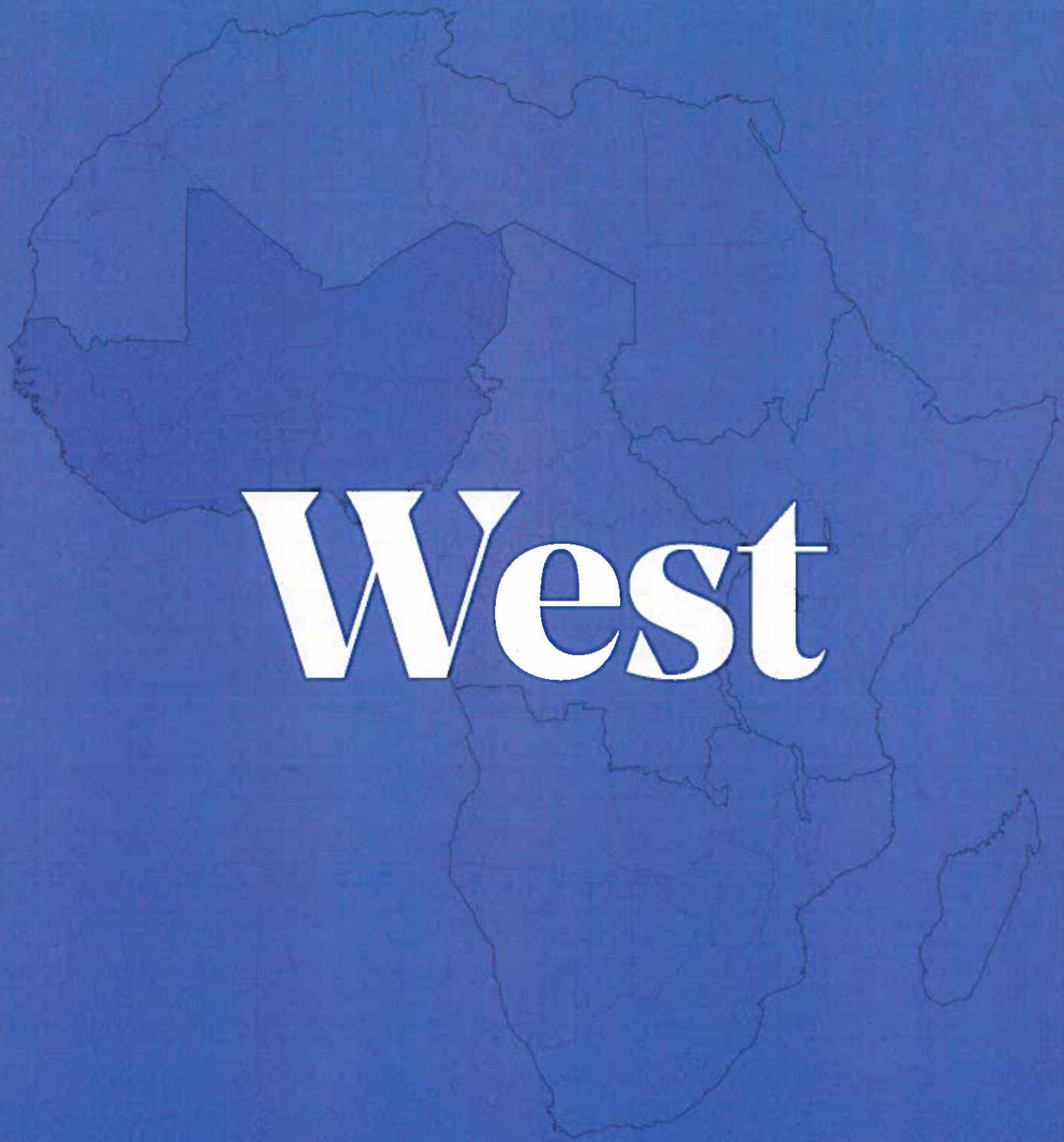
AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Zimbabwe

AfESG



West

REGION

West Africa

ESTIMATED TOTAL ELEPHANTS

11,489 ± 2,583

GUESSES

2,886 - 3,376

GENERAL STATISTICS

Region Area	5,096,660 km²
Range Area	142,500 km² (3%)
Protected Range	70 %
Information Quality Index (IQI)	0-48

CURRENT ISSUES

West Africa's elephant populations are mostly small, fragmented and isolated. With growing human populations and increasing infrastructure development, many countries in West Africa are experiencing increased pressure on natural areas from mining, logging and rapid transformation of land to agriculture. These challenges are particularly acute in those countries that have recently emerged from civil strife (GEF, 2010; Mallon et al., 2015).

The AESR 2016 provides more information than previous status reports on countries known to have small, isolated and highly vulnerable populations, with some stark results. Although numbers are small relative to continental levels, West Africa reported losing twelve populations of elephants since the AESR 2007: one each in Cote d'Ivoire, Ghana, Guinea Bissau, Sierra Leone and Togo; two in Guinea and five in Nigeria. It is surprising, however, that there is recent evidence for the continued survival of a number of populations that were already at a very low level 10-20 years ago.

The transboundary "WAP" complex ("W" National Park, Arly National Park and Pendjari National) straddles the border between Benin, Burkina Faso, Niger, continues to hold the region's largest population which has great significance as one of West Africa's few populations with potential long-term viability.

West Africa has 18 MIKE sites. While reporting rates vary, three sites (Comoé National Park in Côte d'Ivoire, Babban Rafi Forest in Niger, and Kéran NP in Togo) have not reported any elephant carcasses since MIKE started in 2002 and about half the remaining 15 sites did not report any carcasses in 2015. While small populations, such as those prevalent in West Africa, cannot be

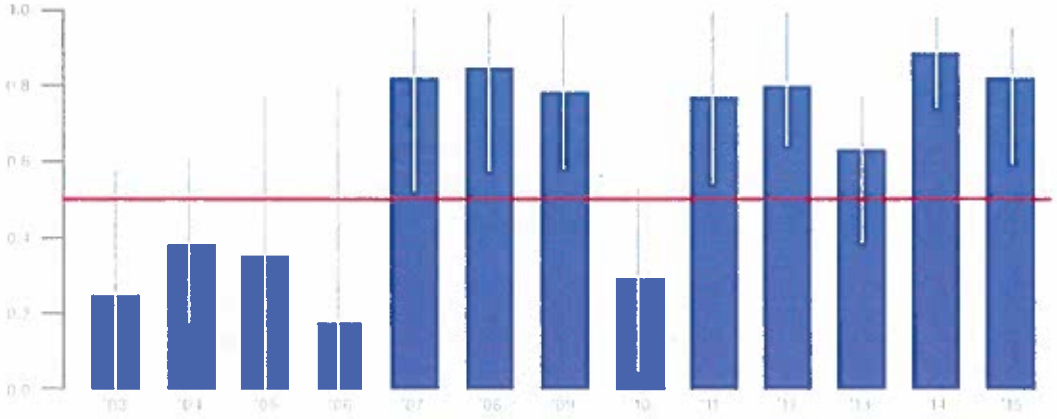


FIGURE 1: *West African PIKE trends with 95% confidence intervals (CITES Secretariat, 2016)*

expected to yield large numbers of carcasses, there have been apparent examples of under-reporting (CITES Secretariat, 2016). Figure 1 provides the most recent PIKE figures for West Africa. The low level of reporting of data for West African MIKE sites in 2015 is cause for concern, in terms of both the regularity of reporting and data quality, which makes reliable inferences on trends impossible for the region.

The Strategy for the Conservation of West African Elephants (African Elephant Specialist Group, 2005b) is now outdated as is the series of national level plans that followed its development. The third wave of planning is currently underway using the framework provided by the African Elephant Action Plan (AEAP) which was adopted by CITES in 2010 (African elephant range states, 2010). Niger was the first country to produce a national plan under the AEAP in 2010 (Direction de la Faune, de la Chasse et des Aires Protégées, 2010), and Liberia is scheduled to initiate their process in 2016 as part of the Elephant Protection Initiative.

In recent analyses of seizure data prepared for CITES, a number of countries in West Africa have been identified as having a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). Nigeria has been requested to prepare and implement a National Ivory Action Plan. Further details are provided in the country summaries.

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed within the last ten years in West Africa is 11,489 ± 2,583 at the time of the last survey for each area. There may be an additional 2,886 to 3,376 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 102,850 km^2, which is 72% of the estimated known and possible elephant range. There remains an additional 28% of the estimated range for which no population estimates are available.

The overall number of elephants in West Africa appears to have increased since 2006. The 2015 survey of the WAP complex supported by the Great Elephant Census (Bouché et al., 2015), produced an estimate of 8,953 ± 2,486 compared to 4,592 for the "WAPOK" complex in 2003 (WAPOK is the WAP complex plus parts of Togo) (Bouché et al., 2004b). The latest data for Togo's portion of

this population indicates that its contribution is negligible. The apparent growth in population, the region's largest, is the major contributor to the overall increase in the region since the AESR 2007.

The proportion of elephant range for which elephant estimates are available currently stands at 72%, an increase from 66% in the previous report. The overall quality of information, as measured by the IQI, has increased from 0.44 to 0.48.

At the national level, population estimates for both Benin and Burkina Faso suggest increases in the WAP complex. Estimates for Côte d'Ivoire, Ghana, Guinea Bissau, Senegal, Sierra Leone and Togo have stayed more or less constant with some higher and lower guesses, while estimates for Guinea, Mali and Nigeria have declined since 2006. Guinea is now reduced to a single small population. Niger's few remaining elephants are thought to still move in and out of the country as part of the WAP complex. Information on Liberia's elephants has been substantially improved in this report, adding a small number to guesses originating from 1989/90. Some of the previous numbers, primarily guesses, for Côte d'Ivoire, Ghana, and Nigeria remain unchanged in this report but have become degraded data due to age.

A substantial update of the West African elephant range has been completed for this report, and this has the effect of reducing the total range (known and possible) from 176,000 km^2 to approximately 143,000 km^2, but the percentage of known range has increased from 71% to 79%. The 2015 Great Elephant Census survey of the WAP complex resulted in the addition of areas of known range in Benin and Burkina Faso but more areas were moved to possible and doubtful range. In Côte d'Ivoire, Ghana, Guinea, Guinea Bissau, Niger, Sierra Leone and Togo, many areas of previously known range have been changed to possible and doubtful range. Range loss has been particularly severe in Côte d'Ivoire. In Liberia, the area of known range has been increased with improved access to information following many years of war. In Mali, small areas of doubtful range have been removed, and sightings and data from collared elephants have provided information to refine the range of the Gourma elephants. In Nigeria, two small areas have been moved to known range, but far more has been changed to possible range and even doubtful range.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	401	–	–	–	3 %	4,338
Aerial Sample Counts	8,936	2,527	–	–	14 %	20,362
Ground Sample Counts	893	507	–	–	1 %	990
Reliable Dung Counts	906	181	–	–	4 %	5,227
Other Dung Counts	0	–	103	227	1 %	1,705
Informed Guesses	353	–	430	796	29 %	41,057
Other Guesses	–	–	1,449	1,449	12 %	17,735
Degraded Data	–	–	905	905	8 %	11,436
Totals 2015	**11,489**	**2,583**	**2,886**	**3,376**		
Totals 2006	**7,862**	**375**	**3,745**	**4,053**		
Assessed Range					72 %	102,850
Unassessed Range					28 %	39,649
Total Range					100 %	142,500

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+146	0	-105	-55	1 %	791
New Population	0	0	+47	+50	5 %	7,698
Different Technique	+4,874	±2,582	-83	-83	17 %	23,892
Different Area	-90	±127	-286	-212	2 %	2,727
New Guess	-987	±320	-249	-85	36 %	50,737
Population Lost	-129	±167	-318	-358	0 %	0
Data Degraded	-187	±36	+187	+118	0 %	0
No Change	0	±76	0	0	12 %	17,004
Totals	+3,627	±2,611	-807	-625	72 %	102,850

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	2,628	1,710	4,338
Direct Sample and Reliable Dung	26,578	0	26,579
Informed Guesses	38,433	2,624	41,057
Other Dung Counts	1,646	59	1,705
Other Guesses	14,992	12,699	27,691
Unassessed Range	28,597	10,723	39,784
Totals	112,874	27,816	141,153

ELEPHANT ESTIMATES

COUNTRY	# OF ELEPHANTS		GUESSES		RANGE			PFS	IQI
	ESTIMATE	(95% CI)	MIN	MAX	AREA (km²)	% REGIONAL	% ASSESSED		
Benin	2,984	1,460	0	0	9,112	6 %	99 %	3	.66
Burkina Faso	6,850	2,123	67	69	15,110	11 %	80 %	3	.61
Cote D'ivoire	189	135	647	652	14,578	10 %	92 %	2	.18
Ghana	994	67	238	288	15,181	11 %	50 %	2	.37
Guinea	0	0	64	138	1,557	1 %	78 %	3	0
Guinea Bissau	0	0	7	7	1,346	1 %	100 %	3	0
Liberia	124	99	1,425	1,425	28,950	20 %	45 %	2	.03
Mali	253	0	51	51	25,495	18 %	100 %	2	.83
Niger	0	0	17	17	2,333	2 %	100 %	3	0
Nigeria	94	0	169	463	20,088	14 %	56 %	2	.09
Senegal	1	0	9	14	1,090	1 %	100 %	3	.07
Sierra Leone	0	0	135	155	1,353	1 %	64 %	3	0
Togo	0	0	74	114	6,307	4 %	65 %	3	0
Total	11,489	2,583	2,286	3,376	142,500	100 %	72 %	2	.48

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).

-- No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst)

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

West Africa

0 200 400 600 800 1000 1200km

ABBREVIATIONS AND ACRONYMS

See Appendix III for a full list of abbreviations and acronyms

AfESG

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Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

Benin

ESTIMATED TOTAL ELEPHANTS

2,984 ± 1,460

GUESSES

0 - 0

GENERAL STATISTICS

Country Area	112,620 km²
Range Area	9,112 km² (8%)
Protected Range	100%
Information Quality Index (IQI)	0.66
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Elephants in Benin are now almost completely confined to the northern border region adjoining Burkina Faso and Niger. The group of protected areas in this region are known collectively as the WAP complex (Parc W, Arly National Park and Pendjari National Park), with Pendjari NP, Parc W du Benin and hunting zones within Benin.

The relatively high density of elephants in Pendjari NP has had an impact on the vegetation including baobab trees and borassus palms (Salako et al., 2016).

Benin's national strategy for elephant conservation was developed and published in 2005 (Ministère de l'Agriculture, de l'Elevage et de la Pêche, 2005).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Benin is 2,984 ± 1,460 at the time of the last survey for each area. This estimate applies to 9,112 km², which is all of the estimated known and possible elephant range.

There has been an increase in recorded estimates at a national level, although this increase results from comparison of surveys using different techniques, so may not represent a true increase in numbers.

An **aerial sample count** conducted in the Benin, Burkina Faso, and Niger WAP complex in 2015 (Bouché et al., 2015), showed the main elephant concentrations in Benin to be in the Pendjari

NUMBERS AND DISTRIBUTION CONT.

NP, in Parc W and in the Mekrou Hunting Zone. The estimate for Pendjari NP was 1,632 ± 1,394, which replaces an estimate of 788 from a total count conducted in 2003 (Bouché et al., 2004). No elephants were seen in the central part of Pendjari NP, with most elephants occurring along the border with Burkina Faso. The estimate for Parc W du Benin NP in 2015 was 462 ± 174, compared to 56 from the 2003 total count (Bouché et al., 2004b). The estimate for the Konkombri Hunting Zone was 87 ± 87 in 2015, with Mekrou Hunting Zone having an estimate of 803 ± 390 in the same survey. In the AESR 2007 these areas were combined as Atakora, and there was a 2003 total count of 343 (Bouché et al., 2004b). On the basis of the 2015 survey, two areas of **doubtful range** have been changed to **known range**.

An aerial total count of parts of Parc W du Benin NP and the Djona Hunting Zone was also carried out in 2012 (Bouché, 2012a) and a foot survey of Parc W, Pendjari NP and adjoining hunting zones was carried out in 2013 (Bouché et al., 2013a). However, since these surveys did not cover the entirety of any protected areas, it is not possible to use their results for comparative purposes.

The 2003 and 2015 surveys used different techniques and were not directly comparable but there was a striking increase in estimates. It cannot be explained by movements from the other two WAP countries, since the estimate for the entire area, including the other countries, increased from 4,592 in 2003 to 8,953 ± 1,253 in 2015. There seems to have been little opportunity for elephants to have been compressed into these protected areas from other parts of the range, since there were not thought to be significant numbers outside the WAP complex even in 2003. It has been suggested that the population may have increased after 2003 but declined in recent years, as indicated by the high carcass ratio of 10% recorded across the WAP complex (Bouché et al., 2015). However it is also possible that the 2003 result was an underestimate, or that 2015 was an overestimate, or both.

According to Bouché (pers. comm., 2015) it is unlikely that any elephants remain in the forests of Alibori Supérieur, Goungoun and Trois Rivières and they have been changed to **doubtful range**. Another area to the north of the Djona Hunting Zone has also been changed to **doubtful range** (Bouché, pers. comm., 2015).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	2,984	1,460	—	—	99 %	8,997
Degraded Data	—	—	0	0	0 %	0
Totals 2015	**2,984**	**1,460**	**0**	**0**		
Totals 2006	**1,223**	**0**	**0**	**0**		
Assessed Range**					99%	8,997
Unassessed Range					1 %	115
Total Range					100 %	9,112

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Different Technique	+1,761	±1,460	0	0	99 %	8,997
Data Degraded	0	0	0	0	0 %	0
Totals	+1,761	±1,460	0	0	99 %	8,997

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	8,997	0	8,997
Unassessed Range	110	0	115
Totals	9,108	0	9,112

***This country is known to have 100% assessed range. Differences in table values exist due to minor variations between map layers.*

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Djona Hunting Zone	DT	AS	B	2015	0		Bouché et al., 2015	1	1,216	2.3°E	11.4°N
Goungoun Classified Forest	-	AT	E	2003	0		Bouché et al., 2004b	1	806	3.2°E	11.5°N
Konkombri Hunting Zone	DT	AS	B	2015	87	86	Bouché et al., 2015	2	217	2.3°E	11.4°N
Mekrou Hunting Zone	DT	AS	B	2015	803	390	Bouché et al., 2015	1	1,073	2.3°E	11.4°N
Pendjari Biosphere Reserve	DT	AS	B	2015	1,632	1,394	Bouché et al., 2015	1	1,977	1.8°E	11.3°N
W du Bénin National Park	DT	AS	B	2015	462	174	Bouché et al., 2015	1	5,872	1.8°E	11.3°N

*RANGE OF INFORMED GUESS

*KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
– : No Change

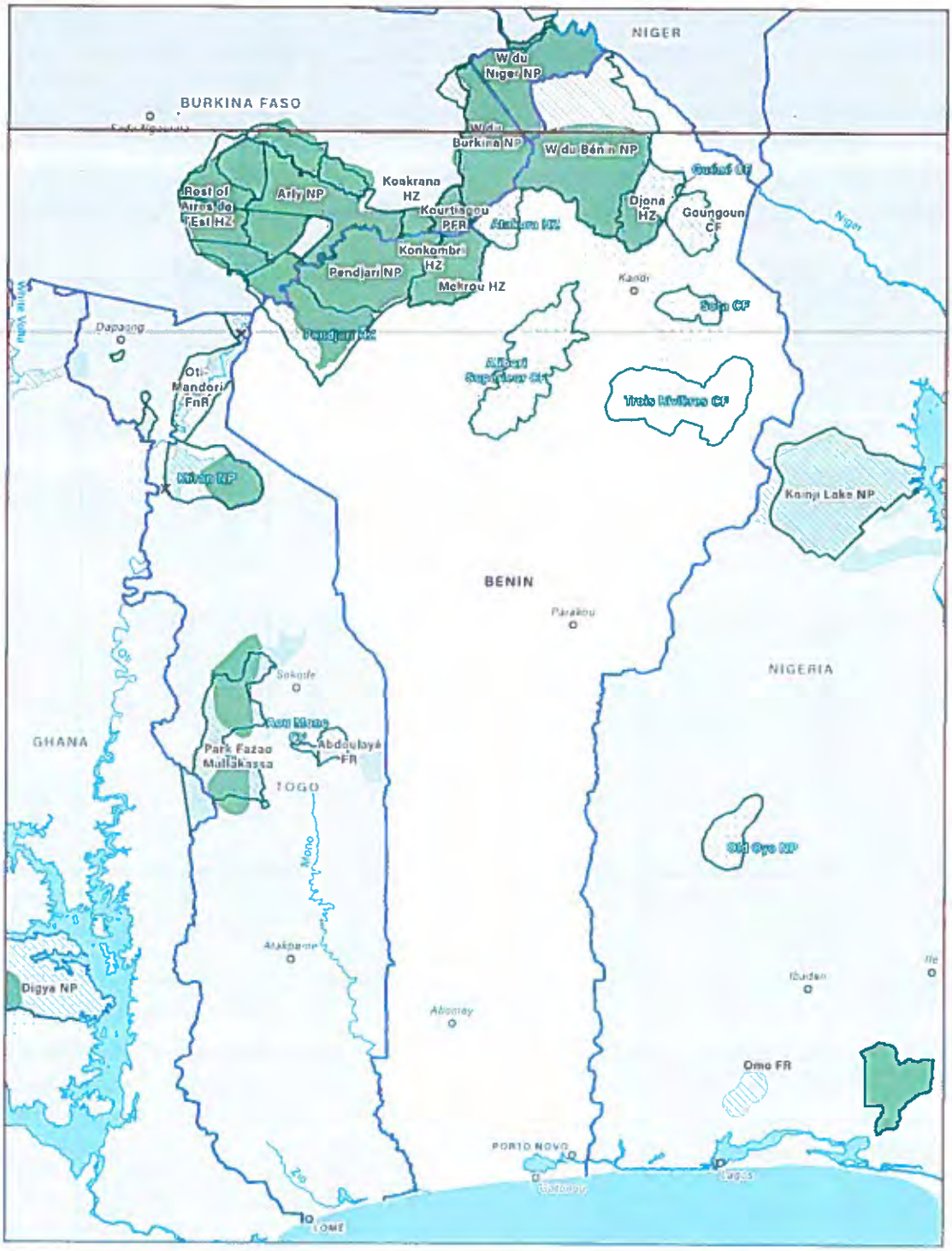
*KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived

Benin



0 30 60 90 120 150 180 km

ABBREVIATIONS AND ACRONYMS

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Burkina Faso

ESTIMATED TOTAL ELEPHANTS

6,850 ± 2,123

GUESSES

67 - 69

GENERAL STATISTICS

Country Area	274,200 km²
Range Area	15,110 km² (6%)
Protected Range	95%
Information Quality Index (IQI)	0.61
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Burkina Faso hosts the largest population of elephants in West Africa, most inhabiting the trans-frontier WAP complex, which includes Parc W du Burkina, Arly NP and surrounding hunting zones in Burkina Faso. Since 2012, Burkina Faso has experienced a new wave of elephant poaching. While few elephants (13 to 20 per year) were poached during the previous decade, the number of carcasses increased to 50 to 86 per year in the last ten years (DFC, 2015). During the 2015 survey of the WAP complex, 76% of the observed carcasses were recorded in the Burkina Faso portion of the complex (Bouché et al., 2015). This is occurring in the context of strong socio-political change and associated insecurity in the country.

Burkina Faso published an elephant management strategy in 2003 (Belemsobgo et al., 2003), which is outdated.

In 2015, a new law formally established Arly National Park and nearly doubled the area of the former "Arly National Park", which had been a park in name but not status (Conseil National de Transition, 2015).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed over the last ten years in Burkina Faso is 6,850 ± 2,123 at the time of the last survey for each area. There may be an additional 67 to 69 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 12,149 km^2, which is 80% of the estimated known and possible range. There remains an additional 20% of range for which no elephant population estimates are available.

The increase of just over 2,000 in recorded estimates at a national level is a result of the increased numbers recorded in the WAP complex.

The WAP complex was covered in an **aerial sample count** in 2015 (Bouché et al., 2015). Most of the 3,969 elephants estimated were in the hunting blocks around Arly, with 985 ± 400 in Arly NP, and 1,099 ± 1,276 in Parc W du Burkina. Elephants were found throughout the area, and the area of **known range** has been increased to include the whole of Parc W du Burkina. There was a high carcass ratio of 11% suggesting that the population has been affected by poaching. These results replace estimates from an aerial total count conducted in 2003 (Bouché et al., 2004b) of 2,119 in the hunting blocks, 422 for Arly NP and 740 for Parc W. A total count of Parc W was carried out in 2012 (Bouché, 2012a). This covered only part of the Burkina Faso sector of the park. A ground sample count covering most of the WAP complex was carried out in 2013 (Bouché et al., 2013a) but because of incomplete coverage neither of these surveys were directly comparable.

A **ground sample count** of Nazinga Game Ranch, on the border with Ghana, estimated 893 ± 507 elephants in 2012 (Bouché, 2012b). This replaces an estimate of 583 elephants of a larger area from an aerial total count conducted in 2003 (Bouché et al., 2004a). At least 34 elephants are known to have been lost to poaching in the Nazinga area between 2010 and 2015 (DFC, 2015).

Elephants may occasionally move between Nazinga, Kaboré Tambi NP and Zabré, on the Volta River next to the border with Ghana, but there are no longer resident elephants, so this area has been changed to **doubtful range** (Bouché, pers. comm., 2015).

An aerial total count conducted in the Mouhoun Protected Area Complex in 2013 recorded five elephants in the Deux Balé protected area, which forms part of the complex. However, between 2007 and 2012, between 35 and 40 elephants were seen and photographed from the ground in Deux Balé, and it is believed that these elephants still survived in 2013 (Bouché et al., 2013b). This new **guess** replaces an aerial sample count estimate of 541 from 2002 (Belemsobgo, 2002). There was no evidence of elephants in other parts of the complex, which had large numbers of domestic livestock. Therefore the other areas in the complex have been changed to **doubtful range**. During the course of the 2013 **aerial total count** elephant signs were seen in the Mare aux Hippopotames Biosphere Reserve, but no animals were found. This is therefore considered a minimum estimate of one elephant, and the area is marked as **known range**. This replaces an estimate of 46 from an aerial total count in 2005 (Bouché, 2005).

There is an updated **guess** of 18–20 elephants from the Bontioli Partial and Total Faunal Reserve on the Ghana border to the south of the Mouhoun complex (Bouché, 2007a), which replaces a

NUMBERS AND DISTRIBUTION CONT.

guess of 50 (Chardonnet, pers. comm., 1998). Based on Bouché (pers. comm., 2015), this has been changed from possible to **known range**, while the area outside the reserve has been changed to **doubtful range**.

Fifteen elephants have been reported from the Niangoloko forest north-west of Comoé-Léraba (Karama, pers. comm., 2016). This has been added as a **new population**. These elephants are believed to move to the Comoé-Léraba forest. The existing guess for Comoé- Léraba of three animals (Bouché, 2005) has been retained.

Elephants from Gourma in Mali have occasionally come south into Burkina Faso to a maximum of 20 km from the border (Wall et al., 2013).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Sample Counts	5,952	2,063	—	—	60 %	9,032
Ground Sample Counts	893	507	—	—	6 %	990
Informed Guesses	5	—	49	51	7 %	1,022
Other Guesses	—	—	15	15	0 %	40
Degraded Data	—	—	3	3	7 %	1,065
Totals 2015	**6,850**	**2,123**	**67**	**69**		
Totals 2008	**4,474**	**320**	**200**	**200**		
Assessed Range					80 %	12,149
Unassessed Range					20 %	2,961
Total Range					100 %	15,110

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Population	0	0	+15	+15	0 %	40
Different Technique	+2,961	±2,124	0	0	66 %	10,022
New Guess	-582	±320	-151	-149	7 %	1,022
Data Degraded	-3	0	+3	+3	0 %	0
Totals	+2,376	±2,148	-133	-131	73 %	12,149

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	10,022	0	10,022
Informed Guesses	1,022	0	1,022
Other Guesses	1,105	0	1,105
Unassessed Range	2,958	3	2,961
Totals	15,107	3	15,110

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Bontioli Partial & Total Faunal Reserve	NG	O	D	2007	18	2*	Bouché, 2007a	2	420	3.1°W	10.8°N
Comoé-Leraba Classified Forests	-	AT	E	2005	3		Bouché, 2005	1	1,204	4.6°W	9.9°N
Mare aux Hippotames Biosphere Reserve	NG	O	D	2013	1		Bouché et al., 2013b	2	192	4.2°W	11.6°N
Mouhoun Protected Area Complex	NG	O	D	2013	35		Bouché et al., 2013b	1	1,976	3.3°W	11.6°N
Nazinga Ecosystem	DT	GS	B	2012	893	507	Bouché, 2012b	1	970	1.5°W	11.1°N
Niangoloko forest	NP	O	E	2015	15		Karama, pers. comm., 2016	2	82	4.9°W	10.2°N
WAP complex											
Arly National Park	DT	AS	B	2015	985	400	Bouché et al., 2015	1	1,223	1.8°E	11.7°N
Koakrana Hunting Zone	DT	AS	B	2015	0		Bouché et al., 2015	2	265	1.2°E	11.7°N
Kourtiagou Partial Faunal Reserve	DT	AS	B	2015	0		Bouché et al., 2015	2	485	1.2°E	11.7°N
Rest of Aires de l'Est Hunting Areas	DT	AS	B	2015	3868	1,570	Bouché et al., 2015	1	5,312	1.2°E	11.7°N
W du Burkina National Park	DT	AS	B	2015	1099	1,276	Bouché et al., 2015	1	2,511	1.2°E	11.7°N
Zabré Department	NG	O	D	2013	0		Bouché, pers. comm., 2015	2	600	0.6°W	11.1°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).
— : No Change

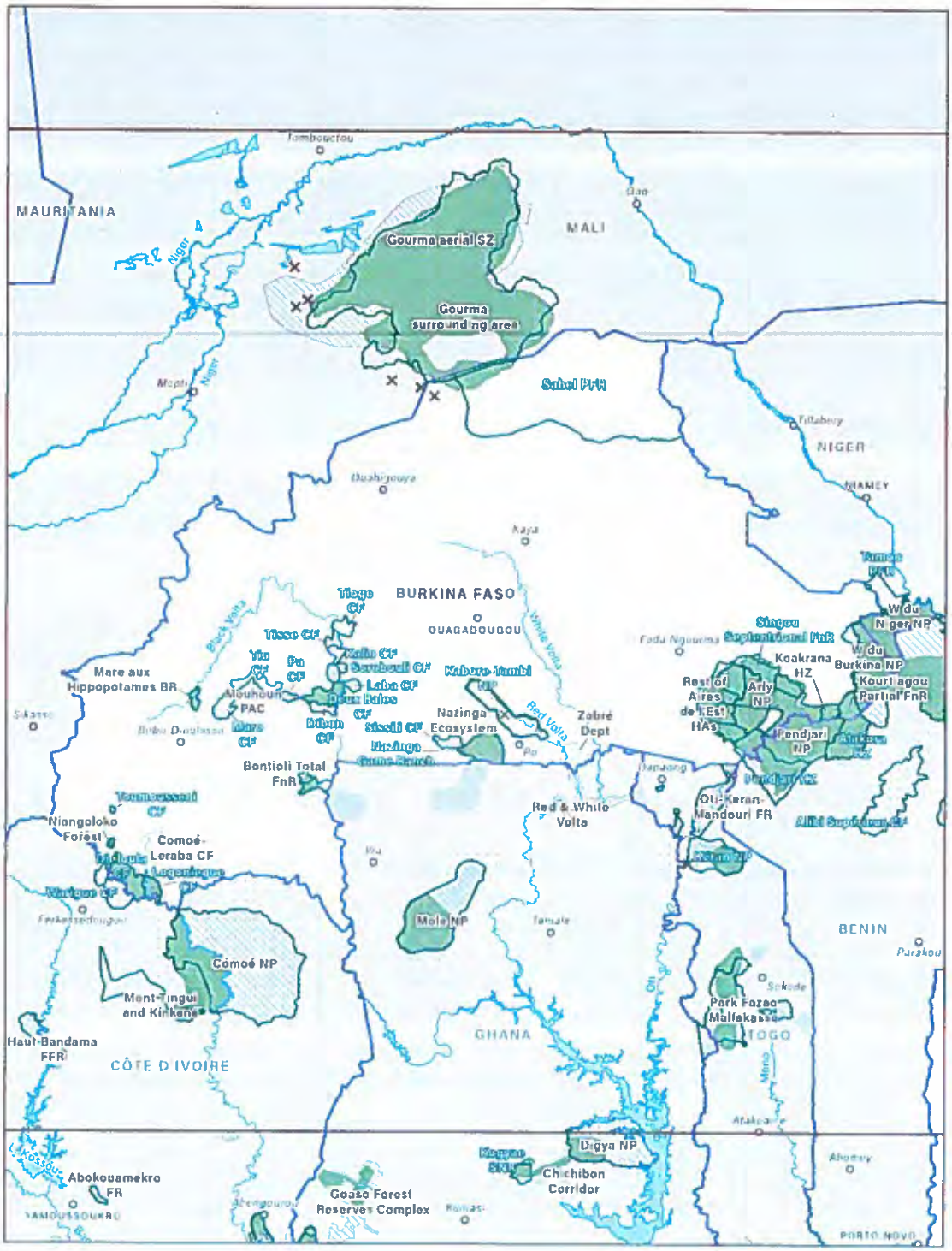
KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Burkina Faso



COUNTRY

Côte d'Ivoire

ESTIMATED TOTAL ELEPHANTS

189 ± 135

GUESSES

647 - 652

GENERAL STATISTICS

Country Area	322,460 km²
Range Area	14,578 km² (5%)
Protected Range	72 %
Information Quality Index (IQI)	0.18
CITES Appendix	I
Listing Year	1994 (year of accession)

CURRENT ISSUES

Côte d'Ivoire has suffered from civil unrest and violence in recent years, and this has affected conservation efforts. The civil war, which started in 2002, split the country between the rebel-held north and the government-controlled south. A power-sharing deal in 2007 presented the prospect of peace, but a 2010 presidential poll led to further violence (International Crisis Group, 2011). This lack of stability has meant that little attention has been paid to conservation and protected areas (Koné, 2013). Wildlife in protected areas is threatened by hunting, the encroachment of cocoa plantations on protected area boundaries in the forest zone, and expansion of illegal cocoa farming within parks and reserves (Bitty et al., 2015).

Most of Côte d'Ivoire's elephant population is found in small fragments of forest. Some of these populations have survived for a surprisingly long time, but there are many for which there is no recent information, and a number of these are likely to have disappeared. There is only one forest population in Taï National Park which is estimated to have more than a hundred elephants, and the status of elephants in Comoé National Park, the country's largest protected area, is unclear.

Following the invasion of Marahoué National Park by people fleeing post-election violence in 2010-11, 12 elephants moved into farming areas near the city of Daloa and were responsible for the deaths of three people. As a result, four male elephants were translocated from Daloa to Azagny National Park on the coast in January 2014, and a further two died during the exercise (McPherson,

2014). The population of Marahoué NP is now recorded as lost, having previously been one of the country's largest elephant populations.

Côte d'Ivoire published its national strategy for elephant management in 2004, covering a time period from 2005 to 2014 (Ministère des Eaux et Forêts, 2004).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Côte d'Ivoire is 189 ± 135 at the time of the last survey for each area. There may be an additional 647 to 652 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 13,334 km², which is 92% of the estimated known and possible elephant range. There remains an additional 8% of the estimated range for which no elephant population estimates are available.

There has been almost no change in the population estimates, because an apparent increase in numbers in Taï NP from a survey using a different technique is matched by the loss of the Marahoué NP population. Total guesses have been reduced, mostly as a result of populations being lost.

Taï NP in the southwest, close to the Liberian border, holds what is probably the largest remaining elephant population in the country. A **dung count** conducted there in 2010 gave an estimate of 189 (54-324) elephants (Baofo & Nandjui, 2011). This replaces an estimate of 53 ± 26 from a DNA survey (Eggert, 2004b).

Comoé NP, which lies in the northern savanna zone, is the largest protected area in the country. An aerial sample count of the park and some surrounding areas was carried out in 2010 (N'Goran et al., 2010). Although some signs were seen from the air, no actual elephants were observed. However, the sampling intensity was low, and elephants are thought to concentrate in gallery forests where they would be difficult to see from an aircraft. A researcher who worked in Comoé NP between 2014 and 2015 estimated at least 100 elephants in the park (Lapuente, pers. comm., 2016), concentrated in the west close to the Komoé river, and this **informed guess** replaces an informed guess of 10-20 elephants from 2002 (Fischer, 2005). There were also at least another 20 elephants in the neighbouring areas of Mont Tingui and Kinkené (Lapuente, pers. comm., 2016). The area in the east of the park has been changed to **doubtful** range, as has the area between Comoé NP and the Burkina Faso border.

Most other estimates remain unchanged from the AESR 2007 report but many are now more than ten years old, and have therefore become degraded data. Continued records of crop-raiding indicate that elephants remain widespread, albeit in small numbers. An **informed guess** of 15-20 for the Beki Bossematié Classified Forest from 2013 (Lapuente, pers. comm., 2016) replaces a guess of 35 from 1993 (Theuerkauf et al., 2001). A **guess** of two elephants in Mont Sangbé National Park in 2013 (Lapuente, pers. comm., 2016) replaces a guess of 47 (Lauginie et al., 2001). There were still elephants in Mont Péko in 2012 (Sissler-Beinvenu, pers. comm., 2016), but probably fewer than the guess of 40 from 2000 (Kobon, pers. comm., 2002) which has not been replaced because this confirmation of presence did not include an estimate of new numbers.

NUMBERS AND DISTRIBUTION
CONT.

The elephant population of Marahoué NP, which had an estimate of 159 ± 53 from a genetic dung count in 2002 (Eggert, 2004a), was lost in about 2010 after the park was almost completely settled by local people. In early 2013, no evidence of elephants was found in a survey covering 506 km of transects (Sissler-Beinvenu, pers. comm., 2016). Marahoué NP has been changed to **doubtful range**. Since it is not clear whether all the elephants from neighbouring Daloa were translocated, this has been added as a point record, where an unknown number of elephants may remain.

Prior to the translocation of elephants from Daloa, there were almost no elephants left in Azagny NP. Whereas there had been an estimate of 65-117 in 2003 (Nandjui, 2003) no evidence of human-elephant conflict was found on the periphery of the park for the two years prior to 2013 and only a few signs of the presence of elephants inside the park. Local hunters said that there were only three surviving elephants, compared to 9-10 in 2010 (Sissler-Beinvenu, pers. comm., 2016).

Crop raiding has been reported from three widely separated sites in the south of the country and these have been added as point records (Bakayoko, 2015; Kan, 2015; La Dépêche d'Abidjan, 2015).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Reliable Dung Counts	189	135	—	—	12 %	1,750
Informed Guesses	0	—	138	143	32 %	4,647
Other Guesses	—	—	2	2	3 %	427
Degraded Data	—	—	507	507	45 %	6,510
Totals 2015	**189**	**135**	**647**	**652**		
Totals 2006	**188**	**0**	**767**	**777**		
Assessed Range					92 %	13,334
Unassessed Range					8 %	1,244
Total Range					100 %	14,578

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Population	0	0	+20	+20	10 %	1,430
Different Technique	+147	±135	-11	-11	12 %	1,750
New Guess	-47	0	+10	+5	25%	3,644
Population Lost	-83	0	-76	-76	0 %	0
Data Degraded	-16	0	+16	+16	0 %	0
Totals	+1	±135	-41	-46	47 %	13,334

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	1,750	0	1,750
Informed Guesses	4,647	0	4,647
Other Guesses	905	6,032	6,937
Unassessed Range	194	1,049	1,244
Totals	7,497	7,081	14,578

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB	YEAR	ESTIMATE	± 95% CI			(km²)	LON.	LAT.
Abokouamékro Faunal Reserve	-	GT	E	2000	11		Kobon, pers. comm., 2002	2	135	5.1°W	6.9°N
Azagny National Park	NG	O	D	2013	3		Sissler-Bienvenu, pers. comm., 2016	2	218	4.9°W	5.2°N
Beki Bossematié Classified Forest	NG	O	D	2013	15	5*	Lapuente, pers. comm., 2016	2	389	3.5°W	6.6°N
Bolo Forest	-	O	E	1989	5		Merz & Hoppe-Dominik, 1991	2	88	5.8°W	5.2°N
Comoé National Park	NG	O	D	2015	100		Merz & Hoppe-Dominik, 1991	1	11,665	3.7°W	9.1°N
Davo Forest	-	O	E	1989	20		Merz & Hoppe-Dominik, 1991	2	126	6.1°W	5.8°N
Djambamakrou Forest	-	O	E	1989	30		Merz & Hoppe-Dominik, 1991	2	274	3.2°W	6.4°N
Duekoué Forest	-	O	E	1997	6		Kobon, pers. comm., 2002	1	536	7.1°W	6.7°N
Fresco Classified Forest	-	O	E	1998	60		Ministère des Eaux et Forêts, 2004	2	2,229	5.8°W	5.1°N
Go-Bodienou Forest	-	O	E	1989	20		Merz & Hoppe-Dominik, 1991	1	600	5.0°W	5.4°N
Goin-Cavally Classified Forest	-	O	E	1989	70		Merz & Hoppe-Dominik, 1991	1	1,890	7.8°W	6.2°N
Haut Bandama Fauna & Flora Reserve	-	O	E	2002	20		Bouché, 2002	1	1,300	5.7°W	8.5°N
Haut Sassandra Classified Forest	-	O	E	1997	30		Kobon, pers. comm., 2002	1	1,024	7.0°W	7.2°N
Keregbo Forest	-	O	E	1989	30		Merz & Hoppe-Dominik, 1991	2	213	3.8°W	7.5°N
Marahoué National Park	PL	O	D	2014	0		Sissler-Bienvenu, pers. comm., 2016	1	1,010	6.0°W	7.1°N
Mont Péko National Park	-	O	E	2000	40		Kobon, pers. comm., 2002	2	340	7.3°W	7.0°N
Mont Sangbé National Park	NG	O	E	2013	2		Lapuente, pers. comm., 2016	1	950	7.3°W	8.0°N
Mont Tingui and Kinkéné	NP	O	D	2015	20		Lapuente, pers. comm., 2016	1	515	4.2°W	8.8°N
Niegré Classified Forest	-	O	E	1989	50		Merz & Hoppe-Dominik, 1991	1	1,056	6.2°W	5.4°N
Okromodou Forest	-	O	E	1989	50		Merz & Hoppe-Dominik, 1991	1	945	5.6°W	5.3°N
Scio Classified Forest	-	O	E	1989	30		Merz & Hoppe-Dominik, 1991	1	1,338	7.8°W	6.8°N
Songan Tamin Mabi Yaya Classified Forest	-	O	E	1993	20		Theuerkauf et al., 2001	1	1,698	3.4°W	5.9°N
Taï National Park	DT	DC	B	2010	189	135	Boafo & Nandjui, 2011	1	1,495	7.1°W	5.7°N
Tené Forest	-	O	E	1998	5		Kobon, pers. comm., 2002	3	4	5.4°W	6.5°N
Tiapleu Forest	-	O	E	1989	10		Merz & Hoppe-Dominik, 1991	2	380	8.2°W	7.5°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA Different Area, DD Data Degraded, DT Different Technique, NA New Analysis, NG New Guess, NP New population, PL Population Lost, RS Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).

— No Change

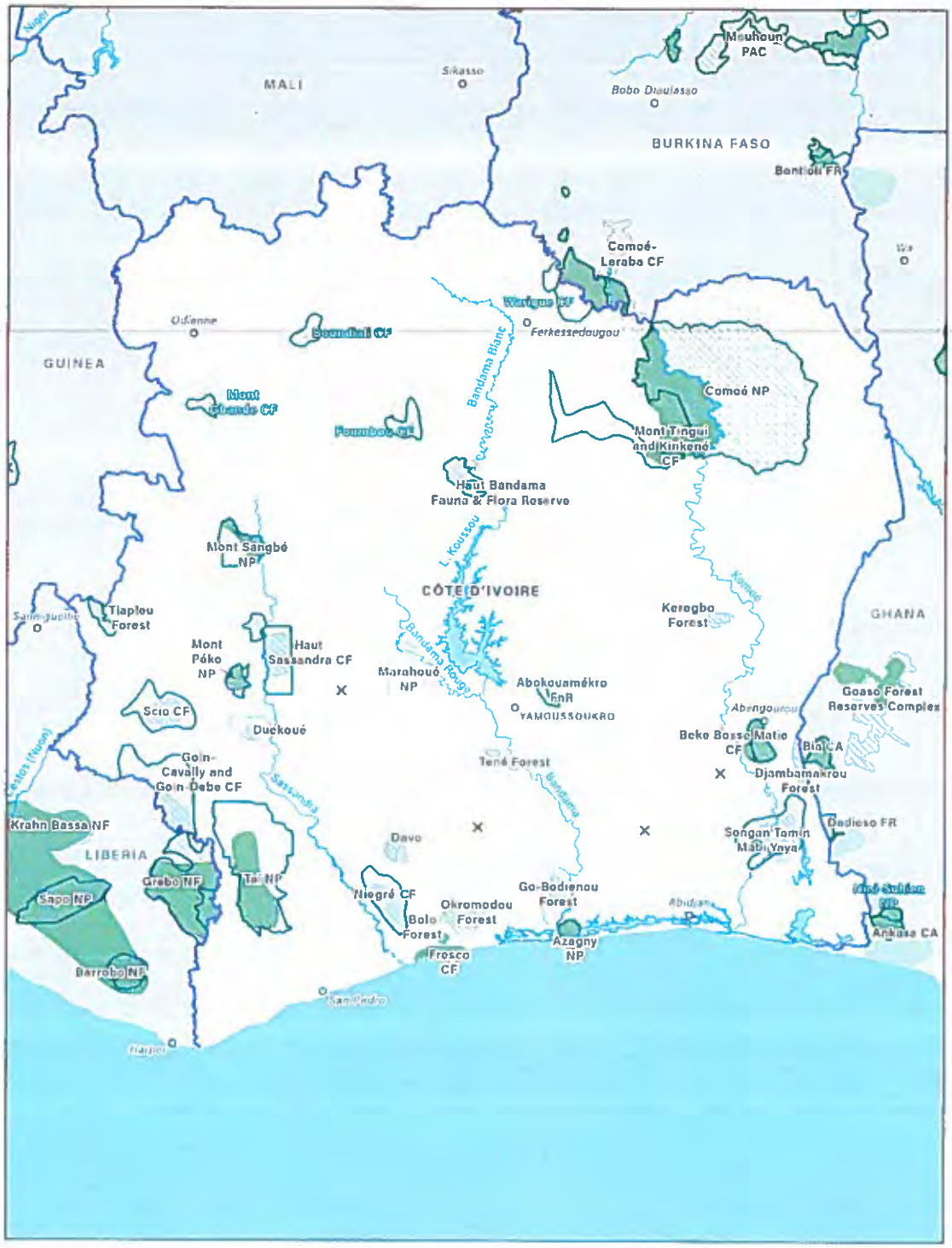
KEY TO SURVEY REPORT

AS Aerial Sample Count, AT Aerial Total Count, DC Dung Count, GD Genetic Dung Count, GS Ground Sample Count, GT Ground Total Count, IG Informed Guess, IR Individual Registration, OG Other Guess. Survey Reliability is keyed A–E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Côte d'Ivoire



0 40 80 120 160 200 240km

ABBREVIATIONS AND ACRONYMS

AfESG

Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Ghana

ESTIMATED TOTAL ELEPHANTS

994 ± 67

GUESSES

238 - 288

GENERAL STATISTICS

Country Area	238,540 km²
Range Area	15,181 km² (6%)
Protected Range	47 %
Information Quality Index (IQI)	0.37
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Ghana has a small number of elephant populations in savanna and forest habitats. As a result of habitat fragmentation and human population density, elephants are becoming increasingly restricted to protected areas. A new approach to anti-poaching in Ghana's protected areas was introduced in 2004. This focused on adaptive management and patrol management, as well as increasing ranger numbers in some areas, and had the effect of reducing poaching levels (Jachmann, 2008).

Several studies have been carried out on crop raiding by elephants on the periphery of the Kakum Conservation Area. These have shown the efficacy of pepper-grease fences (Wiafe & Sam, 2014) and also that elephants damage oil palms less than plantain, cocoa and cassava (Dakwa et al., 2016).

A survey of retail outlets selling ivory in Accra in 2010 found very few items, attributed to a clampdown by the authorities in November 2008 on the main curio market, where several hundred kilos of ivory items were confiscated and dealers were fined and imprisoned (Martin, 2010).

Some of Ghana's most important elephant areas have not been surveyed in many years, leading to a degradation of many estimates, and one population is now recorded as lost.

Ghana's national elephant conservation strategy was published in 2000 (Wildlife Division, 2000).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Ghana is 994 ± 67 at the time of the last survey for each area. There may be an additional 238 to 288 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 7,609 km², which is 50% of the estimated known and possible elephant range. There remains an additional 50% of the range for which no population estimates are available.

There has been little change recorded in elephant numbers since the publication of the AESR 2007. This is because most populations have not been recently surveyed, and there has been little change in those that have been surveyed.

The main forest populations are in Bia National Park and Conservation Area, Goaso Forest Reserves Complex, Dadieso Forest Reserve, Ankasa Conservation Area and Kakum Conservation Area, with Mole and Digya National Parks holding the only surviving savanna populations.

Dung counts of Bia NP and Resource Reserve were carried out in 2007 and 2009, giving estimates of 135 (114-156) elephants in 2007 (Danquah et al., 2009), and 146 (98-172) elephants in 2009 (Danquah & Oppong, 2014). The latter replaces an estimate of 115 ± 29 from 2004 (Sam et al., 2006) reported in the AESR 2007. This population is now considered to be isolated within the protected area (Danquah & Oppong, 2013) and surrounding areas of **possible range** have been removed from the map. However, improved protection allowed elephants to expand their range within Bia NP from 2007 (Danquah, 2009).

There are other forested areas to the north and east of Bia known as the Goaso Forest Reserves Complex. The Goaso elephant population has suffered major declines in both numbers and range, and is currently confined to a few of the reserves in the northern portion of the block. A **dung count** carried out in 2009 gave an estimate of 90 ± 41 (Danquah et al., 2009). This replaces an estimate of 72 from 2004 (Sam, 2004). The area of **known range** has been reduced (Danquah & Oppong, 2013).

There have been no new surveys in the Dadieso Forest Reserve to the south of Bia, and therefore the informed guess of seven from 2002 (Ayesu, 2003) has been retained from the AESR 2007 but is now degraded. The range has been changed to **possible range**.

The Ankasa Conservation Area is further south, close to the coast. A **dung count** carried out in 2009 gave an estimate of 56 (31-81) (Danquah, 2009). This replaces an estimate of 21 for 2001 (Danquah et al., 2001).

No new surveys have been carried out in the Kakum Conservation Area, so the estimate of 164 ± 36 from 2004 (Danquah, 2004) has been retained, but degraded to a guess, as the estimate is more than ten years old. An acoustic survey of Kakum CA was carried out in 2000, but the results were not published until 2010 (Thompson et al., 2010). This study estimated 294 elephants (259-329), and an extended acoustic model, estimating the frequency with which elephants are silent when present, yielded an estimate of 350 elephants (315-384).

NUMBERS AND DISTRIBUTION CONT.

Digya National Park and the Chichibon Corridor are in a forest-savanna mosaic. No recent surveys have been carried out in Digya NP so the estimate of 357 ± 54 from 2006 has been retained (Kumordzi & Danquah, 2007). Crop-raiding by elephants is still a problem in the Chichibon Corridor (Nutsuakor et al., 2015) and the old guess of 12-15 (Sam & Wilson, 1994) from 1994 has been retained.

An aerial survey of northern Ghana in 2006 showed no signs of elephants in the Red and White Volta areas (Bouché, 2007b), so this area has been changed to **doubtful range** and the population is recorded as a **population lost**. Other areas in the north-west have no recent records and have been downgraded to **possible range**.

No new counts have been carried out in Mole National Park, in the northern savanna zone, so the estimate of 401 from an aerial total count in 2006 (Bouché, 2006) has been retained.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	401	–	–	–	29 %	4,338
Reliable Dung Counts	593	68	–	–	13 %	1,956
Other Dung Counts	0	–	56	106	3 %	498
Informed Guesses	0	–	0	0	0 %	0
Degraded Data	–	–	183	183	5 %	816
Totals 2015	**994**	**67**	**238**	**288**		
Totals 2006	**968**	**178**	**281**	**281**		
Assessed Range					50 %	7,609
Unassessed Range					50 %	7,573
Total Range					100 %	15,181

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Repeat Survey	+146	0	-105	-55	5 %	791
Different Technique	+90	±41	-72	-72	5 %	790
Population Lost	-46	±167	0	0	0 %	0
Data Degraded	-164	±36	+164	+164	0 %	0
No Change	0	±76	0	0	40 %	6,027
Totals	+26	±191	-13	+37	50 %	7,609

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Aerial or Ground Total Counts	2,628	1,710	4,338
Direct Sample and Reliable Dung	1,956	0	1,956
Other Dung Counts	439	59	498
Other Guesses	676	140	816
Unassessed Range	763	6,809	7,573
Totals	6,463	8,718	15,181

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Ankasa Conservation Area	RS	DC	C	2009	56	25	Danquah, 2009	2	704	2.6°W	5.3°N
Bia Conservation Area	RS	DC	B	2009	146	26	Danquah & Oppong, 2014	5	306	3.1°W	6.5°N
Chichibon Corridor	-	O	E	1994	12	3*	Sam & Wilson, 1994	2	290	0.7°W	7.3°N
Dadieso Forest Reserve	-	O	E	2002	7		Ayesu, 2003	2	195	3.0°W	6.0°N
Digya National Park	-	DC	B	2006	357	54	Kumordzi & Danquah, 2007	1	3,478	0.3°W	7.4°N
Goaso Forest Reserves Complex	DT	DC	B	2007	90	41	Danquah et al., 2009	1	2,035	3.0°W	6.7°N
Kakum Conservation Area	-	DC	E	2004	164	36	Danquah, 2004	2	366	1.3°W	5.5°N
Mole National Park	-	AT	A	2006	401		Bouché, 2006	1	4,504	1.9°W	9.6°N
Red & White Volta Ecosystem	PL	O	D	2006	0		Bouché, 2007b	1	1,106	0.5°W	10.7°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).
— : No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Ghana

0 30 60 90 120 150 180 km

ABBREVIATIONS AND ACRONYMS

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Guinea

ESTIMATED TOTAL ELEPHANTS

0 ± 0

GUESSES

64 - 138

GENERAL STATISTICS

Country Area	245,860 km²
Range Area	1,557 km² (1%)
Protected Range	78 %
Information Quality Index (IQI)	0.0
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Ziama Strict Nature Reserve is believed to hold Guinea's single remaining elephant population. The area is under pressure from growing human populations and increased cultivation at the edges of the reserve. Crop raiding by elephants is a continuing problem (Ministère de l'Agriculture, de l'Elévage, de l'Environnement, des Eaux et des Forêts, 2007). Law enforcement improved in 2015 with support from Fauna and Flora International (Mollon, pers. comm., 2016).

Ouré Kaba, a population referred to in the AESR 2007, is recorded as lost. Guinea published a national elephant management strategy in 2007 (Ministère de l'Agriculture, de l'Elévage, de l'Environnement, des Eaux et des Forêts, 2007).

NUMBERS AND DISTRIBUTION

There have been no surveys carried out in Guinea in the last 10 years to the standards required for generating an estimate. There may be 64 to 138 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 1,207 km², which is 78% of the estimated known and possible elephant range. There remains an additional 22% of the estimated elephant range for which no elephant population estimates are available.

The Wild Chimpanzee Foundation (WCF) surveyed a number of forest areas in Guinea between May 2009 and May 2011. Signs of elephants were only observed in Ziama Strict Nature Reserve. Elephants had long been absent from Ziama Strict Nature Reserve and surrounding forests until 1996, when it is thought they arrived from neighbouring Liberia (Sagnah & Sagnah, 2000). It is

believed that movement across this border continues, and it is possible that these elephants also move as far as Côte d'Ivoire (Mollon, pers. comm., 2016). The absence of elephant signs in the Mt. Nimba area, however, during the WCF surveys suggest that these movements, if they occur, are intermittent.

The **dung count** of Ziama SNR gave a new estimate of 64 - 138 (Wild Chimpanzee Foundation, 2012). This replaces an estimate of 214 ± 79 from 2004 (Barnes & Nandjui, 2005). However, based on the distribution of elephants and the abundance of their signs, Fauna & Flora International staff members working in the area feel that this estimate is too low and there are probably still around 200 elephants in the area (Mollon, pers. comm., 2016). Elephants are found throughout the reserve, although at lower densities around the two settlements in the east, and the hilly country in the west (Wild Chimpanzee Foundation, 2012). Therefore the range has been changed to include the whole reserve. There is recent evidence of elephants moving from Ziama SNR towards the Simandou range, about 50 km north-east, with a small group possibly resident around the Pic de Fon (Mollon, pers. comm., 2016).

The WCF found no signs of elephants in the Ouré Kaba area, on the border with Sierra Leone. Therefore this area has been removed from the range map, and recorded as a **lost population**. In the AESR 2007, the area of Sansalé in the northwest, on the border with Guinea Bissau, had an estimate of zero (Sagnah, pers. comm., 1998) and was recorded as a lost population. The corresponding area of **doubtful range** has now been removed. There has been no information from the Corubal-Dulombi cross-border population in more than 10 years, so this has been changed to **possible range**.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Other Dung Counts	0	—	64	138	78 %	1,207
Informed Guesses	0	—	0	0	0 %	0
Totals 2015	**0**	**0**	**64**	**138**		
Totals 2006	**214**	**78**	**57**	**57**		
Assessed Range					78 %	1,207
Unassessed Range					22 %	350
Total Range					100 %	1,557

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Different Area	-214	±79	+27	+101	78 %	1,207
Population Lost	0	0	-57	-57	0 %	0
Totals	-214	±79	-30	+44	78 %	1,207

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Other Dung Counts	1,207	0	1,207
Unassessed Range	8	0	350
Totals	1,215	0	1,557

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CI			(km²)	LON.	LAT.
Ouré Kaba	PL	O	D	2007	0		Ministère de l'Agriculture, de l'Elévage, de l'Environnement, des Eaux et des Forêts, 2007	1	691	11.7°W	10.1°N
Ziama	DA	DC	C	2011	64	37	Wild Chimpanzee Foundation, 2012	1	1,171	9.3°W	8.2°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season)

— No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Guinea

ABBREVIATIONS AND ACRONYMS

AfESG

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COUNTRY

Guinea Bissau

ESTIMATED TOTAL ELEPHANTS

0 ± 0

GUESSES

7 - 7

GENERAL STATISTICS

Country Area	36,120 km²
Range Area	1,346 km² (4%)
Protected Range	0 %
Information Quality Index (IQI)	0.00
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Only a handful of elephants were reported from Guinea Bissau more than ten years ago (Brugière et al., 2006). It is believed that a small number may still survive (Brugière, pers. comm., 2016; Goedmakers, pers. comm., 2016) but their future is very uncertain.

Guinea-Bissau published its national elephant action plan in 2000 (Ministère de l'Agriculture et Développement Rurale, 2000).

NUMBERS AND DISTRIBUTION

There have been no surveys carried out in Guinea Bissau in the last ten years to the standards required for generating an estimate. There may be seven elephants in areas not systematically surveyed. This guess likely represents a minimum number, and actual numbers could be higher. This number applies to 1,346 km², which is the entirety of the estimated known and possible elephant range.

There have been no changes to numbers or distribution since the AESR 2007. A study of elephant distribution based on interviews with hunters concluded that only a small elephant population remained in the south east of Guinea Bissau (Brugière et al., 2006) with a minimum of seven elephants in the Corubal-Dulombi area, and that no more than 20 elephants remained in the country. Given the absence of recent information, the range area has been downgraded to **possible range**, while the estimate has been degraded due to age.

NUMBERS AND DISTRIBUTION CONT.

In 2006 it was believed that elephants from the Corubal Dulombi area still moved seasonally across the border to Guinea (Brugière et al., 2006), but there is no recent information on whether this is still the case.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Degraded Data	–	–	7	7	100 %	1,346
Totals 2015	**0**	**0**	**7**	**7**		
Totals 2006	**0**	**0**	**7**	**20**		
Assessed Range					100 %	1,346
Unassessed Range					0 %	0
Total Range					100 %	1,346

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Population Lost	0	0	0	0	0 %	0
Data Degraded	0	0	0	-13	0 %	0
Totals	0	0	0	-13	0 %	1,346

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Binasse Area	PL	O	E	2004	0		Brugière, et al. 2006	1	330	13.8°W	11.8°N
Corubal Dulombi Area	-	O	E	2004	7	13*	Brugière, et al. 2006	1	1,342	14.7°W	11.6°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season)
— : No Change

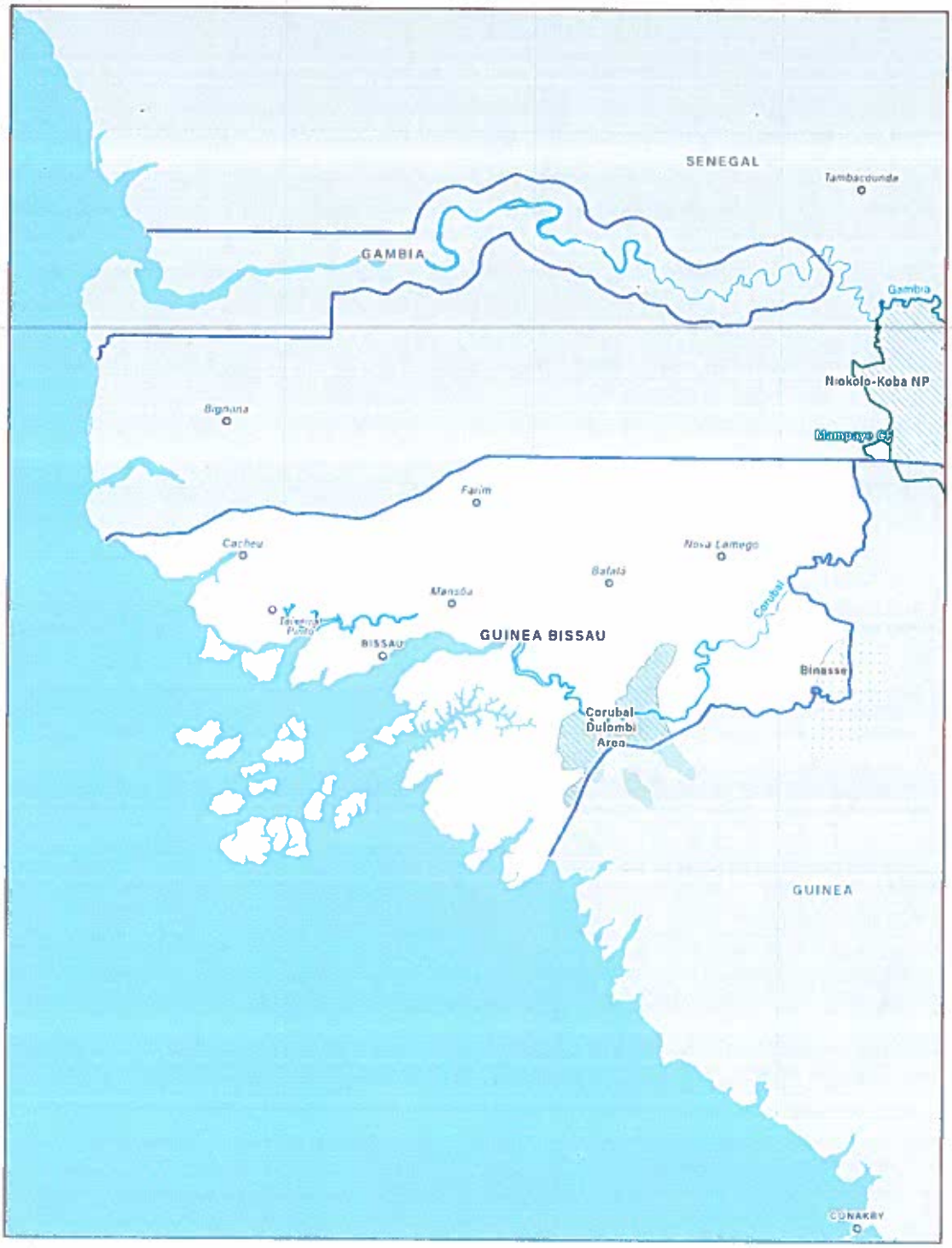
KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst)

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Guinea Bissau



0 20 40 60 80 100 120km

ABBREVIATIONS AND ACRONYMS

AfESG

Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Liberia

ESTIMATED TOTAL ELEPHANTS

124 ± 99

GUESSES

1,425 - 1,425

GENERAL STATISTICS

Country Area	111,370 km²
Range Area	28 950 km² (26%)
Protected Range	34 %
Information Quality Index (IQI)	0.03
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Liberia is the most densely forested country in West Africa, with two large forest blocks in the west and east of the country, including approximately 40% of the remaining Upper Guinea forest (Tweh et al., 2015). Economic development in Liberia after the end of the civil war in 2003 has led to a rapid expansion of oil palm plantations and logging concessions, meaning that natural forests are once again under great threat (Tweh et al., 2015; Wilcove & Koh, 2010).

Sapo National Park is the only national park in Liberia (Tweh et al., 2015). It is threatened by illegal farming, hunting, logging, and mining. About 5,000 illegal settlers were removed from the park in 2005 (Blanc et al., 2007). Following the eviction, Sapo NP was again occupied and by early 2010, an estimated 18,000 settlers were thought to be resident, primarily carrying out artisanal gold mining. Efforts made by the government to remove them were largely successful, and by October 2010, most were thought to have left the park voluntarily (Fauna & Flora of Liberia, 2015).

There is no current action plan or strategy for the management of African elephants in Liberia, but an elephant management planning process under the Elephant Protection Initiative is scheduled to begin in 2016.

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Liberia is 124 ± 99 at the time of the last survey for each area. There may be an additional 1,425 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 13,057 km², which is 45% of the estimated known and possible elephant range. There remains an additional 55% of the estimated range for which no elephant population estimates are available.

There has been an increase in the estimates for Liberia, because of a new survey for Sapo NP, which replaced a lower quality dung count, previously recorded as a guess.

There are four areas of known or possible elephant range in Liberia, divided between two major forest blocks in the east and west of the country. Only Sapo NP has been surveyed in recent years. However, recent elephant records were compiled from various conservation partners (FDA, FFI, MPI EVA, MIKE, RSPB, SCNL, WCF), and this allowed a new elephant range map to be drawn (Vogt & Forster, pers. comm., 2016). As a result the area of **known range** has considerably increased due to improved information; previously most areas were shown as possible range.

There is a transfrontier population between Gola Forest in Sierra Leone and Gola, Kpelle and Lorma forests in western Liberia. In the AESR 2007 this was marked as possible range. However, camera trapping has revealed that elephants still occur on both sides of the border (Tubbs, pers. comm., 2015) and this area has been recorded as **known range**. A new **guess** of 400 (Freeman, pers. comm., 2016) replaces one of 500 elephants from 1990 (Anstey & Dunn, 1991).

There is a small population of elephants in the Wenegisi National Forest, perhaps 50 individuals (Freeman, pers. comm., 2016), which is an extension of the larger population of Ziama in neighbouring Guinea. This new **guess** updates one of 33 from 1990 (Anstey & Dunn, 1991).

A **dung count** carried out in Sapo NP in 2009 gave an estimate of 124 (25-223) elephants (Boafo, 2010). This replaces an estimate of 313 ± 304 from a dung count conducted in 1989 (Barnes & Dunn, 2002). There are also believed to be elephants in the adjoining Krahn Bassa National Forest, with a **guess** of 550 (Freeman, pers. comm., 2016), which replaces a similar guess of 500 from 1990 (Anstey & Dunn, 1991).

For the Grebo National Forest, in the extreme south-east of the country on the Côte d'Ivoire border, there is a **guess** of 300 elephants, and for the nearby Barrobo National Forest, a **guess** of 125. These replace guesses of 230 and 100 respectively, both from 1990 (Anstey & Dunn, 1991). It is no longer considered likely that elephants move between Grebo and Cote d'Ivoire. Many of the classified forests in Cote d'Ivoire close to the border with Liberia have been heavily forested or degraded (Chatelain et al., 2010).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Reliable Dung Counts	124	99	—	—	5 %	1,520
Other Guesses	—	—	1,425	1,425	40 %	11,537
Totals 2015	**124**	**99**	**1,425**	**1,425**		
Totals 2006	**0**	**0**	**1,676**	**1,676**		
Assessed Range					45 %	13,057
Unassessed Range					55 %	15,893
Total Range					100 %	28,950

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Different Area	+124	±99	-313	-313	5 %	1,520
New Guess	0	0	+62	+62	40 %	11,537
Totals	+124	±99	-251	-251	45 %	13,057

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	1,520	0	1,520
Other Guesses	11,537	0	11,537
Unassessed Range	15,788	105	15,893
Totals	28,844	105	28,950

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CI			(km²)	LON.	LAT.
Barrobo National Forest	NG	O	E	2015	125		Freeman, pers. comm., 2016	2	640	8.0°W	4.9°N
Gola, Kpelle & Lorma National Forest	NG	O	E	2015	400		Freeman, pers. comm., 2016	1	4,255	10.4°W	7.5°N
Grebo National Forest	NG	O	E	2015	300		Freeman, pers. comm., 2016	1	2,510	7.6°W	5.5°N
Krahn Bassa National Forest	NG	O	E	2015	550		Freeman, pers. comm., 2016	1	5,142	8.8°W	5.8°N
Sapo National Park	DA	DC	B	2009	124	99	Boafo, 2010	1	630	8.5°W	5.3°N
Wonegisi National Forest	NG	O	E	2015	50		Freeman, pers. comm., 2016	2	130	9.5°W	8.1°N

RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season)

— No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Liberia

0 30 60 90 120 150 180km

ABBREVIATIONS AND ACRONYMS

See Appendix III for map abbreviations and acronyms

AfESG

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Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Mali

ESTIMATED TOTAL ELEPHANTS

253 ± 0

GUESSES

51 - 51

GENERAL STATISTICS

Country Area	1,240,000 km²
Range Area	25,495 km² (2%)
Protected Range	89%
Information Quality Index (IQI)	0.83
CITES Appendix	I
Listing Year	1994 (year of accession)

CURRENT ISSUES

Elephants in Mali are largely confined to Gourma, an arid area in the Sahel north of the border with Burkina Faso, where the elephants live alongside pastoralists. They are the continent's most northerly elephants, and together with Namibia's Kunene elephants, the most adapted to arid conditions. They move long distances in a circular migration pattern with individual home ranges being the largest recorded in Africa (Wall et al., 2013).

Until 2012 agricultural expansion was seen as the main threat to the Gourma elephant population, since there was little poaching and local pastoralists tolerated the elephants. This changed when the area was occupied by jihadists, and the first cases of poaching occurred. Although the government has re-established partial control of the area, the jihadists are still active, and general insecurity has allowed poaching to continue (Canney, pers. comm., 2016a). Twenty elephants were known to have been poached between January 2012 and January 2015, with an upsurge in the first half of 2015, during which period 64 were killed. By the end of 2015 the total had risen to 103 elephants killed since 2012 (Canney, pers. comm., 2016a). In addition, at least 36 elephants died of thirst and starvation in 2010 as a result of pressure from high numbers of livestock in the elephants' dry season range (Canney & Ganame, 2012).

Mali published an elephant conservation plan in 1991, although this is now out of date (Direction Nationale des Eaux et Forets, 1991).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Mali is 253 at the time of the last survey. There may be an additional 51 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 25,495 km², which is the entire estimated elephant range in Mali.

The Gourma elephants move over a large area and are difficult to survey using conventional techniques. A reconnaissance aerial count was carried out in June 2015, which gave an estimate of 253 elephants (Dias et al., 2015). A low wing aircraft, which is not ideal for survey work, was used and the count was carried out two months later than planned, by which time the elephants had dispersed and some were known to have been missed. Subsequently, an additional 51 elephants, were recorded from the ground (Ganame, pers. comm., 2015) and these have been added, giving a total of 304. This is lower than the previous individual registration study which recorded 498 elephants in 2004-2005 (Hema et al., pers. comm., 2006), and the aerial survey of 2007 which gave an estimate of 344 elephants (Bouché, 2007c).

Nine elephants were fitted with GPS collars and tracked between 2008 and 2010 (Wall et al., 2013). They moved over a larger area than those collared in 2000-2001. This range change is shown in the revised range map. Elephants, particularly bulls, sometimes move further beyond the main range, and these movements are shown as point records. The Gourma elephants move about 20 km into northern Burkina Faso as part of their regular migration (Wall et al., 2013).

Elephants are occasionally seen in southwestern Mali and believed to come from Côte d'Ivoire or western Burkina Faso (Dakouo, pers. comm., 2004; Nomoko, 2006) although they are said to be less frequent since the end of the civil war in Côte d'Ivoire (Canney, pers. comm., 2016b).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Informed Guesses	**253**	—	**51**	**51**	100 %	25,495
Totals 2015	**253**	**0**	**51**	**51**		
Totals 2006	**357**	**0**	**141**	**297**		
Assessed Range					100 %	25,495
Unassessed Range					0 %	0
Total Range					100 %	25,495

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Guess	-104	0	-90	-246	100 %	25,495
Totals	-104	0	-90	-246	100 %	25,495

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Informed Guesses	25,495	0	25,495
Unassessed Range	0	0	0
Totals	25,495	0	25,495

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS	SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	SPECIES	YEAR	ESTIMATE				LONG	LAT
Gourma aerial survey zone	NG	O	D	2015	253	Dias et al. 2015	1	15,125	2.4°W	15.4°N
Gourma surrounding area	NG	O	D	2015	51	Guidine pers.comm., 2015	1	1,267,763	3.5°W	17.4°N

RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Mali

0 100 200 300 400 500 600km

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

ABBREVIATIONS AND ACRONYMS

See Appendix II for map abbreviations and acronyms

AfESG

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COUNTRY

Niger

ESTIMATED TOTAL ELEPHANTS

0 ± 0

GUESSES

17 - 17

GENERAL STATISTICS

Country Area	1,267,000 km²
Range Area	2,333 km² (0.2%)
Protected Range	100%
Information Quality Index (IQI)	0.00
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Only one elephant population is known to occur in Niger, forming part of the WAP transfrontier population. It is possible that elephants also occur on the Nigerian border, but there is no recent information.

Niger published a strategy and action plan for the sustainable management of elephants in 2010 (Direction de la Faune, de la Chasse et des Aires Protégées, 2010).

NUMBERS AND DISTRIBUTION

There is a zero estimate for the only survey carried out in Niger in the last ten years to the standards required for generating an estimate. There may be 17 elephants in areas not systematically surveyed. This number applies to 2,333 km², which is all of the estimated known and possible elephant range in Niger.

The reduction in the estimated national population since the AESR 2007 is a result of no elephants being seen in the aerial sample count of the WAP complex in 2015, but it is possible that more elephants do come into Niger on occasion.

Parc W du Niger National Park is located in the southwest region of the country and is part of the WAP transfrontier complex. An **aerial sample count** of the complex was carried out in 2015, but no elephants were seen within the Niger portion of Parc W du Niger NP (Bouché et al., 2015). This is likely to be a result of sampling error or a consequence of a small number of elephants moving between countries rather than loss of the population, since a total aerial count conducted in 2012

NUMBERS AND DISTRIBUTION CONT.

gave a count of 136 elephants within the park and three outside (Bouché, 2012a). Additionally, a ground count in 2013 gave an estimate of 380 ± 61 (Bouché et al., 2013a).

The second, much smaller, population used to occur in the northern part of the Babban Rafi forest, which extends into Nigeria (Direction de la Faune, 1991). There is no recent information on these elephants so the estimate of 17 elephants (Issa, pers. comm., 2005) has been retained but degraded. The range has been changed to **doubtful range** in view of the lack of recent information.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Sample Counts	0	0	—	—	100 %	2,333
Degraded Data	—	—	17	17	0 %	0
Totals 2015	**0**	**0**	**17**	**17**		
Totals 2006	**85**	**0**	**17**	**17**		
Assessed Range					100 %	2,333
Unassessed Range					0 %	0
Total Range					100 %	2,333

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Different Technique	-85	0	0	0	100 %	2,333
Data Degraded	0	0	0	0	0 %	0
Totals	-85	0	0	0	100 %	2,333

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Direct Sample and Reliable Dung	2,333	0	2,333
Unassessed Range	0	0	0
Totals	2,333	0	2,333

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Babban Rafi Forest	-	O	E	2005	17		Issa, pers. comm., 2005	1	430	7.0°E	13.1°N
W du Niger National Park	DT	AS	B	2015	0		Bouché et al., 2015	1	2,294	2.4°E	12.3°N

°RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— : No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst)

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Niger

0 100 200 300 400 500 600km

Intl Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

ABBREVIATIONS AND ACRONYMS

AfESG

Nigeria

ESTIMATED TOTAL ELEPHANTS

94 ± 0

GUESSES

169 - 463

GENERAL STATISTICS

Country Area	923,770 km²
Range Area	20 088 km² (2%)
Protected Range	78%
Information Quality Index (IQI)	0.09
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Nigeria's elephants live in small, relict populations, some in forests in the south of the country and others in savannas in the north. The only relatively well-protected population is in Yankari National Park in central eastern Nigeria, but poaching continues to be a threat even there (Dunn, pers. comm., 2015). Yankari NP is managed by the Wildlife Conservation Society under contract from the Bauchi State Government.

Five populations have been reported as lost.

Nigeria published an elephant conservation plan in 1991 (Natural Resources Conservation Council, 1991), which is now out of date.

In recent analyses of ivory seizure data in ETIS, prepared for CITES, Nigeria has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016). Nigeria was requested by the CITES Standing Committee, at its 65th meeting, to prepare a National Ivory Action Plan. Nigeria has submitted a National Ivory Action Plan and a first progress report (CITES, n.d.-a).

NUMBERS AND DISTRIBUTION

The estimated number of elephants in areas surveyed in the last ten years in Nigeria is 94 at the time of the last survey for each area. There may be an additional 169 to 463 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 11,281 km^2, which is 56% of the estimated known and possible elephant range. There remains an additional 44% of the range for which no elephant population estimates are available.

There has been a reduction in the estimated numbers since the AESR 2007 because the survey of Yankari NP has been treated as an informed guess with a minimum number observed, rather than as a total count. There has been a corresponding increase in guesses.

An aerial total count of Yankari NP was carried out in 2011 in which 361 elephants were observed. However, there was a possibility that some groups were counted twice so the minimum estimate was 82, the size of the largest group. The central part of the park where the elephants are concentrated is thickly wooded, and elephants may have been missed (Bergl et al., 2011). This **informed guess** of 82-361 elephants replaces the previous aerial total count estimate of 348 from 2006 (Omondi et al., 2006). Since at least 50 elephants had been killed since the previous survey, it seems unlikely that the numbers have increased (Bergl et al., 2011). The AESR 2007 only showed **known range** in the east of the park, but more recent information from rangers and two satellite-collared elephants have revealed that elephants occur throughout the area. Poaching in Yankari NP is removing 10-20 animals per year, which would be unsustainable for this size of population (Dunn, pers. comm., 2015).

It is believed that elephants no longer occur in Kambari, south of Yankari NP (Dunn, pers. comm., 2015), so this has been recorded as a **lost population.**

An aerial survey of Sambisa Game Reserve and Marguba Forest Reserve in 2006 found no elephants and heavy human settlement (Omondi et al., 2006). Since there have been no recent records in this area and this was the main base for the Boko Haram insurgents, it seems likely that elephants no longer exist here; these populations are now recorded as **lost populations**. However, there may still be a small group of elephants to the south of Sambisa GR, in Adamawa State (Awi, 2007) and this is shown by a point record. It is believed that elephants no longer cross into the Chad Basin area and Chad Basin National Park from Waza National Park in Cameroon (Saidu, pers. comm., 2015) so these areas have been changed to **doubtful range** and the Chad Basin National Park has been recorded as a **lost population.**

Gashaka Gumti National Park is separated by less than 10 km from Faro National Park in neighbouring Cameroon. Elephants have not been seen in the park for ten years (Sommer, pers. comm., 2016) so this has been recorded as a **lost population**.

Elephants still occur in the forests along the Cameroon border in the Cross River state, including the Okwangwo (Dunn et al., 2014) and Oban Divisions of the Cross River National Park (Abanyam & Imong, 2015) and the Mbe Mountains (Dunn et al., 2014), forming a cross-border population with Korup National Park in Cameroon (Tooze, 1994). However, no surveys have been carried out in this area since 1998 (Obot et al., 1998) and the estimate of 74 from the AESR 2007 has been retained.

A small population of elephants has survived in the swamp forests of Andoni Island, in the Niger Delta. Ijeomah & Esaen (2011) provided photographs of elephant dung taken in 2010 and it is believed that there are still between two and 14 individuals (Pronatura, n.d.). This **guess** updates a guess of six to ten from 2002 (Mshelbwala, pers. comm., 2002). There is another relict population in the Taylor Creek Reserve on the main Niger River. Blench & Dendo (2007) expressed doubt about the continued survival of this population; however, elephant signs were observed in 2012 (Akani et al., 2014) and the estimate of 25 from the AESR 2007 has been retained (Thouless, 1993).

There are some small elephant populations in forests in the south west of Nigeria, including Omo Forest Reserve north-east of Lagos where there were sightings in 2015 and the estimate of 30 from the AESR 2007 has been retained (Mshelbwala, 1998). However, it is believed that they have been extirpated from the adjoining Oluwa Forest Reserve (Ikemeh, 2009), which was not recorded as a population in the AESR 2007.

There have also been recent sightings of a minimum of 12 elephants from the Okomu Game Sanctuary (Saidu, pers. comm., 2015) and this estimate replaces a guess of 40 from 1991 (Natural Resources Conservation Council, 1991). Ikemeh (2009) recorded the presence of elephants in the Akure Ofusu and Idanre Forest Reserves and these have been added as **known range**. Elephant signs were found in a small portion of the Ifon Game Reserve in 2007 (Adeleke et al., 2007) with a guess of 5-8 individuals. There was previously no estimate for this population so this has been added as **known range**.

The Old Oyo National Park, which was previously recorded as possible range, was not mentioned in Ikemeh's (2009) study of elephants in south-west Nigeria, so it has been changed to **doubtful range**.

Kainji Lakes National Park is close to the Benin border. In the AESR 2007 it was recorded as possible range with no estimate. Meduna et al. (2009) stated that all the elephants had left the park and gone to Benin as a result of disturbance from illegal grazing. However, some were seen in 2014 (Saidu, pers. comm., 2015). Seven elephants were observed to the west of Kainji Lakes NP in 2013 (Isikhuemen, pers. comm., 2016) and this has been entered as a **guess** and a **new population**.

There is a small elephant population to the north-west of Kaduna in the north-central part of the country. This range includes the Kamuku National Park, Mando Forest Reserve, Alawa Game Reserve and Kwiambana Game Reserve (Amusa et al., 2015). There are estimated to be 26 elephants (Saidu, pers. comm., 2015) and the population is highly mobile (Amusa et al., 2013) especially because there is little water in the protected areas. This **guess** replaces one of 80-120 from 1993 (Hurst, pers. comm., 1994).

There used to be a population in the transboundary region with Niger around Babban Rafi, but there has been no recent information from here so this has been changed to **doubtful range**.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Aerial Total Counts	0	—	—	—	0 %	0
Informed Guesses	94	—	33	327	22 %	4,495
Other Guesses	—	—	7	7	29 %	5,731
Degraded Data	—	—	129	129	5 %	1,054
Totals 2015	**94**	**0**	**169**	**463**		
Totals 2006	**348**	**0**	**380**	**480**		
Assessed Range					56 %	11,281
Unassessed Range					44 %	8,807
Total Range					100 %	20,088

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Population	0	0	+12	+15	31 %	6,227
New Guess	-254	0	-98	+189	20 %	3,999
Population Lost	0	0	-125	-165	0 %	0
Data Degraded	0	0	0	-56	0 %	0
Totals	-254	0	-211	-17	51 %	11,281

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Informed Guesses	4,281	215	4,495
Other Guesses	259	6,527	6,786
Unassessed Range	7,305	1,502	8,807
Totals	11,844	8,244	20,088

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CI			(km²)	LON	LAT
Andoni Island	NG	O	D	2011	2	12*	Ijeomah & Esaen, 2011	2	215	7.5°E	4.5°N
Chad Basin National Park	PL	O	D	2015	0		Saidu, pers. comm., 2015	1	2,160	14.4°E	11.7°N
Cross River National Park	-	DC	E	1998	74	56	Obot et al., 1998	1	239	9.2°E	6.3°N
Gashaka Gumti	PL	O	E	2010	0		Sommer, pers. comm., 2010	1	5,960	11.7°E	7.5°N
Ifon Game Reserve	NP	O	D	2007	5	3*	Adeleke et al., 2007	2	283	5.8°E	7.1°N
Kainji Lake National Park	NP	O	E	2013	7		Ikhuoemen, pers. comm., 2010	1	5,340	4.3°E	10.0°N
Kambari	PL	O	D	2015	0		Dunn, pers. comm., 2015	2	2,000	10.6°E	8.8°N
Kamuku	NG	O	D	2015	26		Saidu, pers. comm., 2015	1	2,855	6.6°E	11.0°N
Marguba Forest Reserve	PL	AT	A	2006	0		Omondi et al., 2006	2	710	12.7°E	11.5°N
Okomu Game Sanctuary	NG	O	D	2015	12		Saidu, pers. comm., 2015	2	1,082	5.1°E	6.3°N
Omo Forest Reserve	-	O	E	1994	30	20*	Mshelbwala, 1998	2	1,300	3.6°E	6.8°N
Sambisa Game Reserve	PL	AT	A	2006	0		Omondi et al., 2006	2	647	13.4°E	11.3°N
Taylor Creek	-	O	E	1993	25		Rhodes, 1993	2	145	6.4°E	5.2°N
Yankari National Park	NG	O	D	2011	82	279*	Bargiel et al., 2011	1	2,244	10.4°E	9.8°N

* RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA Different Area, DD Data Degraded, DT Different Technique, NA New Analysis, NG New Guess, NP New population, PL Population Lost, RS Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season)

— No Change

KEY TO SURVEY REPORT

AS Aerial Sample Count, AT Aerial Total Count, DC Dung Count, GD Genetic Dung Count, GS Ground Sample Count, GT Ground Total Count, IG Informed Guess, IR Individual Registration, OG Other Guess. Survey Reliability is keyed A–E (best to worst)

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Nigeria

0 80 160 240 320 400 480km

ABBREVIATIONS AND ACRONYMS

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Intact Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

Senegal

ESTIMATED TOTAL ELEPHANTS

1 ± 0

GUESSES

9 - 14

GENERAL STATISTICS

Country Area	196,190 km²
Range Area	1,090 km² (1%)
Protected Range	100%
Information Quality Index (IQI)	0.07
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

Niokolo Koba National Park is the last place where elephants are known to occur in Senegal, the westernmost elephant range state, but the park is in a serious state of deterioration. Illegal activity is widespread, including cattle grazing, commercial timber exploitation and wildlife poaching. It was added to the UNESCO list of World Heritage Sites in Danger in 2007 and remains on the list (UNESCO World Heritage Centre, n.d.). Emergency funding for anti-poaching was provided by the Rapid Response Facility in 2011 (UNESCO World Heritage Centre, 2011). Under these circumstances it is remarkable that such a small and isolated elephant population has managed to survive for so long.

Senegal published an elephant conservation plan in 1991, although this is now out of date (Direction des Parcs Nationaux du Senegal, 1991).

NUMBERS AND DISTRIBUTION

There was known to be at least one elephant in Senegal in 2013. There may be an additional 9 to 14 elephants. Together, this estimate and guess apply to 1,090 km², which is the entirety of the estimated known and possible elephant range in Senegal.

It is thought that there may be 10-15 elephants still in Niokolo Koba NP, with evidence of continued presence from camera trap photos in the Mount Assirik area of the park in 2013 and a few sightings of a small group (c. 10) in 2012 (Henschel, pers. comm., 2015). This **informed guess** replaces a guess of 1-10 individuals from 2006 (Renaud et al., 2006).

It is unlikely that elephants move between Niokolo-Koba NP and neighbouring Guinea, as there have been no records of elephant presence on the Guinea side since the early 1990s (Litoroh et al., 2002).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Informed Guesses	1	—	9	14	100 %	1,090
Totals 2015	**1**	**0**	**9**	**14**		
Totals 2006	**1**	**0**	**0**	**9**		
Assessed Range					100 %	1,090
Unassessed Range					0 %	0
Total Range					100 %	1,090

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Guess	0	0	+9	+5	100 %	1,090
Totals	0	0	+9	+5	100 %	1,090

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Informed Guesses	1,090	0	1,090
Unassessed Range	0	0	0
Totals	1,090	0	1,090

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT
Niokolo-Koba National Park	NG	O	D	2012	10	5*	Henschel, pers. comm. 2015	1	8,282	13.0°W	13.0°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season).
— : No Change

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

Senegal

0 50 100 150 200 250 300km

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

ABBREVIATIONS AND ACRONYMS

AfESG

COUNTRY

Sierra Leone

ESTIMATED TOTAL ELEPHANTS

0 ± 0

GUESSES

135 - 155

GENERAL STATISTICS

Country Area	71.740 km²
Range Area	1 353 km² (2%)
Protected Range	58%
Information Quality Index (IQI)	0.00
CITES Appendix	I
Listing Year	1994 (year of accession)

CURRENT ISSUES

There is little information about the current status of the few elephants remaining in Sierra Leone, and it is believed that the civil war of 1991-2001 had a severe impact on them (Lindsell et al., 2011). Agence Presse Francaise (AFP, 2009) reported in November 2009 that the last elephants in Sierra Leone had been wiped out by poaching. This report has been widely circulated and repeated in news items as recently as 2013. This was not correct, several small populations still survive, although they are under pressure from poaching, mining and logging (Ballweg et al., 2013).

The Gola East Forest Reserve population has been recorded as lost.

Sierra Leone published an elephant conservation plan in 1991, although this is now out of date (Ministry of Agriculture, 1991).

NUMBERS AND DISTRIBUTION

There have been no surveys carried out in Sierra Leone in the last ten years to the standards required for generating an estimate. There may be 135 to 155 elephants in areas not systematically surveyed in Sierra Leone. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. These guesses apply to 867 km², which is 64% of the estimated known and possible elephant range. There remains an additional 36% of the estimated range for which no elephant population estimates are available.

There has been a reduction in the guessed number of elephants in Sierra Leone because of the loss of the Gola East elephant population.

NUMBERS AND DISTRIBUTION CONT.

There are four areas within Sierra Leone where it is believed that elephants still occur. These are Gola North Forest, Outamba Kilimi National Park, Bagbe River Forest and the Kangari Hills Forest Reserve (Ballweg et al., 2013; Siaka, pers. comm., 2016). These are marked as **known range**, while the Nimini South Forest Reserve, from which there are no recent records, has been changed to **doubtful range**, as has a small unnamed area of range from the AESR 2007 in the north-east corner of the country. The Gola East Forest Reserve population is now presumed extinct, a conclusion confirmed by local hunters who had not seen elephants there since the war (Lindsell et al., 2011), and this has been recorded as a **lost population**.

A dung survey was carried out in Outamba Kilimi National Park in 2012 (Ballweg et al., 2013). Elephants were only found in the western part of the Outamba section of the park, and there was insufficient data to derive a population estimate. Illegal gold mining was said to be an increasing problem. Since no new estimate was given, the estimate of 80-100 from 2006 (Danquah & Nandjui, pers. comm., 2006) has been retained.

Lindsell et al. (2011) carried out biodiversity surveys in the Gola Forest Complex in 2006-2007. This area was believed to have been badly affected by the civil war, and it was confirmed that elephant numbers had declined. However, in the absence of new information on numbers, the guess of 50 elephants from 1987 (Grubb et al., 1998) has been retained. The elephants in Gola North may not be permanently resident in this area but move back and forth across the Moro River between Sierra Leone and Liberia. The distribution of elephants in Gola North has been clarified with records from camera traps, direct observations and elephant signs from 2008 to 2014 (Tubbs, pers. comm., 2015).

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Informed Guesses	0	—	80	100	26 %	357
Other Guesses	—	—	0	0	0 %	0
Degraded Data	—	—	55	55	38 %	510
Totals 2015	**0**	**0**	**135**	**155**		
Totals 2006	**0**	**0**	**195**	**215**		
Assessed Range					64 %	867
Unassessed Range					36 %	486
Total Range					100 %	1,353

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Population Lost	0	0	-60	-60	0 %	0
No Change	0	0	0	0	64 %	867
Totals	0	0	-60	-60	64 %	867

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Informed Guesses	357	0	357
Other Guesses	510	0	510
Unassessed Range	369	0	486
Totals	1,236	0	1,353

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Bagbe River Forest	-	O	E	1995	5	45*	Kortenhoven, pers. comm., 2002	1	349	11.1°W	9.3°N
Gola East Forest Reserve	PL	O	E	2011	0		Lindsell, 2011	1	287	11.2°W	7.4°N
Gola North Forest Reserve	-	O	E	1987	50		Grubb et al., 1998	1	242	10.9°W	7.6°N
Outamba Kilimi National Park	-	O	D	2006	80	20*	Nanjui & Danquah, pers. comm., 2006	1	358	12.1°W	9.7°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded; DT: Different Technique; NA: New Analysis; NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season);
— : No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Sierra Leone

0 20 40 60 80 100 120km

ABBREVIATIONS AND ACRONYMS

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

COUNTRY

Togo

ESTIMATED TOTAL ELEPHANTS

0 ± 0

GUESSES

74 - 114

GENERAL STATISTICS

Country Area	56,790 km²
Range Area	6,307 km² (11%)
Protected Range	75%
Information Quality Index (IQI)	0.00
CITES Appendix	I
Listing Year	1990

CURRENT ISSUES

There are very few elephants remaining in Togo. During civil disturbances from 1990-1992, people were encouraged to settle in the protected areas, and it is believed that the majority of elephants were killed or fled to neighbouring countries at that time (Okoumassou et al., 1998). Some attempts have been made to rehabilitate the parks, but their suitability for elephants is limited because they are now heavily settled (Polo-Akpisso et al., 2015). There is a UNDP project to rehabilitate Kéran National Park (République Togolaise, 2015). Fazao-Malfakassa National Park was being managed by the Franz Weber Foundation, but they withdrew at the end of 2015 (Weber, pers. comm., 2016).

In recent analyses of ivory seizure data in ETIS, prepared for CITES, Togo has been identified as a country with a worrying involvement in illegal ivory trade (CITES Secretariat, 2012; Milliken et al., 2013, 2016).

Togo published its national strategy for elephant management in 2003 (Ministère de l'Environnement et des Ressources Forestières, 2003).

NUMBERS AND DISTRIBUTION

There have been no surveys carried out in Togo in the last ten years to the standards required for generating an estimate. There may be 74 to 114 elephants in areas not systematically surveyed. These guesses likely represent a minimum number, and actual numbers could be higher than those reported. Together, this estimate and guess apply to 4,085 km², which is 65% of the estimated known and possible elephant range. There remains an additional 35% of the estimated range for which no elephant population estimates are available.

There were formerly three main areas of elephant range: in and around Kéran NP and Oti-Mandori Faunal Reserve in the north, the Fazao-Malfakassa massif in the centre of the country, and Fosse aux Lions National Park in the north-west. There has been a small increase in the guessed number of elephants in Fazao-Malfakassa NP, but this is probably the result of increased knowledge, rather than a real increase in numbers.

Twenty nine sightings of elephants were recorded in the Kéran area in the north of Togo between 2011 and 2014 with a maximum of ten individuals in one sighting in 2013 (Polo-Akpisso, pers. comm., 2016b). This replaces a guess of zero from 2004 (Bouché et al., 2004b). The range map has been changed to show the area where these were recorded as **known range**, with the remainder of the previous range changed to **possible range**.

Sixty one sightings and elephant tracks were recorded in Fazao Malfakassa NP from 2012 to 2014, and eight individuals were seen in a group in 2014 (Polo-Akpisso, pers. comm., 2016a). However, former park management believes that there are 60-100 and this has been entered as a **guess** (Weber, pers. comm., 2016), which replaces a previous guess of 61 from 2002 (Okoumassou, pers. comm., 2002) The range map has been changed to show the area where elephants were recorded as **known range**, with the remainder of the previous range changed to **possible**.

There is no recent information from Fosse aux Lions NP. There was an estimate of zero in the AESR 2007, and therefore it is recorded as a **lost population** and changed to **non-range.** There is also no recent information from the Abdoulayé Faunal Reserve to the east of Fazao Malfakassa, so the existing guess of four elephants has been retained but degraded.

Elephants recorded in Oti-Kéran-Mandori are probably visitors from Benin and Burkina Faso.

SUMMARY TOTALS

SURVEY CATEGORY	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
Informed Guesses	0	—	70	110	63 %	3,950
Degraded Data	—	—	4	4	2 %	135
Totals 2015	**0**	**0**	**74**	**114**		
Totals 2006	**4**	**0**	**61**	**61**		
Assessed Range					65 %	4,085
Unassessed Range					35 %	2,222
Total Range					100 %	6,307

INTERPRETATION OF CHANGES IN ESTIMATES FROM PREVIOUS REPORT

REASON FOR CHANGE	ESTIMATES FROM SURVEYS		GUESSES		KNOWN AND POSSIBLE RANGE	
	ESTIMATE	± 95% CL	FROM	TO	PERCENT (%)	AREA (km²)
New Guess	0	0	+9	+49	63 %	3,950
Population Lost	0	0	0	0	0 %	0
Data Degraded	-4	0	+4	+4	0 %	0
Totals	-4	0	+13	+53	63 %	4,085

AREA OF RANGE COVERED BY EACH DATA CATEGORY

DATA CATEGORY	KNOWN RANGE (km²)	POSSIBLE RANGE (km²)	TOTAL RANGE (km²)
Informed Guesses	1,540	2,410	3,950
Unassessed Range	1,102	1,255	2,357
Totals	2,642	3,665	6,307

ELEPHANT ESTIMATES

INPUT ZONE	REASON FOR CHANGE	SURVEY DETAILS			# OF ELEPHANTS		SOURCE	PFS	AREA	MAP LOCATION	
		TYPE	RELIAB.	YEAR	ESTIMATE	± 95% CL			(km²)	LON.	LAT.
Abdoulayé Faunal Reserve	-	O	E	2002	4		Okoumassou, pers. comm., 2002	2	300	1.3°E	8.7°N
Fazao Malfakassa National Park	NG	O	D	2015	60	40*	Weber, pers. comm., 2018	1	1,920	0.8°E	8.7 N
Fosse aux Lions	PL	O	E	2002	0		Okoumassou, pers. comm., 2002	3	17	0.2°E	10.8°N
Oti-Kéran-Mandori Faunal Reserve	NG	O	D	2014	10		Polo-Akpisso, pers. comm., 2016b	1	1,804	0.7°E	10.4°N

*RANGE OF INFORMED GUESS

KEY TO REASONS FOR CHANGE

DA: Different Area; DD: Data Degraded, DT: Different Technique, NA: New Analysis, NG: New Guess; NP: New population; PL: Population Lost; RS: Repeat Survey (RS denotes a repeat survey that is not statistically comparable for reasons such as different season),
— : No Change

KEY TO SURVEY REPORT

AS: Aerial Sample Count; AT: Aerial Total Count; DC: Dung Count; GD: Genetic Dung Count; GS: Ground Sample Count; GT: Ground Total Count; IG: Informed Guess; IR: Individual Registration; OG: Other Guess. Survey Reliability is keyed A-E (best to worst).

PFS

Priority for Future Surveys (PFS) is ranked from 1 to 5 (highest to lowest). Based on the precision of estimates and the proportion of national range accounted for by the site in question, PFS is a measure of the importance and urgency for future population surveys. All areas of unassessed range have a priority of 1. See Introduction for details on how the PFS is derived.

Togo

0 20 40 60 80 100 120 km

ABBREVIATIONS AND ACRONYMS

AfESG

Int'l Boundaries
Rivers & Lakes
Towns
Protected Areas
Input Zones

ELEPHANT RANGE
Known
Possible
Doubtful
Sighting

References, Appendices & Glossary

SECTION

References

A

Aba'a, N. R., & Bezangoye, A. N. (2007). Estimation de la densité, de l'abondance et de la distribution relative des grands mammifères et l'impact des activités anthropiques au Parc National des Monts Birougou et ses environs: Etablissement d'une ligne de base pour le monitoring. WCS Gabon.

Aba'a, R. (2006). Abondance relative des grands mammiferes et des activités humaines au parc National des Monts de Cristal et sa peripherie (Unpublished Report). Gabon: WCS.

Aba'a, R., Marsels, F., Starkey, M., & Memiaghe, H. (2011). Inventaire des grands mammifères et de l'impact humaine dans le Mayombe. WCS Gabon.

Abanyam, P., & Imong, I. (2015). Annual Report 2015: Cross River National Park (Oban Division). WCS.

Abdi, M. (1998, July 16). Personal Communication. Information on elephant populations in Gambella National Park and Dabus Controlled Hunting Area, Ethiopia. Letter.

Adeleke, A., Adedayo, M., & Okon, E. U. (2007). Report of the survey of African forest elephants (Loxodonta africana cyclotis) in Ifon Game Reserve, Ondo State, Nigeria. (Report to the Rufford Foundation). Retrieved from www.rufford.org/rsg/projects/alade_adeleke

Aebischer, T. (2016, February 16). Personal Communication. Elephants in the Chinko Project Area, Central African Republic. Email.

AFP. (2009, November 26). Sierra Leone elephants "wiped out" by poachers: official. AFP, Freetown. Retrieved from www.terradaily.com/reports/SLeone_elephants_wiped_out_by_poachers_official_999.html

AFP. (2014, May 16). Elephant poaching reported at Kruger national park in South Africa. The Guardian, Johannesburg. Retrieved from www.theguardian.com/world/2014/may/16/elephant-poaching-kruger-national-park-south-africa

AFP. (2016, January 26). Sri Lanka destroys huge illegal ivory haul. The Guardian. Retrieved from www.theguardian.com/environment/2016/jan/26/sri-lanka-destroys-illegal-ivory-haul

African elephant range states. (2010). African elephant action plan (Information Document No. CoP15 Inf. 68). Doha, Qatar. CITES. Retrieved from cmsdata.iucn.org/downloads/e15i_68.pdf

African Elephant Specialist Group. (2005a). Stratégie régionale pour la conservation des éléphants en Afrique Centrale. Gland: AfESG/IUCN/USFWS/WCS/WWF. Retrieved from www.iucn.org/themes/ssc/sgs/afesg/tools/pdfs/str_afc0512_fr.pdf

African Elephant Specialist Group. (2005b). Strategy for the conservation of West African elephants/Stratégie pour la conservation des elephants d'Afrique Occidentale. Nairobi: IUCN/SSC African Elephant Specialist Group. Retrieved from cmsdata.iucn.org/downloads/strategy_version_march_2005_en.pdf

African Parks. (n.d.-a). About Odzala-Kokoua. Retrieved July 14, 2016, from www.african-parks.org/the-parks/odzala-kikoua/about/about-odzala-kokoua

African Parks. (n.d.-b). African Parks - Garamba National Park. Retrieved from www.african-parks.org/the-parks/garamba/

African Parks Foundation. (2006). The Majete elephant translocation project. Retrieved from www.africanparks-conservation.com/publications/ malawielephanttranslocationexpeditions.pdf

Agger, K., & Hutson, J. (2013). Kony's ivory: How elephant poaching in Congo helps support the Lord's Resistance Army. Enough Project, The Resolve, Invisible Children, and the Satellite Sentinel Project. Retrieved from enoughproject.org/files/KonysIvory.pdf

Agreco. (2008). National census of wildlife in Mozambique (Finale report).

Akani, G. C., Aifesehi, P. E. E., Petrozzi, F., Amadi, N., & Luiselli, L. (2014). Diversity of terrestrial vertebrates in Taylor Creek Forest Reserve, an area of high environmental value in the River Niger Delta (Bayelsa State, Nigeria). Vie et Milieu - Life and Environment, 64(1), 59–68.

Ali, D. M. (2016, April 24). Personal Communication. Providing you summary of current data. Email.

Allam, A., N'Goran, K. P., Mahoungou, S., & Ikoa, B. (2016). Inventaire faunique dans la forêt de Djoua-Ivindo (TRIDOM – Congo) (Provisional). WWF.

Amir, O. G. (2016, June 6). Personal Communication. Ivory in Mogadishu. Verbal information.

Amir, O. G., de Leeuw, J., & Koech, G. (2016). Assessment of the biodiversity in terrestrial and marine landscapes of the proposed Lag Badana National Park and surrounding areas, Jubaland, Somalia. A report prepared for the IGAD Biodiversity Management Program. Mogadishu, Somalia: World Agroforestry Centre (ICRAF) Nairobi and Somali Wildlife and Natural History Society (SWNHS).

Amusa, T. O., Ogunjobi, J. A., Fxentirimam, I. J., & Garba, K. A. (2015). Movement patterns and resource needs of Kamuku elephants along migration routes in Nigeria. Pachyderm, 56(56), 105–111.

Amusa, T. O., Ogunjobi, J. A., Halidu, S. K., Likita, I. B., Muraina, A. R., Fxentirimam, I. J., & Gunu, A. M. (2013). Participatory survey of elephants (Loxodonta africana) in Kamuku National Park and its environs, northwestern Nigeria. Pachyderm, (53), 99–102.

Andresen, L. (2015, July 7). Personal Communication. Elephants in Banhine. Email and map.

Angelides, G. (2003, June 24). Personal Communication. Information on elephant distribution in Inyonga, Itulu, and central Tanzania. Verbal information.

ANPN. (2013). Wildlife and poaching assessment in Northeast Gabon: results of the pilot study (Final report). ANPN, WCS, WWF.

Anstey, S., & Dunn, A. (1991). Forest elephants in Liberia: status and conservation (Unpublished report). Gland: WWF.

Antonínová, M., Dogringar, S., Assilek, A., & Dias, J. (2014a). Dry season aerial total count, Zakouma National Park, Chad, 2014. Chad: African Parks.

Antonínová, M., Dogringar, S., Assilek, A., Dias, J., & Labuschagne, J. (2014b). Dry season aerial total count, Binder Léré Faunal Reserve and adjacent areas of elephant distribution, Chad, 2014. African Parks.

Antonínová, M., Dolmia, N. M., & Siam, B. A. (2015). National elephant conservation and management strategy for Chad, 2016-2025 (NECMSC) (Working Document). Ministry of Agriculture and Environment of Chad and African Parks.

Antonínová, M., Labuschagne, J., Dogringar, S., Assilek, A., & Dias, J. (2014c). Dry season aerial total count, Mayo Kebbi Est & Chari Baguirmi Elephant Area, Chad, 2014. Chad: African Parks.

Associated Press. (2013, June 21). Philippines destroys five tonnes of elephant tusks. The Guardian. Retrieved from www.theguardian.com/world/2013/jun/21/philippines-destroys-elephant-tusks-ivory

Awi, M. (2007). Elephant invasion and escalated depletion of environmental resources in a semi arid tropical ecosystem. Animal Research International, 4(3), 758–761

Ayesu, S. (2003). Capacity building for the implementation of elephant census, research, monitoring and education activities in Ghana. Accra, Ghana: Eden Conservation Society.

B

Bakayoko, S. (2015, August 4). Divo: La présence d'un éléphant aux alentours d'un village préoccupe les autorités. Fratmat. Retrieved from www.fratmat.info/regions/divo-la-pr%C3%A9sence-dun-%C3%A9l%C3%A9phant-aux-alentours-dun-village-pr%C3%A9occupe-les-autorit%C3%A9s

Ballweg, J., Slaka, A. M., & Hillers, A. (2013). The fate of Sierra Leone's elephants (Unpublished report to the Biodiversity Conservation Project). Sierra Leone.

Baofo, Y., & Nandjui, A. (2011). Rapport sur l'inventaire des éléphants du Parc National de Taï dans le sud-ouest de la Côte d'Ivoire.

Barnes, R. F. W. (1993). Indirect methods for counting elephants in forest. Pachyderm, 16, 24–30.

Barnes, R. F. W. (2001). How reliable are dung counts for estimating elephant numbers? African Journal of Ecology, 39(1), 1–9

Barnes, R. F. W. (2002). The problem of precision and trend detection posed by small elephant populations in West Africa. African Journal of Ecology, 40(2), 179–185.

Barnes, R. F. W., Craig, G. C., Dublin, H. T., Overton, G., Simons, W., & Thouless, C. R. (1999). African Elephant Database 1998 (Vol. 22). Gland: IUCN. Retrieved from iucn.org/afesg/aed/aed98.html

Barnes, R. F. W., & Dunn, A. (2002). Estimating forest elephant density in Sapo National Park (Liberia) with a rainfall model. African Journal of Ecology, 40(2), 159–163. doi.org/10.1046/j.1365-2028.2002.00362.x

Barnes, R. F. W., & Nandjui, A. (2005). Report on the survey of the elephants of the Ziama Forest Reserve (July - December 2004) (Unpublished report). Nairobi: CITES MIKE. Retrieved from www.cites.org/common/prog/mike/survey/ziama2004.pdf

Bassouama, A., Bongui, A. S., Ibata, S., & Mahamadou, M. (2006). Rapport d'inventaire faune et bois commercial dans la zone ETIC, sud-ouest du Parc National d'Odzala – Kokoua, 2006. MEFE, PNOK, WWF.

Bauer, J. (1995). Personal Communication. AfESG Questionnaire Reply, Somalia. Questionnaire reply.

BBC News. (2011, July 20). Kenya burns ivory in fight against poachers. Retrieved March 2, 2016, from www.bbc.com/news/world-africa-14217147

BBC News. (2015a, March 3). Kenyan ivory burnt by President Uhuru Kenyatta. Retrieved March 2, 2016, from www.bbc.com/news/world-africa-31716134

BBC News. (2015b, March 20). Ethiopia destroys six-tonne stockpile of poached ivory. Retrieved March 2, 2016, from www.bbc.com/news/world-africa-31983727

Bealtie, S. (2015). Range in Kafue National Park and surrounding GMAs. Map.

Bechem, M. (2016, May 14). Law enforcement patrols in Waza National Park. Email.

Bechem, M. E., & Nchanji, A. C. (2001). Large mammals of Banyang-Mbo Wildlife Sanctuary (Unpublished report).

Bekhuis, P., & Prins, H. H. T. (2003). Forest elephant density and distribution in the southern part of National Park Campo Ma'an, Cameroon. Pachyderm, 35, 37–42.

Belemsobgo, U. (2002). Résultats de l'analyse de l'inventaire aérien de la grande faune et du bétail dans le complexe des aires protégées de la boucle du Mouhoun en avril 2002 (Unpublished report). Ouagadougou: Direction des Parcs Nationaux, Reserves de Faune et des Chasses.

Belemsobgo, U., Coulibaly, S., Celestin, P. W., & Bassargette, D. (2003). Stratégie et programme de gestion durable des éléphants au Burkina Faso. Ministère de l'Environnement et du Cadre de Vie (MECV). Retrieved from cmsdata.iucn.org/downloads/str_wbf0306_fr.pdf

Bento, C. M., Haldane, M., Ribaue, M., & Beilfuss, R. D. (2010). Status and distribution of large herbivores in the Marromeu complex of the Zambezi delta, Mozambique. (Technical Report).

Bergl, R. A., Dunn, A., Haruna, S., Mshelbwala, J., & Nyangaryi, G. (2011). Aerial survey of elephants and other large mammals at Yankari Game Reserve, Bauchi State, Nigeria. NC Zoo, WCS, Yankari.

Beyers, R. L., Hart, J. A., Sinclair, A. R. E., Grossmann, F., Klinkenberg, B., & Dino, S. (2011). Resource wars and conflict ivory: the impact of civil conflict on elephants in the Democratic Republic of Congo - the case of the Okapi Reserve. PLoS ONE, 6(11), e27129. doi.org/10.1371/journal.pone.0027129

Bezangoye, A., & Maisels, F. (2010). Great ape and human impact monitoring in the Lopé-Waka Exceptional Priority Area, Gabon. Part I: Lope National Park (Final report to USFWS). WCS.

Bitok, E. (2002). Extracts from a report to Kenya Wildlife Service (Unpublished manuscript). KWS.

Bitok, E. K., & Kones, D. C. (2005). Density and distribution of elephants (Loxodonta africana) in Aberdare National Park and adjoining forest reserve (Unpublished report). Nairobi: Kenya Wildlife Service.

Bitty, E. A., Bi, S. G., Bene, J.-C. K., Kouassi, P. K., & McGraw, W. S. (2015). Cocoa farming and primate extirpation inside Côte d'Ivoire's protected areas. Tropical Conservation Science, 8 (1), 95–113.

Blackbeard, T. (2014, June 23). Personal Communication. Poaching in Botswana. Verbal information given.

Blake, S. (2005). Central African forests: final report on population surveys (2003 - 2004). March 2005. Nairobi: CITES MIKE. Retrieved from www.cites.org/common/prog/mike/survey/central_africa_survey03-04.pdf

Blake, S., Deem, S. L., Strindberg, S., Maisels, F., Momont, L., Isia, I.-B., … Kock, M. D. (2008). Roadless wilderness area determines forest elephant movements in the congo basin. PLoS ONE, 3(10), e3546. doi.org/10.1371/journal.pone.0003546

Blake, S., Douglas-Hamilton, I., & Karesh, W. B. (2001). GPS telemetry of forest elephants in Central Africa: results of a preliminary study. African Journal of Ecology, 39(2), 178–186.

Blake, S., Strindberg, S., Boudjan, P., Makombo, C., Bila-Isia, I., Ilambu, O., … Maisels, F. (2007). Forest Elephant Crisis in the Congo Basin. PLoS Biol, 5(4), e111. doi.org/10.1371/journal.pbio.0050111

Blake, S., Strindberg, S., & Princée, F. (2012). Evaluation of the CARPO/GHOA biological monitoring programme- Reporting on Consultancy Contract No. WWFCARPO/AFGAP/FY12/CC/030 And Project Activity No. 9F0865.01. WWF CARPO.

Blanc, J. J., Barnes, R. F. W., Craig, G. C., Douglas-Hamilton, I., Dublin, H. T., Hart, J. A., & Thouless, C. R. (2005). Changes in elephant numbers in major savanna populations in eastern and southern Africa. Pachyderm, 38, 19–28.

Blanc, J. J., Barnes, R. F. W., Craig, G. C., Dublin, H. T., Thouless, C. R., Douglas-Hamilton, I., & Hart, J. A. (2007). African Elephant Status Report 2007: an update from the African Elephant Database (Vol. 33). Gland, Switzerland: IUCN. Retrieved from portals.iucn.org/library/efiles/documents/SSC-OP-033.pdf

Blanc, J. J., Thouless, C. R., Hart, J. A., Dublin, H. T., Douglas-Hamilton, I., Craig, G. C., & Barnes, R. F. W. (2003). African elephant status report 2002: An update from the African Elephant Database (Vol. 29). Gland, Switzerland and Cambridge, UK: IUCN. Retrieved from iucn.org/afesg/aed/aesr2002.html

Blench, R., & Dendo, M. (2007). Mammals of the Niger Delta, Nigeria. Retrieved from www.rogerblench.info/

Boafo, Y. (2010). Report on the population status survey of elephants (Loxodonta Africana) in Sapo National Park, Liberia. Liberia: CITES MIKE.

Bodasing, T., & Cumbane, R. (2013). Aerial census report for Maputo Special Reserve 2012. Mozambique.

Boitani, L. (1981). The Southern National Park: a master plan. Rome: Department Technical Cooperation, Ministry Foreign Affairs. Retrieved from www.sudanarchive.net/cgi-bin/sudan?a=pdf&d=Dunepd158&dl=1

Bolaños, N. C. (2012). Garamba National Park: Aerial animal census, 03-09 April / 04-12 May (Survey report). Kinshasa: ICCN / APF.

Booth, V. R., & Dunham, K. M. (2014). Elephant poaching in Niassa Reserve, Mozambique: population impact revealed by combined survey trends for live elephants and carcasses. Oryx, FirstView, 1–10. doi.org/10.1017/S0030605314000568

Borner, M. (2003, April 3). Personal Communication. Estimate of the elephant population in Rubondo Island, Tanzania. E-mail.

Bouché, P. (2002). Elephant status and conservation in the Upper Bandama Game Reserve, Ivory Coast. Pachyderm, 32, 72–73.

Bouché, P. (2005). Inventaire aérien des populations de grande faune dans les sites du PAGEN: Forêt Classée et Réserve Partielle de Faune de Comoé-Leraba; Forêts Classées de Boulon et de Kotiandé; Réserve de la Biosphère de la Mare aux Hippopotames; P.N. Kaboré Tambi (Unpublished Final report). Ouagadougou: Ministère de l'Environnement et du Cadre de Vie.

Bouché, P. (2006). Mole wildlife survey: Final report - June 2006 (Unpublished report). Ouagadougou and Accra: IUCN / Forestry Commission / Widlife Division.

Bouché, P. (2007c). Dénombrement des éléphants du Gourma. IUCN.

Bouché, P. (2007a). Inventaire de la faune dans la Forêt Classée de Koulbi et dans les Reserves Partielle et Totale de Bontioli. Ministère de l'Environnement et du Cadre de Vie.

Bouché, P. (2007b). Northern Ghana elephant survey. Pachyderm, 42(42), 58–69.

Bouché, P. (2010). Inventaire aérien 2010 des grands mammiferes dans le nord de la Republique Centrafricaine. ECOFAC.

Bouché, P. (2012a). Inventaire aérien de l'écosystème W-Arly-Pendjari Mai – Juin 2012. CITES MIKE, IUCN, UNOPS, UNDP, GEF, EU.

Bouché, P. (2012b). Recensement pédestre des grands mammifères de la Forêt Classée et Ranch de Gibier de Nazinga, Burkina Faso. Février 2012. OFINAP.

Bouché, P. (2015). Personal Communication. Estimates and range updates for West Africa. Document given.

Bouché, P., Frederick, H., & Kohi, E. (2015). Inventaire aérien de l'écosystème W-Arly-Pendjari. Wildlife Conservation Society, Vulcan, Elephants Without Borders.

Bouché, P., Lungren, C. G., & Hien, B. (2004a). Recensement aérien total de la faune dans l'Ecosystème Po-Nazinga-Sissili (PONASI)

Mai 2003. Nairobi: MIKE.

Bouché, P., Lungren, C. G., Hien, B., & Omondi, P. O. M. (2004b). Recensement aérien total de l'Ecosystème "W"-Arli-Pendjari-Oti-Mandouri-Keran (WAPOK) Avril-Mai 2003. Nairobi: MIKE / ECOPAS / PAUCOF. Retrieved from www.cites.org/common/prog/mike/survey/WAPOK_survey03.pdf

Bouché, P., Nzapa Mbeti Mange, R., Tankalet, F., Zowoya, F., Lejeune, P., & Vermeulen, C. (2011). Game over! Wildlife collapse in northern Central African Republic. Environmental Monitoring and Assessment. doi.org/10.1007/s10661-011-2475-y

Bouché, P., Ouédraogo, M., Kouton, M., N'Sera, P., Sinandouwirou, T., Fai, C.-Y. N., ... Sahailou, S. (2013a). Inventaire pédestre de la faune de l'écosystème W Arly Pendjari 2013. EU, PAPE, UNDP.

Bouché, P., Renaud, P.-C., Lejeune, P., Vermeulen, C., Froment, J.-M., Bangara, A., ... Fay, M. (2010). Has the final countdown to wildlife extinction in Northern Central African Republic begun? African Journal of Ecology, 48(4), 994–1003. doi.org/10.1111/j.1365-2028.2009.01202.x

Bouché, P., Sombié, D., Sawadogo, H., & Marchais, J. (2013b). Boucle du Mouhoun aerial total count: Burkina Faso - March-April 2013. Ouagadougou: Office National des Aires Protegées.

Brandt, A. L., Hagos, Y., Yacob, Y., David, V. A., Georgiadis, N. J., Shoshani, J., & Roca, A. L. (2014). The elephants of Gash-Barka, Eritrea: nuclear and mitochondrial genetic patterns. Journal of Heredity, 105(1), 82–90. doi.org/10.1093/jhered/est078

Brugière, D. (2016, April 15). Personal Communication: Elephants in Guinea. Email.

Brugiere, D., Badjinca, I., Silva, C., Serra, A., & Barry, M. (2006). On the road to extinction? The status of elephant Loxodonta africana in Guinea Bissau and western Guinea, West Africa. Oryx, 40(4), 442–446. doi.org/10.1017/S0030605306001177

Brugière, D., Sakom, D., & Gautier-Hion, A. (2005). The conservation significance of the proposed Mbaere-Bodingue national park, Central African Republic, with special emphasis on its primate community. Biodiversity & Conservation, 14, 505–522.

Buckland, S. T., Anderson, D. R., Burnham, K. P., Laake, J. L., Borchers, D. L., & Thomas, L. (2001). Introduction to distance sampling: estimating abundance of biological populations. Oxford University Press.

Buckland, S. T., Rexstad, E. A., Marques, T. A., & Oedekoven, C. S. (2015). Distance sampling: methods and applications. Cham: Springer International Publishing. Retrieved from link.springer.com/10.1007/978-3-319-19219-2

Burrill, A., & Douglas-Hamilton, I. (1987). African elephant database project: Final Report - Phase One. Nairobi: WWF/UNEP.

C

Canby, P. (2015, May 11). Elephant Watch. The New Yorker. Retrieved from www.newyorker.com/magazine/2015/05/11/elephant-watch

Canney, S. (2016a, April 22). Personal Communication: Mali update. Document given.

Canney, S. (2016b, June 7). Personal Communication: Southwest Mali Eles. Email.

Canney, S., & Ganame, N. (2012). Impact of cattle on elephant use of key dry-season water in the Gourma of Mali. Pachyderm, (51), 75–77.

Carmignani, E. (2015). Elephant assessment and report on the status of Quissama National Park's Special Conservation Area: October - November 2015. Angola.

Caughley, G., & Goddard, J. (1975). Abundance and distribution of elephants in the Luangwa Valley, Zambia. East African Wildlife Journal, 13(1), 39–48.

Chago, B., Gebre, A., & Zewdie, C. (2001). Preliminary report on aerial census of wild animals conducted in Nechisar, Mago and Omo National Parks and Mazie and Chebera Wildlife Reserve Areas (Unpublished report). Addis Ababa: EWCO.

Chamaillé-Jammes, S. (2016, January 21). Personal Communication: Elephant movements. E-mail.

Chardonnet, B. (1998). Personal Communication: AfESG Questionnaire Reply: Burkina Faso. Questionnaire reply.

Chase, M., Frederick, H., Mukeka, J., & Ngene, S. (2014b). Dry season fixed-wing aerial survey of elephants and other large mammals in the Tsavo and Amboseli Ecosystems, Kenya. Elephants Without Borders, Kenya Wildlife Service.

Chase, M. J. (2006). The population status, ecology and movements of elephants in southwest Zambia. Kasane: Conservation International.

Chase, M. J. (2007). Aerial wildlife census of the Caprivi River systems: A survey of river wetlands and floodplains. September 2007 (Unpublished Report). Namibia Nature Foundation. Retrieved from www.elephantswithoutborders.org/downloads.php

Chase, M. J., & Griffin, C. R. (2005). Elephant distribution and abundance in the Central Kavango-Zambezi Transfrontier Conservation Area: Results of an aerial survey in 2005 (Unpublished report). Windhoek: Ministry of Environment and Tourism, Namibia.

Chase, M. J., & Griffin, C. R. (2011). Elephants of south-east Angola in war and peace: their decline, re-colonization and recent status. African Journal of Ecology, 49(3), 353–361. doi.org/10.1111/j.1365-2028.2011.01272.x

Chase, M., Nyirenda, V., & Sitali, L. (2013). Dry season fixed-wing aerial survey of elephants and other wildlife in Sioma Ngwezi National Park (Internal report). ZAWA.

Chase, M., & Schlossberg, S. (2016). Dry-season fixed-wing aerial survey of elephants and other large mammals in Southeast Angola. Elephants Without Borders / Great Elephant Census.

Chase, M., Schlossberg, S., Kenana, L., Mukeka, J., Kanga, E., Ngene, S., & Omondi, P. (2016). Wet-season fixed-wing aerial survey of elephants and other large mammals in the Laikipia-Samburu, Marsabit, Meru and Lamu ecosystems, Kenya. Elephants Without Borders, KWS, Great Elephant Census.

Chase, M., Schlossberg, S., Landen, K., Sutcliffe, R., Seonyatseng, E., Keitsile, A., & Flyman, M. (2015). Dry season aerial survey of elephants and wildlife in northern Botswana: July – October 2014. Elephants Without Borders, the Department of Wildlife and National Parks (Botswana), Great Elephant Census.

Chase, M., Workeneh, S., Alemayhu, F., Belayneh, A., Regassa, F., & Enawgaw, C. (2014a). Aerial survey of elephants and other large mammals in Babile Elephant Sanctuary and Southwest Ethiopia. Ethopia: Elephants Without Borders, Haramaya University and Ethiopian Wildlife Conservation Authority.

Chatelain, C., Bakayoko, A., Martin, P., & Gautier, L. (2010). Monitoring tropical forest fragmentation in the Zagné-Taï area (west of Taï National Park, Côte d'Ivoire). Biodiversity and Conservation, 19(8), 2405–2420. doi.org/10.1007/s10531-010-9847-4

CITES. (2009). Report on the one-off ivory sale in Southern African countries (Fifty-eighth meeting of the Standing Committee, Geneva (Switzerland), 6-10 July 2009 No. SC58 Doc. 36.3 (Rev. 1)). Geneva: CITES.

CITES. (2012). Elephant conservation, illegal killing and ivory trade (Sixty-second meeting of the Standing Committee, Geneva (Switzerland), 23-27 July 2012 No. SC62 Doc. 46.1 (Rev. 1)). Geneva: CITES. Retrieved from cites.org/sites/default/files/eng/com/sc/62/E62-46-01.pdf

CITES. (2015a). CITES Appendices I, II and III. Geneva, Switzerland: CITES.

CITES. (2015b, March 23). Elephant poaching rates virtually unchanged in 2014. Retrieved March 25, 2015, from cites.org/eng/mike_figures2014

CITES. (2016). Elephant conservation, illegal killing and ivory trade (Sixty-sixth meeting of the Standing Committee, Geneva (Switzerland), 11-15 January 2016 No. SC66 Doc. 47.1). Geneva: CITES. Retrieved from cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-01_2.pdf

CITES. (n.d.-a). CITES National Ivory Action Plans | CITES. Retrieved March 21, 2016, from cites.org/niaps

CITES. (n.d.-b). The CITES export quotas | CITES. Retrieved March 21, 2016, from https://cites.org/eng/resources/quotas/index.php

CITES Conference of the parties. (2013a). Elephant conservation (Elephantidae spp) (Sixteenth Meeting of the Conference of the parties, Bangkok, Thailand, 03-14 March 2013 No. Decision 14.78 (Rev. CoP16)). Geneva: CITES. Retrieved from cites.org/sites/default/files/eng/dec/valid16/E16-Dec.pdf

CITES Conference of the parties. (2013b). Trade in elephant specimens (Sixteenth Meeting of the Conference of the parties, Bangkok, Thailand, 03-14 March 2013 No. Resolution Conf. 10.10 (Rev. CoP16)). Geneva: CITES. Retrieved from cites.org/eng/res/10/10-10R16.php

CITES Secretariat. (2013). Monitoring the illegal killing of elephants (Sixteenth meeting of the Conference of the parties, Bangkok (Thailand), 3-14 March 2013 No. CoP16 Doc. 53.1). Geneva: CITES. Retrieved from cites.org/sites/default/files/eng/cop/16/doc/E-CoP16-53-01.pdf

CITES Secretariat. (2014). Elephant conservation, illegal killing and ivory trade (Sixty-fifth meeting of the Standing Committee, Geneva (Switzerland), 7-11 July 2014 No. SC65 Doc. 42.1). Geneva: CITES. Retrieved from cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-01_2.pdf

CITES Secretariat. (2016). Report on Monitoring the Illegal Killing of Elephants (MIKE) (No. CoP17 Doc. 57.5). Geneva: CITES. Retrieved from cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-57-05.pdf

Clifford, L. (2016). Wildlife Action Group - Animal Census 2015 - DRAFT (Draft report). Wildlife Action Group.

Conseil National de Transition. CNT portant constitution du Parc National d'Arly, Pub. L. No. 042-2015 (2015).

Craig, C. G. (2011a). Aerial survey of wildlife in the Niassa Reserve, October 2011 (Technical Report). Sociedade para a Gestão e Desenvolvimento da Reserva do Niassa.

Craig, C. G., & Gibson, D. S. C. (2013a). Aerial survey of elephants and other wildlife in Khaudum National Park and Tsumkwe September 2013. Namibia, Windhoek: WWF.

Craig, C. G., & Gibson, D. S. C. (2013b). Aerial survey of elephants and other wildlife in the Caprivi May-June 2013. Ministry of Environment, Namibia.

Craig, G. C. (1993). Options for aerial surveys of elephants. Pachyderm, 16, 15-20.

Craig, G. C. (2004). Aerial survey standards for the MIKE programme (Approved by MIKE Technical Advisory Committee). Nairobi: CITES MIKE.

Craig, G. C. (2009). Aerial survey of wildlife in the Niassa National Reserve and adjacent areas, Mozambique, October 2009. (Technical Report). Sociedade para a Gestão e Desenvolvimento da Reserva do Niassa.

Craig, G. C. (2011b). Countrywide survey of elephants in Namibia: draft report. Ministry of Environment and Tourism, Namibia.

Craig, G. C. (2012a). Aerial survey of Chipanje Chetu, Mozambique, October 2011 (Draft report).

Craig, G. C. (2012b). Aerial survey of Quirimbas National Park and adjacent areas, Mozambique, October 2011 (Draft report).

Craig, G. C. (2012c). Aerial survey standards for the MIKE programme — Version 2.0. Nairobi: CITES MIKE. Retrieved from cites.org/sites/default/files/common/prog/mike/survey/MIKE_aerial_standards.v2.pdf

Craig, G. C. (2013). Aerial survey of Quirimbas National Park and adjoining areas. WWF Mozambique.

Craig, G. C., & Gibson, D. S. C. (2004). Aerial survey of wildlife in the Niassa Reserve and surrounds Mozambique, October 2004. Sociedade para a Gestao e Desenvolvimento da Reserva do Niassa, Maputo: Maputo. Retrieved from svyzmzNIASSA2004Report.pdf

Craig, G. C., & Gibson, D. S. C. (2014). Aerial survey of elephants and other wildlife in the Zambezi Region September/October 2014. Ministry of Environment and Tourism, Namibia.

Cumming, D. H. M., & Jones, B. (2005). Elephants in Southern Africa: management issues and options (Unpublished report). Harare: WWF SARPO. Retrieved from www.fitzpatrick.uct.ac.za/publications/Cumming_Jones_2005.pdf

Cumming, D. H. M., Mackie, C. S., Magane, S., & Taylor, R. D. (1994). Aerial census of large herbivores in the Gorongosa National Park and the Marromeu area of the Zambezi delta in Mozambique: June, 1994.

Cunliffe, S. (2010, September). Tusker's last stand. Africa Geographic Magazine, (September 2010), 35-39.

D

Dakouo, F. (2004, September 3). Records of elephant presence in Klëla village (Sikasso circle) and Zantiébougou (southern Mali). Verbal information

Dakwa, K. B., Monney, K. A., & Attuquayefio, D. (2016). Raid range selection by elephants around Kakum Conservation Area: Implications for the identification of suitable mitigating measures. International Journal of Biodiversity and Conservation, 8(2), 21-31.

Danquah, E. (2009). A survey of medium to large mammals of the Ankasa and Bia conservation areas (March - June 2009. Kumasi, Ghana: Department of Wildlife and Range Management, Faculty of Renewable Natural Resources, Kwame Nkrumah University of Science and Technology.

Danquah, E. K. A. (2004). CITES - MIKE Kakum National Park retrospective elephant survey 2004 (Final Report) (Unpublished report). Accra: A Rocha Ghana. Retrieved from www.cites.org/common/prog/mike/sub_reg/W_Africa/ghana_2004_survey.pdf

Danquah, E. K. A., Boafo, Y., Dubiure, U. F., Nandjui, A., Hema, E. M., & Appiah, M. A. (2001). Elephant census in the Ankasa Conservation Area in south-western Ghana. Pachyderm, 31, 63-69.

Danquah, E. K. A., & Nandjui, A. (2006, October 4). AED Questionnaire Reply, Sierra Leone. Questionnaire reply.

Danquah, E., & Oppong, S. K. (2013). Elephant population trends and associated factors: a review of the situation in western Ghana. Pachyderm, 53(53), 81–90.

Danquah, E., & Oppong, S. K. (2014). Survey of forest elephants Loxodonta cyclotis (Matschie, 1900) (Mammalia: Proboscidea: Elephantidae) in the Bia Conservation Area, Ghana. Journal of Threatened Taxa, 6(11). doi.org/0.11609/JoTT.o3722.6399-405

Danquah, E., Sam, M. K., Akom, E., Appiah-Kubi, S. K., & Ayiku, T. (2009). Elephant conservation and possibilities of creating corridors in western Ghana. Project AFE-0348. (Technical report submitted by A Rocha Ghana to African Elephant Conservation Fund of the US Fish and Wildlife Service.). A Rocha Ghana.

Davies, C., Craig, G. C., Mackie, C. S., Chimuti, T., & Gibson, D. S. C. (1996). Aerial census of elephant and other large mammals in the Gonarezhou, Zambezi Valley, North-West Matabeleland, Sebungwe, Dande and communal land regions of Zimbabwe: July to November 1995. Harare: DNPWLM.

Delsink, A. K., Kirkpatrick, J., van Altena, J., Bertschinger, H. J., Ferreira, S. M., & Slotow, R. (2013). Lack of spatial and behavioral responses to immunocontraception application in african elephants (Loxodonta africana). Journal of Zoo and Wildlife Medicine, 44(4s), S52–S74. doi.org/10.1638/1042-7260-44.4S.S52

Demeke, Y. (2006, June 15). Personal Communication. Information on Elephants in Ethiopia. E-mail.

Department of Environmental Affairs. (2014, September 24). Norms and standards for the management of elephant in South Africa to be amended. Retrieved from www.environment.gov.za/mediarelease/normsandstandards_managementofelephant

Department of Environmental Affairs and Tourism. National norms and standards for the management of elephants in South Africa (2008).

Department of Wildlife and National Parks. (2006). Aerial census of animals in northern Botswana: dry season 2006. Gaborone: Department of Wildlife and National Parks.

Dethier, M., & Ghiurghi, A. (2000). Etude de la chasse villageoise dans le secteur ouest (route Mambélé-Ndelé) de la zone d'intervention du projet ECOFAC. Brussels: Agreco.

DFC. (2015). Le braconnage d'éléphants au Burkina Faso (Unpublished Report).

DG Ecological Consulting. (2003). National policy and strategy for the conservation and management of elephants in Botswana. Gaborone: Department of Wildlife and National Parks. Retrieved from cmsdata.iucn.org/downloads/bwstrategyfinal.pdf

Dianzenza, L. (2015, October 28). Parc national de la Salonga : l'ICCN et WCS saluent la peine de 20 ans de prison ferme infligée à deux braconniers. Agence d'Information d'Afrique Centrale. Democratic Republic of Congo. Retrieved from www.adiac-congo.com/content/parc-national-de-la-salonga-liccn-et-wcs-saluent-la-peine-de-20-ans-de-prison-ferme-infligee

Dias, J., Soumanou, M., Dicko, A., & Ouedraogo, H. (2015). Gourma elephant survey, Mali, 4-10 June 2015. New York: WCS.

Direcção Nacional de Florestas e Fauna Bravia. (1999). Elephant management strategy. Maputo: Ministerio da Agricultura e Pescas.

Direction de la Faune, P. et P. (1991). Plan de conservation de l'éléphant au Niger (Unpublished report). Niamey: Ministère de l'Hydraulique et de l'Environnement.

Direction de la Faune, de la Chasse et des Aires Protégées. (2010). Stratégie nationale et plan d'actions pour la conservation durable des elephants au Niger. Niamey, Niger: Ministère de l'Eau, de l'Environnement et de la Lutte Contre la Désertification; UNDP; UNDP. Retrieved from cmsdata.iucn.org/downloads/str_wne1006_fr.pdf

Direction de la Faune et des Parcs Nationaux. (1991). Elephant conservation plan for Cameroon (Elephant conservation plan). Yaoundé: Ministère du Tourisme.

Direction des Parcs Nationaux du Senegal. (1991). Plan de conservation de l'elephant au Senegal (Elephant conservation plan). Dakar: Direction des Parcs Nationaux du Senegal.

Direction Nationale des Eaux et Forets. (1991). Plan de conservation de l'elephant au Mali. Bamako: Direction Nationale des Eaux et Forets.

DNPW. (2016). Report on the 2015 aerial survey of elephants in Zambia. Chilanga, Zambia: Department of National Parks and Wildlife, Zambia.

Douckaga, M. (2014). Rapport de synthèse sur le suivi des grands mammifères de la plage n04 KESSALA 2010 - 2013. Zone périphérique du Parc National du Plateau Batéké (S 01 54.334' E 013 54.830') (Unpublished report). WCS Gabon.

Douglas-Hamilton, I. (1979). The African elephant action plan (Final report to US Fish and Wildlife Service). Nairobi: IUCN.

Douglas-Hamilton, I. (1996). Counting elephants from the air: total counts. In K. F. Kangwana (Ed.), Studying elephants (Vol. 7, pp. 28–37). Nairobi: African Wildlife Foundation.

Douglas-Hamilton, I. (2016a, July 12). Personal Communication. Range of Tana River elephants across to Tsavo ecosystem and East to Somalia. E-mail and map.

Douglas-Hamilton, I. (2016b, July 13). Personal Communication. New elephant range for AED 2016. Email.

Douglas-Hamilton, I., & Burrill, A. (1991). Using carcass ratios to determine population trends. In F. I. B. Kayanja & E. L. Edroma (Eds.), African wildlife: research and management. Proceedings of an international symposium, 8-11 December, 1986, Kampala, Uganda (pp. 98–105). Paris: ICSU.

Douglas-Hamilton, I., Michelmore, F., & Inamdar, A. (1992). African elephant database. Nairobi: UNEP.

Dunham, K. M. (2002). Aerial census of elephant and other large herbivores in Gonarezhou national park and some bordering lands, Zimbabwe: 2001. Harare: DNPWLM/WWF-SARPO.

Dunham, K. M. (2003). Aerial survey of elephants and other large herbivores in Save Valley Conservancy, Zimbabwe: 2003. Harare: WWF.

Dunham, K. M. (2004). Aerial survey of elephants and other large herbivores in the Zambezi Heartland (Zimbabwe, Mozambique and Zambia): 2003. Kariba: AWF.

Dunham, K. M. (2010). Aerial survey of elephants and other large herbivores south of Lake Cabora Bassa, Mozambique: 2010 (Unpublished Final report No. Part 4). Agreco G.E.I.E.

Dunham, K. M. (2015). National summary of aerial survey results for elephant in Zimbabwe: 2014. Harare, Zimbabwe: Parks and Wild Life Management Authority.

Dunham, K. M., & Mackie, C. S. (2002). National summary of aerial census results for elephant in Zimbabwe: 2001 (Unpublished report). Harare: DNPWLM/WWF-SARPO.

Dunham, K. M., Mackie, C. S., Musemburi, O. C., Chipesi, D. M., Chiwese, N. C., Taylor, R. D., ... Brightman, M. A. H. (2006a). Aerial survey of elephants and other large herbivores in the Sebungwe Region, Zimbabwe: 2006 (Unpublished Draft Report). Harare: WWF SARPO.

Dunham, K. M., Mackie, C. S., Musemburi, O. C., Chipesi, D. M., Zhuwau, C., Taylor, R. D., & Chimuti, T. (2006b). Aerial survey of elephants and other large herbivores in northwest Matabeleland, Zimbabwe: 2006 (Unpublished Draft Report). Harare: WWF-SARPO.

Dunham, K. M., Mackie, C. S., Musemburi, O. C., Zhuwau, C., Mtare, T. G., Taylor, R. D., & Chimuti, T. (2007). Aerial survey of elephants and other large herbivores in north-west Matabeleland, Zimbabwe: 2007. Harare: WWF-SARPO.

Dunham, K. M., Mackie, C. S., Nyaguse, G., & Zhuwau, C. (2015a). Aerial survey of elephants and other large herbivores in north-west Matabeleland (Zimbabwe): 2014. Harare, Zimbabwe: Parks and Wild Life Management Authority.

Dunham, K. M., Mackie, C. S., Nyaguse, G., & Zhuwau, C. (2015b). Aerial survey of elephants and other large herbivores in the Sebungwe (Zimbabwe): 2014. Harare, Zimbabwe: Parks and Wild Life Management Authority.

Dunham, K. M., Mackie, C. S., Nyaguse, G., & Zhuwau, C. (2015c). Aerial survey of elephants and other large herbivores in the Zambezi Valley (Zimbabwe): 2014 (Draft report). Harare, Zimbabwe.

Dunham, K. M., & Simwanza, H. I. (2002). Aerial Census of Elephants and Other Large Herbivores in South Luangwa NP and Lupande GMA, Zambia: 2002. Chipata: Zambia Wildlife Authority & WWF.

Dunham, K. M., & van der Westhuizen, H. F. (2015). Aerial survey of elephants and other large herbivores in Gonarezhou National Park and Save Valley Conservancy (Zimbabwe): 2014. GEC, ZPWMA, FZS.

Dunham, K., van der Westerhuyen, E., van der Westhuizen, H., & Gandiwa, E. (2010). Aerial survey of elephants and other large herbivores in Gonarezhou National Park (Zimbabwe), Zinave National Park (Mozambique) and surrounds: 2009. Chiredzi: Parks and Wildlife Management Authority / Frankfurt Zoological Society.

Dunham, K., van der Westerhuyen, E., van der Westhuizen, H., & Ndaimani, H. (2013). Aerial survey of elephants and other large herbivores in Gonarezhou National Park (Zimbabwe) and surrounding areas: 2013. Chiredzi: Parks and Wildlife Management Authority / Frankfurt Zoological Society.

Dunn, A. (2015, March 12). Personal Communication. Elephant Crisis Fund - Yankari. Documents given.

Dunn, A., Bergl, R., Byler, D., Eben-Ebai, S., Etiendem, D. N., Fotso, R., ... Morgan, B. J. (2014). Revised Regional Action Plan for the Conservation of the Cross River Gorilla (Gorilla gorilla diehli) 2014–2019. IUCN/SSC Primate Specialist Group and Wildlife Conservation Society.

DWNP. (2012). Aerial census of animals in Botswana: 2012 dry season. Gaborone, Botswana: Department of Wildlife and National Parks.

DWNP. (2016). Draft report on aerial census of animals in Southwest Botswana: Dry season 2015. Gaborone, Botswana: Department of Wildlife and National Parks, Republic of Botswana.

E

ECCAS. (2013). Declaration on the anti-poaching campaign in Central Africa. Yaoundé, Cameroon: Economic Community of Central African States.

Edebe, J., Lala, F., Bett, A., Makau, D., Kimutai, D., & Tokro, G. (2010). Total aerial count of elephants and other large mammals in Nasolot/South Turkana/Rimoi/Namnarok area, Kenya, 30 July - 1 August 2010. KWS.

Edward, A. (2009). Occurrence, distribution and relative abundance of medium to large size wild mammal species in Madi wildlife corridor: Prospects for conservation and development opportunities (Final report). Kampala, Uganda: WCS - WILD Programme.

Eggert, L. S. (2004a). The elephants of Parc National de la Marahoué: genetic estimate of population size, demography, and phylogeography. Final Report (Unpublished report). Nairobi: CITES MIKE.

Eggert, L. S. (2004b). The elephants of Parc National de Taï: genetic estimate of population size, demography, and phylogeography (Unpublished report). Nairobi: CITES MIKE.

Eggert, L. S., Eggert, J. A., & Woodruff, D. S. (2003). Estimating population sizes for elusive animals: the forest elephants of Kakum National Park, Ghana. Molecular Ecology, 12(6), 1389–1402.

Ekobo, A. (1993). The status of forest elephants in the south east of the Republic of Cameroon. Pachyderm, 16, 84.

Ekobo, A. (1994, October 24). Personal Communication. Information on elephant distribution in Cameroon. Fax.

Ekobo, A. (1998, September 7). Personal Communication. Estimates of elephant populations in Nki and Boumba Bek, Cameroon. Fax.

Ekobo, A. (2003). Preliminary forest elephant (Loxodonta africana cyclotis) survey in Mt Cameroon forest: January-March 2003.

Ekobo, A. (2009). Large mammals and potential migration surveys between Korup and the FMU 11-005. WWF Coastal Forests Programme.

EKZNW. (2016, April 28). Personal Communication. Update on elephant numbers in South Africa. Email.

Elkan, P., Fotso, R., Hamley, C., Mendiguetti, S., Bour, P., Nguertou Alexandre, V., ... Kenmoe, G. A. (2016). Aerial surveys of wildlife and human activity across the Bouba N'djida - Sena Oura - Benoue - Faro landscape: Northern Cameroon and southwestern Chad: April - May 2015. Wildlife Conservation Society; Ministry of Forests and Wildlife (MINFOF); L'Ecole de Faune de Garoua.

Enock, M. (2002, February 2). Personal Communication. AED Questionnaire Reply, Angola. Questionnaire reply.

ESRI, Inc. (1992). Digital Chart of the World [CD-ROM].

Ethiopia Wildlife Conservation Organization. (2002). Gambella National Park aerial survey, May 2002. Addis Ababa: Ethiopian Wildlife Conservation Organization.

EU. (2015, March 7). Short Summary of Conclusions of the 75th Meeting of the Scientific Review Group on Trade in Wild Fauna and Flora. Retrieved from circabc.europa.eu/sd/a/758de7d5-46d2-49d2-bc3d-a8d6248dbb8c/75_summary_srg.pdf

Fay, J. M., Malachie, D., Boulanoudji, E., Guggemos, C., & Poilecot, P. (2005). Complete aerial survey, Zakouma National Park, Tchad, 25-29 March 2005 (Unpublished Report).

Fay, M. (2016, February 14). Personal Communication. Elephants in Wonga-Wongue Presidential Reserve, Gabon. Verbal Information.

Fay, M., Elkan, P. W., Marjan, M. D., & Grossmann, F. (2007). Aerial surveys of wildlife, livestock, and human activity in and around existing and proposed protected areas of Southern Sudan, dry season 2007. WCS/GOSS/USAID/USFWS.

F

Fearnhead, P. (2015, March 17). Personal Communication. Elephants in Malawi. Email.

Ferguson, K., & Chase, M. (2010). Elephants and fencing conflicts in the GLTFCA an KAZA TFCA. In K. Ferguson & J. Hanks (Eds.), Fencing impact: A review of the environmental, social and economic impacts of game and veterinary fencing in Africa with particular references to the Great Limpopo and Kavango-Zambezi transfrontier conservation areas (p. 173). Pretoria: University of Pretoria. Mammal Research Institute.

Ferreira, S., Greaver, C., & Simms, C. (2015). Elephant Management Update (02/2015): Elephant survey of the Kruger National Park. South African National Parks.

Ferreira, S. M., Lehman, E. R., Fourie, J., & van Aarde, R. J. (2005). A survey of large mammal numbers of the Lundazi Forest Reserve, the Kasungu National Park, the Vwaza Game Reserve and the Nyika National Park (Unpublished report). Pretoria: Conservation Ecology Research Unit, University of Pretoria.

Ferreira, S., Pienaar, D., Freitag-Ronaldson, S., & Magome, H. (2012). An update on managing the effects of elephants in National Parks. SANParks.

Fischer, F. (2005). Elephants in Côte d'Ivoire – a warning for West African conservation. Pachyderm, 38, 64–75.

Fishlock, V. (2016, May 5). Personal Communication: Amboseli identified population. Email.

Flora & Fauna International. (2015, December 8). Remote cameras offer glimpse into the "forgotten forests" of South Sudan. Flora & Fauna International. Retrieved from www.fauna-flora.org/news/remote-cameras-offer-glimpse-into-the-forgotten-forests-of-south-sudan/

Foguekem, D., Tchamba, M. N., & Omondi, P. (2010). Aerial survey of elephants (Loxodonta africana africana), other large mammals and human activities in Waza National Park, Cameroon. African Journal of Environmental Science and Technology, 4(6), 401–411.

Foley, C. (2016, March). Personal Communication. Verifying draft map of distribution for Tanzania. Phone conversation.

Fotso, R., Eno Nku, M., & Groves, J. (2002). Distribution and conservation status of gorilla population in the forests around belabo, eastern province, Cameroon. Cameroon Oil Transportation Company (COTCO).

Fourie, J., & Ferreira, S. M. (2005). A survey of large mammals in the Lukusuzi National Park, Zambia (unpublished). Pretoria: Conservation Ecology Research Unit, University of Pretoria.

Freeman, T. (2016, March 11). Personal Communication: Elephants in Liberia. Verbal information given.

G

Ganame, N. (2015, June). Personal Communication. Further information related to the Gourma Elephant Survey. Email.

Garai, M. (2016, May 17). Personal Communication. ESAG Database update 2015/2016. Email.

GEF. (2010). GEF's programmatic approach to biodiversity conservation in West and Central Africa. Washington D.C.: The Global Environment Facility. Retrieved from www.thegef.org/gef/sites/thegef.org/files/publication/west-africa-BIO.pdf

Gettleman, J. (2016, April 30). Kenya Burns Elephant Ivory Worth $105 Million to Defy Poachers - The New York Times. The New York Times. Retrieved from www.nytimes.com/2016/05/01/world/africa/kenya-burns-poached-elephant-ivory-uhuru-kenyatta.html?_r=0

Gibson, D. S. C. (1997). Aerial surveys of Vwaza Marsh Wildlife Reserve and Nyika National Park (Unpublished report). Essex: AHT International.

Gibson, D. S. C., & Craig, G. C. (2015a). Aerial survey of elephants and other wildlife in Zambezi Region September/October 2015. WWF.

Gibson, D. S. C., & Craig, G. C. (2015b). Aerial survey of elephants & other wildlife in Khaudum National Park & neighbouring conservancies October 2015. WWF.

Godard, P. (2014, February 21). President Idriss Deby Itno Of Chad Destroys 1.1 Ton Ivory Stockpile. Retrieved March 21, 2016, from www.africanparks.eu/Blog_107_President+Idriss+Deby+Itno+of+Chad+Destroys+1.1+Ton+Ivory+Stockpile.html

Goldenberg, S. (2013, November 15). US crushes 6 tons of "blood ivory" in largely symbolic move. The Guardian. Retrieved from www.theguardian.com/environment/2013/nov/14/obama-administration-crush-6-tons-ivory

Government of Gabon. (2015). Gabon national elephant conservation strategy (Draft).

Gray, M. (2005). Personal Communication. AED Questionnaire reply, Virunga Volcans Range. Questionnaire reply.

Gray, T. N. E., Vidya, T. N. C., Potdar, S., Bharti, D. K., & Sovanna, P. (2014). Population size estimation of an Asian elephant population in eastern Cambodia through non-invasive mark-recapture sampling. Conservation Genetics, 15(4), 803–810. doi.org/10.1007/s10592-014-0579-y

Greengrass, E. (2016, March 11). Personal Communication. Elephants in Bayang-Mbo, Cameroon. Questionnaire reply.

Greengrass, E., & Maisels, F. (2007). Conservation of the Nigerian- Cameroon Chimpanzee P. t. vellerosus (and other mammals) in and around the Banyang-Mbo Wildlife Sanctuary, South-west Province, Cameroon.

Grossman, F., Elkan, P., Tiba, C., Moi, J., Awol, P. P., Lita, J., ... Kenyi, S. (2011). Aerial surveys of wildlife, livestock, and human activity in and around existing and proposed protected areas of the Republic of South Sudan 2009 - 2010 (Technical report No. 4). WCS, GOSS.

Grossman, F., Hart, J. A., & Dino, S. (2006). Réserve de Faune à Okapi: Post conflict baseline surveys. 2005 Central Sector "Zone Verte" (Unpublished report). Kinshasa: WCS.

Grossman, F., Lopes Pereira, C., Chambal, D., Bay, C., Mudluli, A., Peltier, A., ... Nelson, A. (2014a). Aerial survey of elephant, other wildlife and human activity in the Marromeu Buffalo Reserve (Reserva Especial de Marromeu). New York: Wildlife Conservation Society.

Grossman, F., Lopes Pereira, C., Chambal, D., Bay, C., Mudluli, A., Peltier, A., ... Nelson, A. (2014b). Aerial survey of elephant, other wildlife and human activity in the Tete Province: areas South and North of Lake Cahora Bassa and Magoe National Park, Mozambique 10 October - 1 November 2014, late dry season. New York: Wildlife Conservation Society.

Grossman, F., Lopes Pereira, C., Chambal, D., Guilherme dos Santos, M., Bendzane, E., McLellan, P., ... Nelson, A. (2014c). Aerial survey of elephant, other wildlife and human activity in the Quirimbas National Park and the Western Corridor, Mozambique, 7th November - 13th November 2014, late dry season (Survey Report). New York: WCS.

Grossman, F., Lopes Pereira, C., Chambal, D., Maluleque, G., Bendzane, E., McLellan, P., ... Nelson, A. (2014d). Aerial survey of elephant, other wildlife and human activity in the Niassa National Reserve and adjacent areas, Mozambique, 15th October - 9th November 2014, late dry season. New York: Wildlife Conservation Society.

Grossmann, F., Elkan, P., Awol, P. P., & Penche, M. C. (2008). Aerial surveys of wildlife, livestock, and human activity in and around existing and proposed protected areas of Southern Sudan, dry season 2008 (No. Technical Report No. 2). Juba: WCS / GOSS.

Grossmann, F., van Aarst, S., & Abera, K. (2013). Aerial surveys of wildlife, livestock, and human activity in Gambella Region, Ethiopia, dry season 2013 (Draft report). Ethiopia: Ho-AREC&N, APN, EWCA and Gambella Region Land Utilisation.

Grossmann, F., Lopes Pereira, C., Foloma, M., Ntumi, C., Chambal, D., Maluleque, G.,Bendzane, & E., Parker N. (2014e). Aerial survey of wildlife and human activity in Limpopo National Park and the Southern Extension. New York, NY, USA: Wildlife Conservation Society.

Grubb, P., Jones, T. S., Davies, A. G., Edberg, E., Starin, E. D., & Hill, J. E. (1998). Mammals of Ghana, Sierra Leone and the Gambia. St Ives, Cornwall: The Trendine Press.

H

Halford, T., Ekodeck, H., Sock, B., Dame, M., & Auzel, P. (2003). Recensement et distribution des populations d'éléphants (Loxodonta africana cyclotis) dans la Réserve de Mengame, Province du Sud, Cameroun: Un état de la situation comme base de réflexion pour une meilleure cohabitation entre l'homme et l'éléphant. Yaoundé: MINEF/The Jane Goodall Institute/IRAD. Retrieved from www.janegoodall.org/africa-programs/resources/pub/2003%20Mengame-Elephant-Report.pdf

Harrison, M., Roe, D., Baker, J., Mwedde, G., Travers, H., Plumptre, A., ... Milner-Gulland, E. J. (2015). Wildlife crime: a review of the evidence on drivers and impacts in Uganda. London: IIED. Retrieved from pubs.iied.org/pdfs/17576IIED.pdf

Hart, J. (2006a). Overview of WCS / DRC elephant program 2005-06

Hart, J. (2006b). Resource wars and conflict ivory: depletion of Democratic Republic of Congo's elephants 1996-2006. Unpublished.

Hart, J. (2014). Summary results of elephant surveys in North Central Democratic Republic of Congo. Kinshasa: Lukuru Wildlife Research Foundation.

Hart, J. (2016, June 28). Personal Communication. DRC Tshuapa Lomami-Lualaba (TL2) and Adjacent Areas. Electronic document given.

Hart, J. A. (2003, February 22). Personal Communication. Information on elephant distribution in various Central African countries. Verbal information.

Hart, T. (2009, February 1). How Many Elephants Are Left in D.R. Congo ? Retrieved from www.bonoboincongo.com/2009/02/01/how-many-elephants-are-left-in-dr-congo/

Hart, T. B. (n.d.). Searching for Bonobo in Congo: Field notes from Dr Terese Hart. Retrieved from www.bonoboincongo.com

Hartman, A. (2014, March 27). Elephant causes major damage to Hochfeld Farm. The Namibian.

Hasson, M. (2013, January 21) Personal Communications. Elephant status in Katanga, Democratic Republic of Congo. Email.

Hedges, S. (2012a). Estimating elephant population density and abundance from dung pile density: theoretical concepts. In S. Hedges (Ed.), Monitoring elephant populations and assessing threats: a manual for researchers, managers and conservationists (pp. 61–111). Hyderabad: Universities Press. Retrieved from www.fws.gov/international/pdf/Monitoring_Elephant_Populations_and_Assessing_Threats_to_press_version.pdf

Hedges, S. (2012b). Monitoring needs, resources and constraints: deciding which methods to use. In S. Hedges (Ed.), Monitoring elephant populations and assessing threats: a manual for researchers, managers and conservationists (pp. 8–25). Hyderabad: Universities Press. Retrieved from www.fws.gov/international/pdf/Monitoring_Elephant_Populations_and_Assessing_Threats_to_press_version.pdf

Hedges, S., Johnson, A., Ahlering, M., Tyson, M., & Eggert, L. S. (2013). Accuracy, precision, and cost-effectiveness of conventional dung density and fecal DNA based survey methods to estimate Asian elephant (Elephas maximus) population size and structure. Biological Conservation, 159, 101–108. doi.org/10.1016/j.biocon.2012.12.010

Hedges, S., & Lawson, D. (2006). Dung survey standards for the MIKE programme. Nairobi: CITES Monitoring the Illegal Killing of Elephants. Retrieved from www.cites.org/common/prog/mike/survey/dung_standards.pdf

Hedges, S., Maisels, F., & Blake, S. (2012). Estimating elephant population density and abundance from dung pile density: field methods. In S. Hedges (Ed.), Monitoring elephant populations and assessing threats: a manual for researchers, managers and conservationists (pp. 172–214). Hyderabad: Universities Press. Retrieved from www.fws.gov/international/pdf/Monitoring_Elephant_Populations_and_Assessing_Threats_to_press_version.pdf

Heffernan, J. (2005). Elephants of Cabinda: mission report, Angola, April 2005. Luanda: UNDP / FFI. Retrieved from iucn.org/afesg/hec/pdfs/hecHeffCbind.pdf

Hema, E. M., Conney, S., K, L., Barnes, R. F. W., & Douglas-Hamilton, I. (2006, September 14). Personal Communication. Information on elephant distribution and abundance in the Gourma Region of Mali. Emails.

Henley, M. (2011, March). Save the Elephants transboundary elephant research programme. Elephant newsletter.

Henschel, P. (2015, December 9). Personal Communication. Information on elephants in Angola and Senegal. Email.

Hillman Smith, A. K. K., Ndey, J. A., Smith, F., Tshikaya, P., Mboma, G., Ibiliabo, S., & Panziama, G. (2006). Garamba National Park: Systematic aerial sample count of large mammals, April 2004 and total block surveys of rhinos and threats, July and November 2004 (Unpublished report). Nairobi: IRF, ICCN, FZS, UNESCO/UNF.

Hines, C. (2015). Personal Communication. Elephants in Angola. Document given.

Hoare, R. (2015). Lessons From 20 Years of Human–Elephant Conflict Mitigation in Africa. Human Dimensions of Wildlife, 20(4), 289–295. doi.org/10.1080/10871209.2015.1005855

Hoare, R. E. (2000). African elephants and humans in conflict: the outlook for co-existence. Oryx, 34(1), 34–38.

Hungerford, E. (2016, March 21). Government bans trade of ivory in Angola. Independent. Retrieved from www.independent.co.uk/voices/campaigns/GrantsClub/government-bans-trade-of-ivory-in-angola-a6944486.html

Hurst, B. (1994). Personal Communication. AfESG Questionnaire Reply, Nigeria. Questionnaire reply.

Hurt, D. (2002, April 14). Personal Communication. Elephant numbers in Robin Hurt Hunting Concessions, Tanzania. E-mail.

I

Ijeomah, H. M., & Esaen, N. (2011). Tourism management in selected ecotourism destinations in the Niger Delta, Nigera. APRN Journal of Agricultural and Biological Science, 6(10), 13.

Ikemeh, R. A. (2009). Preliminary data on forest elephants (Loxodonta africana cyclotis) in southwestern Nigeria. Pachyderm, (45), 117–123.

Ikfuingei, R., & Kuchambi, E. (2013). The Takamanda National Park - large mammal survey, May-July 2013 (Unpublished report). Limbe, Cameroon: WCS.

Inkamba-Nkulu, C. (2007). Sondage écologique dans le massif du Chaillu. WCS Congo.

Inkamba-Nkulu, C., Pokempner, A., & Maisels, F. (2015). Conservation of forest elephants in the Ogooué-Leketi National Park, Republic of Congo (Batéké Plateaux, Congo) Phase IV (Final report. Grant # F13AP00442. African Elephant Fund. Reporting period: 1 August 2013 - 31 March 2014). WCS.

Inkamba-Nkulu, C., & Tsoumou, R. (2008). Reconnaissance des éléphants des forêts (loxodonta africana cyclotis, matchie, 1900) autour des sources de la rivière Nambouli, Réserve de Faune de la Lefini. WCS Congo.

Institut Zairois pour la Conservation de la Nature. (1991). Plan de conservation de l'elephant au Zaire (Elephant conservation plan). Kinshasa: IZCN.

Instituto de Desenvolvimento Florestal. (1991). Elephant conservation plan for Angola. Luanda: Ministerio da Agricultura e do Desenvolvimento Rural.

International Crisis Group. (2011). A critical period for ensuring stability in Côte d'Ivoire (African Report No. 176). Retrieved from www.crisisgroup.org/en/regions/africa/west-africa/cote-divoire.aspx

Isikhuemen, E. M. (2016, March 9). Personal Communication. Information on elephants in Kainji Lakes area, Nigeria. Email.

Issa, A. M. (2005, December 14). Personal Communication. Les éléphants de Baban Rafi. E-mail.

IUCN PAPACO. (2010). Parcs et réserves de la République Démocratique du Congo: Evaluation de l'efficacité de la gestion des aires protégés. Gland: IUCN.

Iyenguet, F. C., Madzoké, B., Twagirashyaka, F., Maisels, F., Strindberg, S., Bomomo, V., & Elondza, D. E. (2012). WCS Congo Program: Great Ape Conservation and Monitoring in the Lac Télé Landscape (Final report to USFWS). WCS Congo.

Iyenguet, F. C., Malanda, G.-A. F., Madzoke, B., Rainey, H. J., Schloeder, C. A., & Jacobs, M. J. (2007). Recensement d'éléphants dans la Réserve Communautaire du Lac Télé, République du Congo. Pachyderm, 41(July-December 2006), 20–20.

J

Jachmann, H. (1996). Aerial survey of the Luangwa Valley: animal abundance and population trends, 1996 (Unpublished report). Chipata: LIRDP.

Jachmann, H. (2008). Monitoring law-enforcement performance in nine protected areas in Ghana. Biological Conservation, 141(1), 89–99. doi.org/10.1016/j.biocon.2007.09.012

Jachmann, H., & Billiouw, M. (1997). Elephant poaching and law enforcement in the central Luangwa Valley, Zambia. J. Applied Ecology, 34(1), 233–244.

Jacobson, A. (2015, October 5). Personal Communication. Elephant distribution in Tete. Documents given.

Japan Overseas Forestry Consultants Association, & Pasco International Incorporated. (1997). Final report of the master plan study on sustainable multiple-use resource management of Nkhotakota Wildlife Reserve, Malawi (DATA) (Unpublished Report). Japan International Cooperation Agency and Ministry of Natural Resources Republic of Malawi.

John, R. (2016, April 13). Two more charged in ivory case - News | The Citizen. The Citizen. Dar es Salaam. Retrieved from www.thecitizen.co.tz/News/Two-more-charged-in-ivory-case/-/1840340/3157172/-/xsu6ls/-/index.html

Jones, G. (2012a, June 27). Gabon burns ivory stockpiles. The Guardian. Retrieved from www.theguardian.com/environment/2012/jun/27/gabon-burn-ivory

Jooste, D., & Lenton, S. (2015). Aerial survey, Save Valley Conservancy, Zimbabwe, September 2015.

Joubert, C. J., & Joubert, L. (2013). Aerial survey of the larger herbivores Save Valley Conservancy, Zimbabwe. SangoEco / Save Valley Conservancy.

K

Kan, B. Y. (2015, September 10). Sikensi: Des éléphants causent de nombreux dégâts à Soukoukro - FratMat. Fratmat. Retrieved from www.fratmat.info/regions/sikensi-des-elephants-causent-de-nombreux-degats-a-soukoukro

Kangwana, K. F. (1996). Studying elephants (Vol. 7). Nairobi: African Wildlife Foundation.

Kanyesigye, F. (2013, March 6). Rwanda elephants not endangered, says WCS. The New Times. Rwanda. Retrieved from www.newtimes.co.rw/section/article/2013-03-06/63582/

Karama, M. (2016, January 29). Personal Communication. Information on elephants in the Niangoloko Forest in Burkina Faso. Phone conversation.

Karanth, K. U., Hedges, S., Kumar, N. S., & Nichols, J. D. (2012a). Estimating distribution and abundances of elephant populations from sign surveys at the landscape scale using occupancy modelling: statistical concepts. In S. Hedges (Ed.), Monitoring elephant populations and assessing threats: a manual for researchers, managers and conservationists (pp. 136–150). Hyderabad: Universities Press. Retrieved from www.researchgate.net/publication/255978061_Hedges_2012_Monitoring_Elephant_Populations_and_Assessing_Threats/file/3deec52132f7bde7e0.pdf#page=147

Karanth, K. U., Kumar, N. S., & Nishant, M. S. (2012b). Estimating distribution and abundances of elephant populations from sign surveys at the landscape scale using occupancy modelling: field methods. In S. Hedges (Ed.), Monitoring elephant populations and assessing threats: a manual for researchers, managers and conservationists (pp. 249–258). Hyderabad: Universities Press. Retrieved from www.researchgate.net/publication/255978061_Hedges_2012_Monitoring_Elephant_Populations_and_Assessing_Threats/file/3deec52132f7bde7e0.pdf#page=147

Karanth, K. U., Nichols, J. D., Kumar, N. S., Goswami, V. R., Nichols, J. D., & Hedges, S. (2012c). Estimating abundance and other demographic parameters in elephant populations using capture–recapture sampling: field practices. In S. Hedges (Ed.), Monitoring elephant populations and assessing threats: a manual for researchers, managers and conservationists (pp. 214–237). Hyderabad: Universities Press. Retrieved from www.researchgate.net/publication/255978061_Hedges_2012_Monitoring_Elephant_Populations_and_Assessing_Threats/file/3deec52132f7bde7e0.pdf#page=147

Kaunga-Nyirenda, J. (2014, May 23). Personal Communication. Elephant estimates in Malawi. Email.

KAZA Secretariat. (2014a). Proceedings of the KAZA TFCA law enforcement and anti-poaching strategy development workshop, Katima Mulilo, Namibia, 23-24 June 2014 (Unpublished report). Kasane Botswana: KAZA Secretariat.

KAZA Secretariat. (2014b). Proceedings of the Workshop: Pan African Elephant Survey: KAZA TFCA Partner Countries (Angola, Botswana, Namibia, Zambia, Zimbabwe) (Unpublished Report). Kasane, Botswana: KAZA Secretariat.

Keigwin, M. (2005, June 12). Personal Communication. AED Questionnaire Reply, Uganda. Questionnaire reply.

Kelm, B., & Howard, E. (2015, June 19). African "blood ivory" destroyed in New York to signal crackdown on illegal trade. The Guardian. Retrieved from www.theguardian.com/environment/2015/jun/19/us-crushes-blood-ivory-in-new-yorks-times-square

Kenana, L. M., Bakari, S. K., Bitok, E., Machoke, N. M., Hamza, K., & Mukeka, J. (2013). Aerial total count Amboseli – West Kilimanjaro and Magadi Natron cross border landscape wet season, April 2013 (Technical report). Kenya Wildlife Service, Tanzania Wildlife Research Institute.

Kiambi, S. (2016, April). National status of elephant conservation. Presented at the Elephant Conservation and Management Strategy (2012-2021) Mid-Term Evaluation Conference., Nairobi.

Kiambi, S., Andanje, S., Maloba, M., Mungai, P., Edebe, J., Muteti, D., ... Muhati, G. (2014). Elephant and other large mammal dry season survey for Marsabit Forest Ecosystem, Kenya.

Kiambi, S., Kufoba, B., Muteti, D., & Mwenda, E. (2012). Wet season aerial count of large herbivores in Masai Mara National Reserve and the adjacent community areas, Kenya. Kenya: Kenya Wildlife Service.

Kilian, J. W. (2015). Aerial survey of Etosha National Park. (Internal report to the Ministry of Environment and Tourism).

Kilian, W., & Kolberg, H. (2004). Aerial survey of Etosha National Park, 14 to 25 June, 2004 (Final draft report). Windhoek: Directorate of Scientific Services, Ministry of Environment and Tourism.

Knocker, W. I. (2003, May 15). Personal Communication. Information on the elephant population in Tana River Delta, Kenya. E-mail.

Knocker, W. I. (2005, July 4). Personal Communication. Information on elephant presence and numbers in the Tana Primate Reserve, Kenya. Email.

Kobon, M. S. (2002). Personal Communication. AED Questionnaire Reply, Côte d'Ivoire. Questionnaire reply.

Kolberg, H. (2004). Aerial survey of north east Namibia, 11 August to 19 September 2004 (Technical report). Windhoek: Directorate of Scientific Services, Ministry of Environment and Tourism.

Kolberg, H. (2008). Report on an aerial survey of north-eastern Namibia, 19 August to 12 September 2008 (Technical Report of Scientific Services). Windhoek, Namibia: Ministry of Environment and Tourism.

Kolberg, H. (2012). Report on aerial survey of Etosha National Park, 6 to 17 August 2010. Windhoek, Namibia: Directorate of Scientific Services.

Koné, I. (2013). Wildlife in jeopardy inside and outside protected areas in Côte d'Ivoire: The combined effects of disorganization, lack of awareness, and institutional weakness. In N. S. Sodhi, L. Gibson, & P. H. Raven (Eds.), Conservation Biology: Voices from the Tropics (pp. 26–32). Wiley-Blackwell.

Kortenhoven, A. (2002, October 9). Personal Communication. Information on elephants in Sierra Leone. E-mail.

Kujirakwinja, D., Plumptre, A. J., Moyer, D., & Mushenzi, N. (2006). Parc National des Virunga: Recensement aerien des grands mammiferes, 2006.

Kumordzi, B. B., & Danquah, E. K. A. (2007). Report on an elephant survey in the Digya National Park in Ghana (unpublished).

Kunda, J. (2014, September 4). Zambia: Hunting Ban On Elephants Still On. The Times of Zambia.

Kyale, D. M., Mukeka, J. M., Kimitei, K. K., Munyao, M. N., & Lala, F. O. (2014). Tsavo-Mkomazi total aerial census for elephants and large animals. Kenya: Kenya Wildlife Service.

L

La Dépêche d'Abidjan. (2015, June 8). Côte d'Ivoire : des attaques d'éléphants inquiètent des villageois au sud du pays. La Dépêche d'Abidjan. Retrieved from www.ladepechedabidjan.info/Cote-d-Ivoire-des-attaques-d-elephants-inquietent-des-villageois-au-sud-du-pays_a21106.html

Lahm, S. A., & Barnes, R. F. W. (2006, February 5) Personal Communication. AED Questionnaire, Gabon and additional estimates. Questionnaire reply.

Laing, S. E., Buckland, S. T., Burn, R. W., Lambie, D., & Amphlett, A. (2003). Dung and nest surveys: estimating decay rates. Journal of Applied Ecology, 40(6), 1102–1111. doi.org/10.1111/j.1365-2664.2003.00861.x

Lamprey, R. (2015, March). Personal Communication. Information about elephants in Otze Forest. Verbal Information.

Lamprey, R. H. (2002). Akagera-Mutara aerial survey, Rwanda: February-March 2002 - Final report (Unpublished report). Kigali: GTZ.

Lapuente, J. (2016, January 23). Personal Communication. Elephants in Côte d'Ivoire. Email.

Larziliere, A., & Doumenge, C. (2015). République de Guinée Équatoriale. Kinshasa and Yaounde: OFAC.

Latour, S. (2006). Recensement d'elephants et de grand singes dans la region du Parc National de Pongara (Gabon). Rapport technique Aout 2006.

Lauginie, F., Kobon, M. S., & Ouattara, S. (2001). Rapport préliminaire d'inventaire des éléphants du Parc National du Mont Sangbe, Côte d'Ivoire (Unpublished report). Abidjan: Université de Cocody.

Laurance, W. F., Croes, B. M., Tchignoumba, L., Lahm, S. A., Alonso, A., Lee, M. E., … Ondzeano, C. (2006). Impacts of roads and hunting on Central African rainforest mammals. Conservation Biology, 20(4), 1251–1261. doi.org/10.1111/j.1523-1739.2006.00420.x

Laurance, W. F., Sloan, S., Weng, L., & Sayer, J. A. (2015). Estimating the environmental costs of Africa's massive "development corridors." Current Biology, 25, 1–7.

Legal and Human Rights Centre. (2015). Operesheni Tokomeza Ujangili Report 2014. Retrieved from www.humanrights.or.tz/downloads/tokomeza%20repot.pdf

Lewis & Clark Law School. (2014, November 29). IELP assisting Malawi with review of wildlife legislation. Retrieved May 12, 2016, from law.lclark.edu/live/news/28655-ielp-assisting-malawi-with-review-of-wildlife

Liengola, I., Vosper, A., Maisels, F., Bonyenge, A., & Nkumu, P. (2009). Conserving bonobos in the last unexplored forest of the Democratic Republic of Congo the Tshuapa-Lomami-Lualaba Landscape (Final report to the Beneficia Foundation). WCS.

Lindeque, P. (2016, May 1) Personal Communication. Elephants in the Mangetti area of Namibia. Email.

Lindsell, J. A., Klop, E., & Siaka, A. M. (2011). The impact of civil war on forest wildlife in West Africa: Mammals in Gola Forest, Sierra Leone. Oryx, 45(1), 69–77. doi.org/10.1017/S0030605310000347

Lindsey, P. A., Nyirenda, V. R., Barnes, J. I., Becker, M. S., McRobb, R., Tambling, C. J., ... t'Sas-Rolfes, M. (2014). Underperformance of African Protected Area Networks and the Case for New Conservation Models: Insights from Zambia. PLoS ONE, 9(5), e94109. doi.org/10.1371/journal.pone.0094109

Litoroh, M. (2002a). An elephant dung survey in the Shimba Hills Ecosystem (Unpublished Report). Nairobi: African Elephant Specialist Group.

Litoroh, M. (2003, July 2) Personal Communication. Information on elephant populations in Lamu District. Verbal information.

Litoroh, M., Ihwagi, F. W., Mayienda, R., Bernard, J., & Douglas-Hamilton, I. (2010). Total aerial count of elephants in Laikipia-Samburu Ecosystem in November 2008.

Litoroh, M., Omondi, P., Kock, R., & Amin, R. (2012). Conservation and management strategy for the elephant in Kenya, 2012-2021. Nairobi: Kenya Wildlife Service. Retrieved from www.kws.org/export/sites/kws/info/publications/strategies/Conservation_and_Management_Strategy_for_the_Elephant_in_Kenya_2012-2021.pdf

Litoroh, M. W. (1997a). Aerial census of the Gash-Setit elephant population of Eritrea and Ethiopia. Pachyderm, 23, 12–18.

Litoroh, M. W. (1997b). Elephant aerial census of south-western Eritrea and northern Ethiopia : a report to the governments of Eritrea and Ethiopia, the African Specialist Group and USFWS.

Litoroh, M. W. (2002b). An elephant survey of Arabuko-Sokoke Forest Reserve (Unpublished report). Nairobi: IUCN/SSC African Elephant Specialist Group.

Litoroh, M. W., Kock, R., & Jachmann, H. (2002). Evaluation to investigate the feasibility of a proposed translocation of elephants from Arly National Park in Burkina Faso to Niokolo-Koba National Park in Senegal (Unpublished report). Nairobi: IUCN/SSC African Elephant Specialist Group.

Luhuma, S., & Bechem, M. (2009). Status of elephant population in Bangassou MIKE site, Central African Republic. Pachyderm, (46), 66–68.

M

Mackie, C. S. (2002). Aerial Census of elephants and other large herbivores in the Zambezi Valley, Zimbabwe: 2001 (Unpublished report). Harare: DNPWM/WWF SARPO.

Macpherson, D. (2012). Report on an aerial game Count in Majete Wildlife Reserve, Malawi - October 2012. Malawi: Cluny Wildlife Management Services.

Macpherson, D. (2013a). Report on an aerial census of Akagera National Park, Rwanda - August 2013. Cluny Wildlife Trust.

Macpherson, D. (2013b). Report on an aerial survey of Nkhotakota Wildlife Reserve - April 2013. Malawi: Cluny Wildlife Management Services.

Macpherson, D. (2013c). Report on an aerial wildlife census of Nyika National Park, Malawi - October 2013. Cluny Wildlife Trust.

Macpherson, D. (2013d). Report on an aerial wildlife census of Vwaza Marsh Wildlife Reserve, Malawi - October 2013. Cluny Wildlife Trust.

Macpherson, D. (2015a). Report on an aerial wildlife census of Kasungu National Park, Malawi October 2014. Cluny Wildlife Trust.

Macpherson, D. (2015b). Report on an aerial wildlife census of Liwonde National Park, Malawi October 2014. Cluny Wildlife Trust.

Macpherson, D. (2015c, April). Personal Communication. Migrations into Mangochi Foreset Reserve. Verbal Information.

Maguire, T., & Haenlein, C. (2015). An illusion of complicity: terrorism and the illegal ivory trade in East Africa (Occasional Paper). London Royal United Services Institute for Defence and Security Studies. Retrieved from www.rusi.org/downloads/assets/201509_An_Illusion_of_Complicity.pdf

Maisels, F. (2014). Wildlife monitoring in the Mbam et Djerem National Park, Cameroon. Map of elephant presence 2008-2014 (Unpublished report). Yaoundé, Cameroon: WCS.

Maisels, F. (2016a). Personal Communication. Elephants in Ogooue-Leketi and MPD.

Maisels, F. (2016b, May 1). Personal Communication. Elephants in Mount Fouari Complex, Congo. Email.

Maisels, F. (2016c, May 11). Personal Communication. Estimate of elephants in Lossi-Kelle area, Congo. Email.

Maisels, F. (2016d, May 26). Personal Communication. Congo range for AESR 2016. Email and map.

Maisels, F. (2016e, August 1). Personal Communication. Loango estimate 2007 recalculation. Email.

Maisels, F., Abitsi, G., & Bezangoye, A. (2008). Great ape and human impact monitoring in the Lopé-Waka Exceptional Priority Area, Gabon, Part 2: The Lopé-Waka Corridor (Final performance report to USFWS). WCS.

Maisels, F., & Akou, M. E. (2012). Mwagna National Park: report on survey transects 2012. ANPN, WCS, WWF.

Maisels, F., Ambahe, R., Ambassa, E., Yara, C. N., & Fosso, B. (2009). Great ape and human impact monitoring in the Mbam et Djerem National Park, Cameroon (Final report to USFWS). WCS.

Maisels, F. G. (2006, July 14). Personal Communication. Estimates for Ivindo and Lope NP, Gabon. Email.

Maisels, F., Motsaba, P., & Aba'a, R. (2010). Great ape and human impact monitoring in the Ivindo Landscape, Gabon, Final report, second cycle of monitoring in the Park and southern buffer zone. (Final report to USFWS). WCS.

Maisels, F., Nishihara, T., Strindberg, S., Boudjan, P., Breuer, T., Aczel, P., ... Telfer, P. (2012). Great ape and human impact monitoring training, surveys, and protection in the Ndoki-Likouala Landscape, Republic of Congo. (Final report). Republic of Congo: WCS Congo.

Maisels, F., & Strindberg, S. (2012). Review of Gabon's elephant status. WCS.

Maisels, F., Strindberg, S., Ambahe, R., Ambassa, E., Yara, C. N., Pouomegne, B., ... Fotso, R. (2013a). Deng Deng National Park and UFA 10-065 Republic of Cameroon wildlife and human impact survey 2012. WCS.

Maisels, F., Strindberg, S., Kiminou, F., Ndzai, C., Ngounga, R., Okondza, A., ... Lamprecht, L. (2013). Wildlife and human impact survey 2012, and monitoring 2005-2008-2012, Republic of Congo. Fondation Odzala-Kokoua/WCS.

Maisels, F., Strindberg, S., Blake, S., Wittemyer, G., Hart, J., Williamson, E. A., ... Warren, Y. (2013b). Devastating decline of forest elephants in Central Africa. PLoS ONE, 8(3), e59469. doi.org/10.1371/journal.pone.0059469

Maisels, F., Strindberg, S., Blake, S., Wittemyer, G., Hart, J., Williamson, E. A., ... Warren, Y. (2014). Update to Devastating decline of forest elephants in Central Africa. PLoS One 8, e59469 Comments section. Retrieved from dx.doi.org/10.1371/journal.

Maisels, F., Strindberg, S., Bechem, M., Blanc, J., Boafo, Y., Mahop, J. P., ... Luhunu, S. (2014a). Bouba Bek National Park, Republic of Cameroon: Wildlife and human impact survey 2012. Nairobi, Kenya: CITES MIKE.

Maisels, F., Strindberg, S., Rayden, T., Kiminou, F., Madzoke, B., Mangonga, P., & Ndzai, C. (2014b). Wildlife and human impact survey of the Ngombé Ntokou-Pikounda forest landscape, Republic of Congo, Feb-Oct 2014. Republic of Congo: WCS, USFWS.

Malachie, N. D., & Lassou, K. (2002). Etat des populations d'éléphants: Rapport de Pays Tchad, Année 2002. N'djamena: Direction des Parcs Nationaux et Réserves de Faune,.

Malanda, G., Iyenguet, F., & Madzoke, B. (2008). Recensement des grands Mammiferes à l'Est de LA RCLT : Zone Batanga. Rapport finale. WCS.

Mallon, D. P., Hoffman, M., Grainger, M. J., Hilbert, F., van Vliet, N., & McGowan, P. J. K. (2015). An IUCN situation analysis of terrestrial and freshwater fauna in West and Central Africa (Occasional Paper of the IUCN Species Survival Commission No. 54). Gland, Switzerland and Cambridge, UK: IUCN.

Mariagene, S., & Musoki, J. (1998). Mwea elephant survey (Unpublished report). Nairobi: KWS.

Mantsila, G. M., Mbani, O., & Mahoungou, S. (2013). Recensement et distribution des grands mammiferes de la foret Messok-Dja (Sembe, Nord Congo) -Projet de Conservation Inter zone. Republic of Congo: WWF.

Maputla, N. W. (2015). Forest elephant population recovery in the Lomako Yokokala Faunal Reserve, Democratic Republic of Congo (Unpublished report). AWF.

Mararv, E. (2016, February 6). Personal Communication. Elephant range in Garamba from radiotracking. Email.

Martin, E. (2010). Effective law enforcement in Ghana reduces elephant poaching and illegal ivory trade. Pachyderm, 48(48), 24–32.

Mathiesen, K. (2015, May 29). China agrees to phase out its ivory industry to combat elephant poaching. The Guardian. Retrieved from www.theguardian.com/environment/2015/may/29/china-agrees-to-phase-out-its-ivory-industry-to-combat-elephant-poaching

Matthews, A., & Matthews, A. (2000). Primate populations and inventory of large and medium sized mammals in the Campo Ma'an Project Area, Southwest Cameroon - Including Management Recommendations (Unpublished report). Berlin: Institut für Anthropologie und Humanbiologie, Freie Universität Berlin.

Matthews, W. S. (2008). Aerial survey report for Maputo Special Reserve.

Mbende, M., Kabunda, M., Mpia, G., & Pélissier, C. (2012). Evaluation rapide des mouvements récents d'éléphants dans et en périphérie du Domaine et Réserve de Chasse de Swa-Kibula, Avril - Mai 2012 (Rapport du mission). WWF.

McPherson, A. (2014, January 30). Forest elephants moved across Africa in risky operation. Retrieved May 9, 2016, from news.nationalgeographic.com/news/2014/01/140131-african-forest-elephants-relocated-ivory-coast-animals-science/

Mduma, H., Musyoki, C., Maliti, H., Kyale, D. M., Ndi, S., Hamza, K., ... Kohi, E. M. (2014). Aerial total count of elephants and buffaloes in the Serengeti-Mara Ecosystem. TAWIRI, KWS, WWF, FZS, Paul G. Allen Foundation. Retrieved from www.tanzaniaparks.com/useful_docs/Mara_Elephant_Count_Report.pdf

Mduma, S. (2002a, January 4). Personal Communication. Table of Elephant population estimates - TAWIRI Surveys, Tanzania (1998-2002). Electronic document given.

Mduma, S. (2002b, December 7). Personal Communication. Results of Selous-Masasi Aerial Sample Count (2000). E-mail.

Meduna, A. J., Ogunjinmi, A. A., & Onadeko, S. A. (2009). Biodiversity conservation problems and their implications on ecotourism in Kainji Lake National Park, Nigeria. Journal of Sustainable Development in Africa, 10(4), 59–73.

Merz, G., & Hoppe-Dominik, B. (1991). Distribution and status of the forest elephant in the Ivory Coast, West Africa. Pachyderm, 14, 22–24.

MET. (2012). Countrywide survey of elephants in Namibia: final report (Internal report to the Ministry of Environment and Tourism). Ministry of Environment and Tourism, Namibia.

Michelmore, F. (1998, October 18) Personal Communication. Estimates of elephant populations in Uganda. E-mail.

Milliken, T., Burn, R. W., Underwood, F. M., & Sangalakula, L. (2013). ETIS report of TRAFFIC (CITES Document No. CoP16 Doc. 53.2.2 (Rev. 1)). Geneva: CITES. Retrieved from www.cites.org/sites/default/files/eng/cop/16/doc/E-CoP16-53-02-02.pdf

Milliken, T., Pole, A., & Huongo, A. (2006). No peace for elephants: Unregulated domestic ivory markets in Angola and Mozambique. Cambridge: TRAFFIC International. Retrieved from www.traffic.org/species-reports/traffic_species_mammals26.pdf

Milliken, T., Underwood, F. M., Burn, R. W., & Sangalakula, L. (2016). The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory: A report to the 17th meeting of the Conference of the Parties to CITES. Cambridge, UK: TRAFFIC.

MINFOF/UICN. (2015). Caractérisation de la population de grands et moyens mammifères dans la Reserve de Faune du Dja: Potentiel et menaces. Yaoundé, Cameroun.

Ministère de l'Agriculture, de l'Elévage, de l'Environnement, des Eaux et des Forêts. (2007). Stratégie nationale de gestion des éléphants en République de Guinée. Ministère de l'Agriculture, de l'Elevage, de l'Environnement, des Eaux et Forêts. Retrieved from cmsdata.iucn.org/downloads/str_wgn0709_fr.pdf

Ministère de l'Agriculture, de l'Elevage et de la Pêche. (2005). Strategie de conservation de l'elephant au Benin. AfESG. Retrieved from cmsdata.iucn.org/downloads/str_wbj0509_fr_1.pdf

Ministère de l'Agriculture et Développement Rurale. (2000). Plan d'action de conservation de l'éléphant en Guinée-Bissau. Retrieved from cmsdata.iucn.org/downloads/plan_de_conservation_guinea_bissau.pdf

Ministère de l'Environnement et des Ressources Forestieres. (2003). Stratégie pour la conservation des populations d'éléphants au Togo. Lomé: Ministère de l'Environnement et des Ressources Forestières. Retrieved from www.african-elephant.org/tools/pdfs/str_wtg0305_fr.pdf

Ministère des Eaux, des Forets (1992). Plan de conservation de l'elephant en Republique Centrafricaine. Bangui: Ministère des Eaux, des Forets, Chasse, Pêches et du Tourisme.

Ministère des Eaux et Forêts. (2004). Stratégie de gestion durable des éléphants en Côte d'Ivoire. Programme 2005-2014. Abidjan: Ministère des Eaux et Forêts. Retrieved from www.african-elephant.org/tools/pdfs/str_wci2005_fr.pdf

Ministère des Forêts et de la Faune. (2010). Stratégie et programme de gestion durable des eléphants au Cameroun 2011 - 2020. République du Cameroun. Retrieved from cmsdata.iucn.org/downloads/str_cm_2010.pdf

Ministry of Agriculture, Livestock, Fisheries and Forestry (1991). Elephant conservation plan for Sierra Leone. Freetown: Ministry of Agriculture, Natural Resources and Forestry.

Ministry of Agriculture, Livestock, Fisheries and Forestry. (1991). Elephant conservation plan for Equatorial Guinea (Elephant conservation plan). Malabo: Ministry of Agriculture, Livestock, Fisheries and Forestry.

Ministry of Environment and Tourism. (2005). North west aerial survey 2005: first draft 24 November 2005 (Unpublished report). Windhoek: MET.

Ministry of Environment and Tourism. (2007). Species Management Plan: Elephants Loxodonta africana. Republic of Namibia. Retrieved from cmsdata.iucn.org/downloads/namibia_elephant_management_plan_dec__2007.pdf

Ministry of Information, Tourism and Culture. (2014, November). Press release: Wildlife Policy Review.

Ministry of Natural Resources and Tourism. (2014). National strategy to combat poaching and illegal wildlife trade. Tanzania: Ministry of Natural Resources and Tourism, Tanzania.

Ministry of Tourism, E. and N. R. (2003). National policy and action plan on elephant management in Zambia. Lusaka: Ministry of Tourism, Environment and Natural Resources.

Mohamed, H. (2015, September 16). Kenya's wildlife flees al-Shabab conflict into Somalia: Elephants, lions, leopards, giraffe and buffalo spotted for first time in decades in Somalia as they flee operations. Al-Jazeera. Somalia. Retrieved from www.aljazeera.com/news/2015/09/kenya-wildlife-flees-al-shabab-conflict-somalia-150916085912634.html

Mohammad, A. (2016, April 27). Personal Communication. National Parks - Sudan. Email.

Mokhandla, R. (2016, May 20). Personal Communication. Elephant movements in central Botswana and Ghanzi District. Hand-drawn map and discussion.

Mollon, A. (2016, March 9). Personal Communication. Elephants in Guinea. Verbal information given.

Mondol, S., Moltke, I., Hart, J., Keigwin, M., Brown, L., Stephens, M., & Wasser, S. K. (2015). New evidence for hybrid zones of forest and savanna elephants in Central and West Africa. Molecular Ecology, 24(24), 6134–6147. doi.org/10.1111/mec.13472

Mònico, M. (2014). Aerial survey March 2014 Parc National de la Garamba, République Démocratique de Congo (Report). Democratic Republic of Congo: ICCN, APN.

Mònico, M., & Schapira, P. (2015). Aerial survey: Gambella National Park and surrounding areas, dry season, April 2015 (Technical report). IGAD/BMP.

Morgan, B. (2016, March 21). Personal Communication. Elephants in the Ebo forest, including the forest concession to the north (Cameroon). Questionnaire reply.

Morgan, D., Sanz, C., Greer, D., Rayden, T., Maisels, F., & Williamson, E. A. (2013). Great apes and FSC: implementing "ape friendly" practices in Central Africa's logging concessions. Gland, Switzerland: IUCN/SSC Primate Specialist Group.

Motsaba, P., & Aba'a, R. (2012). Inventaire préliminaire de grands mammifères et des activités anthropiques à la Réserve Présidentielle de Wonga-Wongué (Unpublished report). Libreville: WCS.

Mshelbwala, J. (1998). Unpublished report provided at the AfESG meeting in Ouagadougou. Nairobi: IUCN/SSC African Elephant Specialist Group.

Mshelbwala, J. H. (2002, July 15). Personal Communication. Information on elephant distribution in Nigeria. Verbal information.

Mubalama, L. K. (2003, April 26). Personal Communication. Estimate of the elephant population in Virunga NP, Southern Sector (DRC). Email.

Mubalama, L. K. (2006, March 1). Personal Communication. AED Questionnaire Reply, Democratic Republic of Congo. Questionnaire reply.

Mubalama, L. K. (2013, July 1). Personal Communication. Information on elephant population in Democratic Republic of Congo. Email.

Muboko, N., Muposhi, V., Takarini, T., Gandiwa, E., Vengesayi, S., & Makuwe, E. (2014). Cyanide poisoning and African elephant mortality in Hwange National Park, Zimbabwe: a preliminary assessment. Pachyderm, 55(January-June 2014), 92–94.

Munishi, L. K., & Maganga, S. L. S. (2003). The status of the African elephants in the Mount Kilimanjaro ecosystem and its management implications (Unpublished Report). Nairobi: IUCN/SSC African Elephant Specialist Group.

Munthali, S. M. (1998, August 19). Personal Communication. Estimates of elephant populations in Thuma and Phirilongwe, Malawi. Fax.

Murai, M., Ruffler, H., Berlemont, A., Campbell, G., Esono, F., Agbor, A., ... Kühl, H. S. (2013). Priority areas for large mammal conservation in Equatorial Guinea. PLoS ONE, 8(9), e75024. doi.org/10.1371/journal.pone.0075024

Mwambola, S., Ijumba, J., Kibasa, W., Masenga, E., Eblate, E., & Munishi, L. (2016). Population size estimates and distribution of the African elephant using the dung surveys method in Rubondo Island National Park, Tanzania. International Journal of Biodiversity and Conservation, 8(6), 113–119. doi.org/10.5897/IJBC2015.0873

Mwangi, P., Ngene, S., & Esau, K. (2007). Wet season aerial count of large mammals in the Meru Conservation Area (MCA) 2007. Nairobi: KWS.

Mwathe, K. M., Muriuki, J., Nyamu, J., & Waruingi, L. (2006). Elephants in Kenya's South Rift: bridging the information gap (Unpublished report to the AfESG). Nairobi: African Conservation Centre.

N

Nackoney, J., Molinario, G., Potapov, P., Turubanova, S., Hansen, M. C., & Furuichi, T. (2014). Impacts of civil conflict on primary forest habitat in northern Democratic Republic of the Congo, 1990–2010. Biological Conservation, 170, 321–328. doi.org/10.1016/j.biocon.2013.12.033

Naidoo, R., Balmford, A., Ferraro, P. J., Polasky, S., Ricketts, T. H., & Rouget, M. (2006). Integrating economic costs into conservation planning. Trends in Ecology & Evolution, 21(12), 681–687. doi.org/10.1016/j.tree.2006.10.003

Nandjui, A. (2003). Estimation des populations d'éléphants Loxodonta cyclotis (Roca et al., 2001) dans le Parc National d'Azagny (Côte-d'Ivoire) (Diplôme d'études approfondies de gestion et valorisation des ressources naturelles). Université d'Abobo-Adjame.

National Directorate of Conservation Areas. (2010, March). Strategy and Action Plan for the Conservation and Management of Elephants in Mozambique 2010-2015. Republic of Mozambique — Ministry of Tourism.

National Range Agency. (1991). Elephant conservation plan for Somalia. Mogadishu: Ministry of Livestock, Range and Forestry.

Natural Resources Conservation Council. (1991). Elephant conservation plan for Nigeria. Abuja: Federal Ministry of Agriculture and Water Resources.

Ngene, S., Kimutai, D., Mukeka, J., & Omondi, P. (2012). Total aerial census of elephants and other large mammals in Mwea National Reserve. Kenya: Kenya Wildlife Service.

Ngene, S. M., Mukeka, J. M., Ihwagi, F. W., Mathenge, J., Wandera, A., Anyona, G., ... Omondi, P. (2013a). Total aerial count of elephants, Grevy's zebra and other large mammals in Laikipia-Samburu-Marsabit Ecosystem in November 2012. Nairobi: Kenya Wildlife Service.

Ngene, S., & Mukeka, J. (2012). Aerial census of elephants and other mammals in Shimba Hills, Mkongani, and Mwaluganje Conservation Areas. KWS.

Ngene, S., Njumbi, S., Nzisa, M., Kimitei, K., Mukeka, J., Muya, S., ... Omondi, P. (2013b). Status and trends of the elephant population in the Tsavo–Mkomazi ecosystem. Pachyderm, (53), 38–50.

N'Goran, K. P., Maho, N. R., Kouakou, Y. C., Dowd, D., & Herbinger, I. (2010). Etat des ressources naturelles du Parc National de la Comoé et de sa zone périphérique: Rapport de l'inventaire faunique par sur vol: Mars 2010. Abidjan: Wild Chimpanzee Foundation.

Ngoran, P. (2014, June 17). Personal Communication. Elephants à Moukalaba-Doudou. Email.

Ngoru, B., Bitok, E., Mwangi, A., Ochieng', B., & Lukara, L. (2009). Large mammal survey of Mt. Kenya. Kenya: Kenya Wildlife Service.

Nixon, S., & Plumptre, A. (2016, May 12). Personal Communication. Elephants in Maiko National Park, Democratic Republic of Congo. Email.

Njumbi, S. J., Mwathe, K. M., Gachago, S. W., Mungai, P., & Waithaka, J. M. (1995). A survey of the Mau Forest complex elephant population. Nairobi: KWS Elephant Programme.

Nomoko, M. (2006). Etude sur les possibilites d'aménagement des parcours des éléphants hors site dans les régions de Sikasso et de Mopti au Mali. Bamako: Association Malienne pour la Conservation de la Faune et de l'Environnement.

Norton-Griffiths, M. (1978). Counting Animals. (J. J. R. Grimsdell, Ed.) (Vol. 1). Nairobi: African Wildlife Leadership Foundation.

Ntumi, C., Monjane, N., & Tafula, I. (2012). Determinação preliminar do tamanho da população de elefantes da Reserva Nacional do Gilé, Moçambique. Maputo: Fundação IGF.

Ntumi, C. P. (2003, February 13). Personal Communication. Information on recent surveys in Moribane and Gile, Mozambique. E-mail.

Nutsuakor, M. E., Kumordzi, B. B., & Danquah, E. (2015). Nature and extent of human wildlife conflict in the Chichibon Corridor, Ghana. Presented at the Tropentag 2015, Ghana.

Nyirenda, V. R., Lindsey, P. A., Phiri, E., Stevenson, I., Chomba, C., Namukonde, N., ... Reilly, B. K. (2015). Trends in illegal killing of African elephants (Loxodonta africana) in the Luangwa and Zambezi ecosystems of Zambia. Environment and Natural Resources Research, 5(2). doi.org/10.5539/enrr.v5n2p24

Nzooh Dongmo, Z., Kouob Begne, S., Annong, V., Bassama, C., Fouda, E., & Mahop, J. P. (2006). Suivi écologique dans le Parc National de Nki et sa zone péripherique: Données de base sur la dynamique des populations de grands et moyens mammifères et des activités anthropiques. WWF.

Nzooh Dongmo, Z. L., Foguekem, D., Ekobo, A., & Defo, L. (2012). Abondance et distribution des grands mammifères dans le massif forestier de Ngoyla-Mintom. (Unpublished report). WWF Cameroon.

O

Obot, E., Edet, C., Ogar, G., & Ayuk, J. (1998). A population survey of elephants (Loxodonta africana cyclotis) in Okwangwo Division of Cross River National Park, Nigeria.

Office Rwandais du Tourisme et des Parcs Nationaux. (1991). Plan de conservation de l'éléphant au Rwanda. Kigali: Office Rwandais du Tourisme et des Parcs Nationaux/AECCG.

Ojok, L. I. (2002 Personal Communication). Information on elephant populations and distribution in South Sudan. Verbal information.

Okapi Conservation Project. (2014). Annual report 2014. Okapi Conservation Project.

Okoumassou, K. (2002). AED Questionnaire Reply. Togo. Questionnaire reply.

Okoumassou, K., Barnes, R. F. W., & Sam, M. (1998). The distribution of elephants in north-eastern Ghana and northern Togo. Pachyderm, 26, 52–60.

Omondi, P., Mayienda, R., & Tchamba, M. (2007). Total aerial count of elephants, giraffes, roan antelopes and other wildlife species and ostrich in Waza National Park, Cameroon. WWF.

Omondi, P. O. M. (2006, August 7). Personal Communication. Information on elephant numbers in Marsabit National Reserve, Kenya. Verbal information.

Omondi, P. O. M., & Bitok, E. K. (2005). Total aerial count of elephants, buffalo and other species in the Tsavo/Mkomazi ecosystem. Nairobi: KWS/USFWS/MIKE.

Omondi, P. O. M., Bitok, E. K., Kahindi, O., & Mayienda, R. (2002a). Total aerial count of elephants in Laikipia/Samburu ecosystem: July 2002 (Unpublished report). Nairobi: Kenya Wildlife Service, STE, NEMA and Laikipia Wildlife Forum.

Omondi, P. O. M., Bitok, E. K., & Mayienda, R. (2002b). Decline of elephants and other wildlife in the Nasolot-South Turkana and Kerio Valley-Kamnarok conservation areas, Kenya. Pachyderm, 33, 69–73.

Omondi, P. O. M., Bitok, E. K., & Mayienda, R. (2002c). Total aerial count of elephant, buffalo, livestock and other wildlife in Meru Conservation Area (Unpublished Report). Nairobi: Kenya Wildlife Service.

Omondi, P. O. M., Mayienda, R., Mamza, J. S., & Massalachi, M. S. (2006). Total aerial count of elephants and other wildlife species in Sambisa Game Reserve in Borno State, Nigeria. Nairobi: KWS.

Omondi, P., Tchamba, M., Mayienda, R., & Lambert, B. B. (2008). Total aerial count of elephant and other wildlife species in Faro, Benoué, Bouba Ndjidda National Parks and adjacent hunting blocks in Northern Cameroon. World Wildlife Fund and Cameroon Ministry of Forestry and Wildlife.

Owen-Smith, G. (2014). Personal Communication. Elephants in northwestern Namibia. Verbal information given.

Owiunji, I., Nkuutu, D., Kujirakwinja, D., Liengola, I., Plumptre, A., Nsanzurwimo, A., ... McNeilage, A. (2004). The biodiversity of the Virunga volcanoes. WCS, DFGFI, ICCN, ORTPN, UWA, IGCP, ITFC.

P

Packenham, C. (2016). Personal Communication. Elephants in Mavuradonha Wilderness Area, Zimbabwe. Verbal information given.

Parker, G. E. (2006). Conservation of elephants in the Akagera National Park (Rwanda): Establishing a monitoring system for elephants (Consultant's report). ORTN / WCS.

Peters, C. (2016, March 9). Omaha zoo's elephants loaded onto plane in Swaziland for trip to U.S. Omaha World Herald. Retrieved from www.omaha.com/news/metro/omaha-zoo-s-elephants-loaded-onto-plane-in-swaziland-for/article_39c52c84-e592-11e5-9001-f34bc0d21eff.html

Pinter-Wollman, N., Isbell, L. A., & Hart, L. A. (2009). Assessing translocation outcome: Comparing behavioral and physiological aspects of translocated and resident African elephants (Loxodonta africana). Biological Conservation, 142(5), 1116–1124. doi.org/10.1016/j.biocon.2009.01.027

Plumptre, A. (2010, November 1). Personal Communication. Elephants in eastern DRC. Email.

Plumptre, A. J., Ayebare, S., & Kujirakwinja, D. (2015a). Priority areas for conservation in the Maiko, Tayna, Kahuzi Biega Landscape. WCS, USAID, USFWS. Retrieved from dx.doi.org/10.13140/RG.2.1.5069.2564

Plumptre, A. J., Ayebare, S., & Mudumba, T. (2015b). An assessment of impacts of oil exploration and appraisal on elephants in Murchison Falls National Park, Uganda. WCS, TOTAL and UWA.

Plumptre, A. J., Kujirakwinja, D., Moyer, D., Driciru, M., & Rwetsiba, A. (2010). Greater Virunga Landscape large mammal surveys, 2010 (Unpublished report). UWA and ICCN.

Poilecot, P. (2010). Le braconnage et la population d'éléphants du parc national de Zakouma (Tchad). Bois et forets des tropiques, 303(1), 93–102.

Polo-Akpisso, A. (2016a, March 7). Personal Communication. Elephants in Park Fazao Malfakassa, Togo. Questionnaire reply.

Polo-Akpisso, A. (2016b, March 17). Personal Communication. Elephants in the Oti-Kéran-Mandouri Complex, Togo. Questionnaire reply.

Polo-Akpisso, A., Wala, K., Ouattara, S., Woegan, Y., Coulibaly, M., Atato, A., ... Akpagana, K. (2015). Plant species characteristics and woody plant community types within the historical range of savanna elephant, Loxodonta africana Blumenbach 1797 in northern Togo (West Africa). Annual Research & Review in Biology, 7(5), 283–299. doi.org/10.9734/ARRB/2015/19271

Poole, J., Grant, P., Okita-Ouma, B., Kimanzi, D., Goss, M., Tiller, L., ... Douglas-Hamilton, I. (2016). Mara ecosystem connectivity: Information on elephant population status and movements for spatial planning and conservation in Narok County. Elephant Voices, Save the Elephants, Mara Elephant Project, Kenya Wildlife Service.

Poole, J. H. (2006, December 1). Personal Communication. AED Questionnaire for Amboseli, Kenya. Questionnaire reply.

Powell, J. A. (1993). Personal Communication. AED Questionnaire Reply, Cameroon. Questionnaire reply.

Presidential Press Service. (2016, April 14). Official press release from the Presidential Press Service of the Gabonese Republic: Creation of a special Gabonese unit to fight poaching. Le Gabon.org. Libreville. Retrieved from medias.legabon.net/PROD/0000001038.pdf

Princée, F. P. G. (2013). Bio-monitoring survey 2011-2012 in Dzangha-Sangha Protected Areas. Bayanga, CAR: WWF CAR.

Pronatura. (n.d.). Andoni elephant population study: research by PNI. Retrieved June 5, 2016, from www.pronatura-nigeria.org/OLD-WEBSITE/research/andoni.html

R

Ramey, R. R., & Brown, L. M. (2015). Desert-dwelling elephants in the Hoarusib, Hoanib, and Uniab Rivers (Unpublished report to Ministry of Environment and Tourism, Namibia).

Redmond, I. (2015, February). Personal Communication. Renewed Hope for the Cave Elephants of Mount Elgon, Kenya. Powerpoint Presentation.

Reilly, M. (2012, August 15). Personal Communication. Swaziland elephant estimates 2012. Email.

Reilly, M. (2016, February 22). Personal Communication. Swaziland elephant estimates 2015. Questionnaire reply.

Reinartz, G. E. (2016). Preliminary densities and population estimates for 70.7% Watsi Kengo area analyzed to date. (Unpublished report to IUCN/AED). Milwaukee: Zoological Society of Milwaukee.

Relief as police arrest "The Devil" - News | The Citizen. (2015, October 31). The Citizen. Dar es Salaam. Retrieved from www.thecitizen.co.tz/News/Relief-as-police-arrest--The-Devil-/-/1840340/2937088/-/12h4ltd/-/index.html

Renaud, P. C., Fay, J. M., Abdoulayé, A., Abakar, R., Bangara, A., Fiongaï, Ö., ... Froment, J. M. (2005). Recensement aérien de la faune dans les préfectures de la région Nord de la République Centrafricaine (Unpublished report). Nairobi: WCS / MIKE.

Renaud, P. C., Gueye, M. B., Hejcmanová, P., Antoninova, M., & Samb, M. (2006). Inventaire aérien et terrestre de la faune et relevé des pressions au Parc National du Niokolo Koba. Dakar: Ministère de l'Environnement et de la Protection de la Nature and African Parks Foundation.

Republic of Kenya. The Wildlife Conservation and Management Act, Pub. L. No. No. 47 or 2013 (2013).

République Togolaise. (2015, November 11). Une menace pour la biodiversité et l'écosystème régional. Retrieved August 21, 2016, from www.republicoftogo.com/Toutes-les-rubriques/Environnement/Une-menace-pour-la-biodiversite-et-l-ecosysteme-regional

Reuters. (2014). Belgium destroys ivory to raise awareness of illegal trade | Top News | Reuters. Retrieved March 21, 2016, from af.reuters.com/article/topNews/idAFKBN0CV09220140409

Reuters. (2015, August 26). Thailand wins guarded praise for destroying ivory stockpile. Reuters. Retrieved from www.reuters.com/article/us-thailand-ivory-idUSKCN0QV0S620150826

Reuters. (2016, March 14). Malawi torches ivory haul in fight against elephant poaching. Retrieved March 15, 2016, from uk.reuters.com/article/uk-malawi-elephants-idUKKCN0WG1SM

Ripple, W. J., Newsome, T. M., Wolf, C., Dirzo, R., Everatt, K. T., Galetti, M., ... Valkenburgh, B. V. (2015). Collapse of the world's largest herbivores. Science Advances, 1(4), e1400103. doi.org/10.1126/sciadv.1400103

Roca, A. L., Ishida, Y., Brandt, A. L., Benjamin, N. R., Zhao, K., & Georgiadis, N. J. (2015). Elephant natural history: a genomic perspective. Annual Review of Animal Biosciences, 3(1), 139–167. doi.org/10.1146/annurev-animal-022114-110838

Rolkier, G. G. (2015). Planning for core wildlife conservation area of Gambella National Park. International Journal of Innovative Research & Development, 4(6), 409–416.

Rolkier, G. G., Yeshitela, K., & Prasse, R. (2015). Habitats map of distributions of key wild animal species of Gambella National Park. International Journal of Innovative Research & Development, 4(4), 240–259.

Russo, C. (2014, December 8). New Doubts About Whether Elephants Can Survive South Sudan's Civil War. Retrieved May 14, 2016, from news.nationalgeographic.com/news/2014/12/141208-south-sudan-elephant-census-conservation-animals/

Rwetsiba, A., & Wanyama, E. (2010). Aerial surveys of Murchison Falls Protected Area, Uganda, March 2010. Pachyderm, 47(47), 118–123.

Rwetsiba, A., & Wanyama, F. (2005). Aerial surveys of medium-large mammals in Kidepo Valley and Murchison Falls conservation areas. Kampala: Uganda Wildlife Authority.

Rwetsiba, A., Wanyama, F., Kisame, F., & Owoyesigire, G. (2012). Aerial survey of medium - large mammals in Murchison Falls Conservation Area (Draft report). Kampala, Uganda: Uganda Wildlife Authority.

S

SADC. (2007). Southern Africa regional elephant conservation and management strategy. SADC. Retrieved from cmsdata.iucn.org/downloads/2007saecs.pdf

SADC. (2015). Law enforcement and anti-poaching strategy 2016 - 2021. Retrieved from www.gaborone.diplo.de/contentblob/4715602/Daten/6225495/SADC_LEAP_FINAL.pdf

Sagnah, S. M. (1998) Personal Communication. AfESG Questionnaire Reply. Guinea. Questionnaire reply.

Sagnah, S., & Sagnah, S. M. A. (2000). Amelioration de la cohabitation hommes/elephants en périphérie de la forêt classée de Ziama (Unpublished Report). Conakry: AfESG.

Said, M. Y., Chunge, R. N., Craig, G. C., Thouless, C. R., Barnes, R. F. W., & Dublin, H. T. (1995). African elephant database 1995 (Vol. 11). Gland: IUCN.

Saidu, Y. (2015, March 30). Personal Communication. Elephants in Nigeria. Email.

Salako, V. K., Azihou, A. F., Assogbadjo, A. E., Houéhanou, T. D., Kassa, B. D., & Glèlè Kakaï, R. L. (2016). Elephant-induced damage drives spatial isolation of the dioecious palm Borassus aethiopum Mart. (Arecaceae) in the Pendjari National Park, Benin. African Journal of Ecology, 54(1), 9–19. doi.org/10.1111/aje.12253

Saleh, A., Tsague, L., Hatunguimana, E., & Battokock, J. (2002). Rapport de dénombrement de la faune sauvage au Parc National de Waza (Unpublished report). Ministry of Environment and Forests.

Sam, M. K. (2004). A preliminary investigation into the possibilities of creating elephant corridors in Guinean forests of western Ghana (Unpublished report). Nairobi: IUCN/SSC African Elephant Specialist Group.

Sam, M. K., Danquah, E. K. A., Oppong, S. K., & Bosu, E. D. (2006). Elephant survey in the Bia Conservation Area, western Ghana. Pachyderm, 40(40), 42–50.

Sam, M. K., & Wilson, V. J. (1994). A zoological survey of Kogyae Strict Nature Reserve (Mimeograph report to Forest Resource Management Project). Accra, Ghana: GWD/IUCN.

SANParks. (2009). Elephant estimates in Addo Elephant, Kruger, Marakele, and Mapungubwe National Parks, 2005-2009. Pretoria: SANParks.

Saria, D., & Tesha, H. (2016, May 25). Two men arrested with pieces of ivory hidden in nylon bags. The Citizen. Dar es Salaam. Retrieved from www.thecitizen.co.tz/News/Two-men-arrested-with-pieces-of-ivory-hidden-in-nylon-bags/-/1840340/3223602/-/rheekt/-/index.html

Scanlon, J. (2015, April 29). CITES Secretary-General's remarks to the first destruction of confiscated elephant ivory in the United Arab Emirates | CITES. Retrieved March 21, 2016, from cites.org/eng/uae_ivory_destruction_2015

Selier, J. (2016, May 25). Personal Communication. Information on elephant populations in South Africa. Email.

Selier, J., & Page, B. (2015). Dry season fixed-wing aerial survey of large mammals in the Northern Tuli Game Reserve and Mapungubwe National Park and of elephants in the Greater Mapungubwe Transfrontier Conservation Area, Botswana, South Africa and Zimbabwe, August 2014. Central Limpopo River Valley Elephant Research Project and the University of KwaZulu-Natal. Retrieved from www.academia.edu/18073030/DRY_SEASON_FIXED-WING_AERIAL_SURVEY_OF_LARGE_MAMMALS_IN_THE_NORTHERN_TULI_GAME_RESERVE_AND_MAPUNGUBWE_NATIONAL_PARK_AND_OF_ELEPHANTS_IN_THE_GREATER_MAPUNGUBWE_TRANSFRONTIER_CONSERVATION_AREA_BOTSWANA_SOUTH_AFRICA_AND_ZIMBABWE_AUGUST_2014

Shoshani, J. (2006, February 28). Personal Communication. Information on elephant sightings in Eritrea. Email.

Shoshani, J., Hagos, Y., Yacob, Y. I., Ghebrehiwet, M., & Kebrom, E. (2004). Elephants (Loxodonta africana) of Zoba Gash Barka, Eritrea: Part 2. Numbers and distribution, ecology and behaviour, and fauna and flora in their ecosystem. Pachyderm, 36, 52–68.

Siaka, A. (2016, April 26). Personal Communication. Elephants in Sierra Leone. Email.

Sichali, E., & Mkumbwa, S. K. (2014). Nkhotakota Wildlife Reserve 2013 animal census report. Nkhotakota, Malawi: Research and Planning Unit, Nkhotakota Wildlife Reserve.

Simukonda, C. (2009). The elephant survey - a country report. Zambia Wildlife Authority.

Simwanza, H. I. (2004). Aerial survey of large wild herbivores in Kafue National Park and Lunga Luswishi, Kasonso Busanga, Mumbwa, Namwala, Nkala, Bbili, Sichifulo and Mulobezi Game Management Areas. November 2004. Chilanga, Zambia: ZAWA.

Sissler-Beinvenu, C. (2016, May 23). Personal Communication. Elephants in Côte d'Ivoire: Azagny, Marahoué, Mont Péko, and Mont Sangbé. Email.

Sitati, N. (2016, April 27). Personal Communication. Elephants in the Transmara, Kenya. Email.

Sitati, N., & Bitok, E. (2007). Wet and dry seasons elephant (Loxodonta africana africana) density and distribution in Transmara district, 2007 (Technical Report). Kenya: WWF EARPO Elephant Programme.

Small Arms Survey. (2015). Small arms survey 2015 highlights: Key findings and chapter summaries (p. 24). Cambridge University Press.

Smith, D. (2015, April 29). Congo-Brazzaville president burns five tonnes of ivory in fight against poachers. The Guardian. Retrieved from www.theguardian.com/world/2015/apr/29/congo-brazzaville-president-burns-elephant-ivory-poachers

Sommer, V. (2016, May 23). Personal Communication. Elephants in Gashaka Gumti. E-mail.

Songhurst, A. (2016, May 3). Personal Communication. Elephant range in Botswana. Email and map.

Songhurst, A., & Chase, M. J. (2010). Elephant survey July 2010: Eastern Okavango Panhandle, Botswana (NG11,NG12 and NG13). Okavango Elephant and People Research Project and Elephants Without Borders. Retrieved from www.elephantswithoutborders.org/downloadspapers/Panhandle%20survey%202010.pdf

Stalmans, M. (2012, November 19). Personal Communication. Banhine, Mozambique survey 2009. Email.

Stalmans, M., Peel, M., & Massad, T. (2014). Aerial wildlife count of the Parque Nacional da Gorongosa, Mozambique, October 2014: approach, results and discussion. Parque Nacional da Gorongosa.

Stander, P. E. (2004). Aerial survey of wildlife in the Nyae Nyae Conservancy, Namibia. September 2004 (Aerial Survey Report). Windhoek: Wildlife Science.

Steel, L. (2007). Salonga-Lukenie-Sankuru Landscape: summary results of WWF biological surveys: 2006 - 2007. Kinshasa: WWF DRC.

Stevenson, I. (2015). Personal Communication. Elephant range in Lower Zambezi National Park. Map.

Stokes, E. J., Strindberg, S., Bakabana, P. C., Elkan, P. W., Iyenguet, F. C., Madzoké, B., ... Rainey, H. J. (2010). Monitoring great ape and elephant abundance at large spatial scales: measuring effectiveness of a conservation landscape. PLoS ONE, 5(4), e10294. doi.org/10.1371/journal.pone.0010294

Strindberg, S. (2012). Distance sampling along line transects: statistical concepts and analysis options. In S. Hedges (Ed.), Monitoring elephant populations and assessing threats: a manual for researchers, managers and conservationists (pp. 26–60). Hyderabad: Universities Press. Retrieved from www.fws.gov/International/pdf/Monitoring_Elephant_Populations_and_Assessing_Threats_to_press_version.pdf#page=37

Sullivan, K. (2014, August 22). Akagera park's 80 years of ups and downs. The East African. Rwanda. Retrieved from www.theeastafrican.co.ke/magazine/Akagera-park-s-80-years-of-ups-and-downs-/434746-2427808-s02swc/index.html

Svensson, M. S., Bersacola, E., Bearder, S. K., Nijman, V., & Mills, M. (2014). Open sale of elephant ivory in Luanda, Angola. Oryx, 48(1), 13–14. doi.org/10.1017/S0030605313001439

Swanepoel, W. T. (2010). Limpopo National Park, helicopter census. (Technical Report). Bassair Aviations.

T

TAWIRI. (2001). Aerial census in the Selous-Niassa Corridor, wet and dry seasons, 2000 (Unpublished report). Arusha: Tanzania Wildlife Research Institute.

TAWIRI. (2003). Aerial total count of elephants in West Kilimanjaro, Tanzania: dry season, 2002. Arusha: Tanzania Wildlife Research Institute.

TAWIRI. (2007a). Aerial census in the Selous-Niassa wildlife corridor, dry season 2006. Arusha, Tanzania: Wildlife Division and SNWC/UNDP-GEF/GTZ-IS. Retrieved from www.selous-niassa-corridor.org/fileadmin/publications/SNWC_Aerial_Census_2006.pdf

TAWIRI. (2007b). Elephant population estimate in Tanzania: Dry season, 2006 (TAWIRI Aerial Survey Report). Dar es Salaam: Tanzania Wildlife Research Institute.

TAWIRI. (2009a). Aerial census in the Selous-Niassa wildlife corridor, dry season, december 2009. Arusha: TAWIRI / TANAPA / Wildlife Division. Retrieved from www.selous-niassa-corridor.org/uploads/tx_drblob/storage/Selous_Niassa_WC_2009_Census_Report_final.pdf

TAWIRI. (2009b). Elephant population estimate in Tanzania: dry season, 2009 (TAWIRI Aerial Survey Report). Dar es Salaam: Tanzania Wildlife Research Institute.

TAWIRI. (2010). Tanzania elephant management plan: 2010-2015. (S. R. Mduma, A. L. Lobora, C. Foley, & T. Jones, Eds.). Arusha: Tanzania Wildlife Research Institute. Retrieved from www.tawiri.or.tz/images/Conference/elephant_plan.pdf

TAWIRI. (2013a). Aerial Census of Burigi-Biharamulo, 2012. Tanzania Wildlife Research Institute.

TAWIRI. (2013b). Aerial census of large animals in the Ruaha-Rungwa Ecosystem, dry season 2013 (Unpublished Preliminary Report). Arusha: Tanzania Wildlife Research Institute. Retrieved from conservationaction.co.za//wp-content/uploads/2014/01/Selous-Ruaha-reports.zip

TAWIRI. (2015a). Aerial census of elephant in Katavi-Rukwa Ecosystem, Tanzania, dry season 2014. Arusha, Tanzania: Tanzania Wildlife Research Institute. Great Elephant Census.

TAWIRI. (2015b). Aerial census of elephant in Selous-Mikumi Ecosystem Tanzania, dry season 2014. Arusha, Tanzania: Tanzania Wildlife Research Institute, Great Elephant Census.

TAWIRI. (2015c). Aerial census of elephant in the Burigi-Biharamulo Ecosystem, dry season 2014 (Final report). Tanzania Wildlife Research Institute, Great Elephant Census.

TAWIRI. (2015d). Aerial census of elephants in Malagarasi-Muyovosi ecosystem, dry season 2014. Arusha, Tanzania: Tazania Wildlife Research Institute.

TAWIRI. (2015e). Aerial census of elephants in Tarangire-Manyara ecosystem, dry season 2014. Arusha, Tanzania: Tanzania Wildlife Research Institute.

TAWIRI. (2015f). Wildlife census in Ruaha Rungwa Ecosystem, Tanzania, dry season survey report 2015. Arusha, Tanzania: Tanzania Wildlife Research Institute.

Taylor, R. (2009). Community based natural resource management in Zimbabwe: the experience of CAMPFIRE. Biodiversity and Conservation, 18(10), 2563–2583. doi.org/10.1007/s10531-009-9612-8

Tchamba, M. N. (1995, August 23) Personal Communication. Estimate of the elephant population in Dja Faunal Reserve, Cameroon. Fax.

Tchamba, M. N., Barnes, R. F. W., & Ndjoh a Ndiang, I. (1997). National elephant management plan: Republic of Cameroon. Yaoundé: Ministry of Environment and Forestry/WWF.

Tembo, A. (1993) Personal Communication. AfESG Questionnaire Reply, Zambia. Questionnaire reply.

Terblanche, N. (2016, July 25). Barbaric elephant slaughter in Angola. Africa Geographic. Retrieved from africageographic.com/blog/barbaric-elephant-slaughter-angola/

TFCI. (2010). Aerial survey report: Gambella Reconnaissance 2009 & Census 2010. Ethiopia: Trans Frontier Conservation Initiative.

The Ministry of Forestry and Wildlife. (2014). The management plan of the Mount Cameroon National Park and its peripheral zone 2015 - 2019. The Ministry of Forestry and Wildlife, Republic of Cameroon.

The Namibian. (2014, March 14). Jumbo menace hits Otjombinde. The Namibian. Namibia.

The Times Group. (2016, March 2). Malawi campaigns to stop wildlife crimes. Retrieved from www.times.mw/malawi-campaigns-to-stop-wildlife-crimes/

Theuerkauf, J., Ellenberg, H., Waikuwait, W. E., & Muhlenberg, M. (2001). Forest elephant distribution and habitat use in the Bossematie Forest Reserve, Ivory Coast. Pachyderm, 30, 37–43.

Thibault, M., Walsh, P. D., Idiata, D., Mbina, C., Mihindou, Y., & White, L. J. T. (2001). Inventaire de Grands mammifères dans le Complexe d'Aires Protegees de Gamba en 1998 et 1999 (Unpublished report). Libreville: WWF/WCS.

Thomas, L., Buckland, S. T., Rexstad, E. A., Laake, J. L., Strindberg, S., Hedley, S. L., ... Burnham, K. P. (2010). Distance software: design and analysis of distance sampling surveys for estimating population size. Journal of Applied Ecology, 47(1), 5–14. doi.org/10.1111/j.1365-2664.2009.01737.x

Thompson, M. E., Schwager, S. J., & Payne, K. B. (2010). Heard but not seen: an acoustic survey of the African forest elephant population at Kakum Conservation Area, Ghana. African Journal of Ecology, 48(1), 224–231. doi.org/10.1111/j.1365-2028.2009.01106.x

Thouless, C. (2016, February). Personal Communication. Loroki Forest: Review comment.

Thouless, C. R. (1993). Elephant distribution in Nigeria. Lagos: Western Geophysical.

Tilbury, D. (2015, May 14). Personal Communication: Elephants in West Lunga. E-mail.

Tomor, B., Moses. (2015). Elephant population ecology and conflict dynamics in Nimule National Park Landscape (PhD). Makerere University.

Tooze, Z. (1994). Elephant distribution, abundance and movements in the Oban Division of Cross River National Park: report on hunter interviews carried out May & November 1994.

Tubbs, N. (2015, November 4). Personal Communication: Elephants in Gola. Email.

Tweh, C. G., Lormie, M. M., Kouakou, C. Y., Hillers, A., Kuhl, H. S., & Junker, J. (2015). Conservation status of chimpanzees Pan troglodytes verus and other large mammals in Liberia: a nationwide survey. Oryx, 49(4), 710–718. doi.org/10.1017/S0030605313001191

U

Uganda National Parks. (1991). Elephant conservation plan for Uganda. Kampala: Uganda National Parks.

Uganda Wildlife Authority. (2016). Elephant Conservation Action Plan for Uganda (2016-2026) (Draft Final Report). Uganda: Uganda Wildlife Authority.

UNEP, CITES, IUCN, & TRAFFIC. (2013). Elephants in the dust: the African elephant crisis. (C. Nellemann, R. Knutsdatter Formo, J. Blanc, D. Skinner, T. Milliken, & T. De Meulenaer, Eds.). Arendal: GRID. Retrieved from www.grida.no/publications/rr/elephants/

UNEP-WCMC, & IUCN. (n.d.). World Database on Protected Areas. Retrieved from www.protectedplanet.net/

UNESCO World Heritage Centre. (2011, May 18). Anti-Poaching Patrols to continue at Niokolo Koba National Park, thanks to Rapid Response Facility emergency support. Retrieved May 10, 2016, from whc.unesco.org/en/news/750/

UNESCO World Heritage Centre. (n.d.). Niokolo-Koba National Park. Retrieved May 10, 2016, from whc.unesco.org/en/list/153

USFWS. (2015a, March 26). Enhancement finding for African elephants taken as sport-hunted trophies in Zimbabwe on or after January 1, 2015. United States Department of the Interior: Fish and Wildlife Service.

USFWS. (2015b, July 3). Enhancement finding for African elephants taken as sport-hunted trophies in Tanzania in 2015. United States Department of the Interior: Fish and Wildlife Service. Retrieved from www.fws.gov/international/pdf/enhancement-finding-2015-elephant-Tanzania.PDF

V

Van de Weghe, J. P. (1990). Akagera: land of water, grass and fire. Rwanda: World Wide Fund for Nature.

van der Westhuizen, E. (2003). Systematic reconnaissance flight survey of large herbivore numbers and distribution North Luangwa National Park, Zambia. 23 - 26 September 2003. Summary report - Elephant population estimates and statistics.

Vanleeuwe, H. (2004). Managing the Mount Kenya environment for people and elephants (PhD). University of Kent, Canterbury. Retrieved from ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.413271

Vanleeuwe, H. (2006). Résumé: Recensements des éléphants au PNCD menés en fin de saison sèche entre octobre et décembre 2005. Brazzaville: Wildlife Conservation Society (WCS).

Vanleeuwe, H. (2014). Ecological surveys 2005, 2008, 2010 and 2013 at Conkouati-Douli National Park, Republic of Congo. WCS.

Vaughan, A. (2014, January 6). China crushes six tons of ivory | Environment | The Guardian. Retrieved March 21, 2016, from www.theguardian.com/environment/2014/jan/06/china-crush-ivory-elephant-poaching

Vaughan, A. (2015, July 6). Mozambique burns world's largest rhino horn seizure. The Guardian. Retrieved from www.theguardian.com/environment/2015/jul/06/mozambique-burns-worlds-largest-rhino-horn-seizure

Vaz Pinto, P., & Verissimo, L. (2014, April 28). Personal Communication. Elephant range in Angola. Email and map.

Verheggen, A., Mayaux, P., de Wasseige, C., & Defourny, P. (2012). Mapping Congo Basin vegetation types from 300 m and 1 km multi-sensor time series for carbon stocks and forest areas estimation. Biogeosciences, 9, 506–507.

Viljoen, P. (2010). Akagera National Park, Aerial wildlife survey. August 2010 (Unpublished Report). Akagera, Rwanda: African Parks.

Virunga National Park. (2016, March 14). Rangers Killed in Mai Mai Attack on Virunga's Central Sector. Retrieved June 10, 2016, from virunga.org/news/rangers-killed-mai-mai-attack-virungas-central-sector/

Virunga National Park - Who we are. (n.d.). Retrieved July 30, 2016, from virunga.org/who-we-are/

Vogt, T., & Forster, B. (2016, January 3). Personal Communication. Updated elephant information Liberia. Email and map.

Vosper, A., Masselink, J., & Maisels, F. (2012). Great ape and human impact monitoring in the Okapi Faunal Reserve, Democratic Republic of Congo. Kinshasa: WCS.

W

Wall, J., Wittemyer, G., Klinkenberg, B., LeMay, V., & Douglas-Hamilton, I. (2013). Characterizing properties and drivers of long distance movements by elephants (Loxodonta africana) in the Gourma, Mali. Biological Conservation, 157, 60–68. doi.org/10.1016/j.biocon.2012.07.019

Walley, C. (2014, December 8). African Parks takes on the Chinko Project in the Central African Republic. Wildlife News. Central Africal Republic. Retrieved from wildlifenews.co.uk/2014/12/african-parks-takes-on-the-chinko-project-in-the-central-african-republic/

Wamukoya, G. M., Njagah, D., Gachago, S. W., Kahihia, A., Too, D., Kirui, J., & Mulama, M. S. (1997). A survey of the Transmara Forest elephant populations. Nairobi.

Wanyama, F. (2005). Ground census of mammals in Kibale Natioanl Park, Uganda (Unpublished Report). Kampala, Uganda: Uganda Wildlife Authority, WCS.

Wanyama, F. (2012). Aerial total count of medium - large mammals: Kidepo Valley National Park and Karenga Corridor. Uganda: Uganda Wildlife Authority.

Wanyama, F. (2013). Aerial total count of medium - large mammals: Toro Semliki Wildlife Reserve and Semliki Flats/Rwengara Wildlife Area. Uganda: Uganda Wildlife Authority

Wanyama, F., Balole, E., Elkan, P., Mendiguetti, S., Ayebare, S., Kisame, F., … Plumptre, A. J. (2014a). Technical report: aerial surveys of the Greater Virunga Landscape. WCS, ICCN, UWA.

Wanyama, F., Elkan, P., Grossmann, F., Mendiguetti, S., Kisame, F., Mwedde, G., … Plumptre, A. J. (2014b). Technical report: aerial surveys of Murchison Falls Protected Area. Wildlife Conservation Society: Uganda Wildlife Authority

Wanyama, F., Elkan, P., Grossmann, F., Mendiguetti, S., Modi, M., Kisame, F., … Plumptre, A. J. (2014c). Technical Report: aerial surveys of Kidepo Valley National Park and Karenga Community Wildlife Area. Wildlife Conservation Society: Uganda Wildlife Authority.

Wasser, S. K., Brown, L., Mailand, C., Mondol, S., Clark, W., Laurie, C., & Weir, B. S. (2015). Genetic assignment of large seizures of elephant ivory reveals Africa's major poaching hotspots. Science, aaa2457. doi.org/10.1126/science.aaa2457

WCS. (2014, August 5). WCS statement on public-private partnership agreement on national parks management signed with Republic of Congo. Retrieved July 14, 2016, from newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/6104/WCS-Statement-on-Public-Private-Partnership-Agreement-on-National-Parks-Management-Signed-with-Republic-of-Congo.aspx

WCS. (2015a). Survey of the Lokofa Block of the Salonga National Park: Preliminary report. Kinshasa: WCS.

WCS. (2015b, May 26). Gov't of Mozambique announces major decline in national elephant population. Retrieved from newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/9760/Govt-of-Mozambique-announces-major-decline-in-national-elephant-population.aspx

WCS Flight Programme. (2008). Aerial surveys of Kidepo National Park, Lipan Controlled Hunting Area & Madi Corridor March - April 2008. Uganda: WCS.

WCS Flight Programme. (2009). Aerial survey report: Luangwa Valley 2009. WCS, New York.

Weber, V. (2016, May 3). Personal Communication. Elephants in Togo. Email

Whyte, I. J. (2007). Results of the 2006 and 2007 censuses of elephant and buffalo in the Kruger National Park (No. Scientific Report 06/2007). Skukuza: South African National Parks.

Whyte, I. J., & Swanepoel, W. (2006). An aerial census of the Shingwedzi basin area of the Parque Nacional do Limpopo (Limpopo National Park) in Mozambique, 16th-21st October, 2006 (No. Scientific Report 02/2006). South African National Parks.

Wiafe, E. D., & Sam, M. K. (2014). Evaluation of a low-tech method, pepper-grease, for combatting elephant crop-raiding activities in Kakum Conservation Area, Ghana. Pachyderm, 55(January-June 2014), 38–42.

Wijnstekers, W. (2011a). The evolution of CITES: a reference to the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Budapest: CIC.

Wilcove, D. S., & Koh, L. P. (2010). Addressing the threats to biodiversity from oil-palm agriculture. Biodiversity and Conservation, 19(4), 999–1007. doi.org/10.1007/s10531-009-9760-x

Wild Chimpanzee Foundation. (2012). Etat de la faune et des menaces dans les aires protegées terrestres et principales zones de forte biodiversité de Republique de Guinée.

Wildlife Division. (2000). Strategy for the Conservation of Elephants in Ghana. Accra: Wildlife Division/AfESG/WWF.

Willems, F. (2016, May 8). Personal Communication. Elephant estimate in Bangweulu/Kasanka/LMNP system. Email.

Willsher, K. (2014, February 6). France destroys illegal ivory stocks. The Guardian. Retrieved from www.theguardian.com/environment/2014/feb/06/france-destroys-illegal-ivory-poaching

Wilson, E. O. (2013, June). The rebirth of Gorongosa. National Geographic Magazine. Retrieved from ngm.nationalgeographic.com/2013/06/gorongosa-park/wilson-text

Winter, P. (1991). Elephant conservation plan: Sudan. Nairobi: African Elephant Conservation Coordinating Group. Retrieved from www.sudanarchive.net/cgi-bin/sudan?a=pdf&d=Dunepd145&dl=1

Wittemyer, G., Northrup, J. M., Blanc, J., Douglas-Hamilton, I., Omondi, P., & Burnham, K. P. (2014). Illegal killing for ivory drives global decline in African elephants. Proceedings of the National Academy of Sciences, 111(36), 13117–13121. doi.org/10.1073/pnas.1403984111

WRI. (2016). Congo Basin Forest Atlases | World Resources Institute. Retrieved from www.wri.org/our-work/project/congo-basin-forest-atlases

WWF Cameroon. (2016a). Inventaire faunique dans le Parc National de Campo Ma'an (PNCM Dipikar + PNCM Nord) (Cameroun) & les UFAs autour. (Unpublished summary). Yaoundé, Cameroon: WWF Cameroon.

WWF Cameroon. (2016b). Inventaire faunique dans le PN Lobeke et paysage TNS (Unpublished Summary). Yaoundé, Cameroon: WWF Cameroon.

WWF Cameroon. (2016c). Inventaire faunique dans le TRIDOM-Cameroun-PNNki & PN Boumba Bek (Unpublished summary). Yaoundé, Cameroon: WWF Cameroon.

WWF Cameroon. (2016d). Inventaire faunique dans le PN Lobeke et paysage TNS (Unpublished Summary). Yaoundé, Cameroon: WWF Cameroon.

WWF Zambia. (2016). 2015 aerial survey of Lower West Zambezi Game Management Area (Draft report). WWF Zambia.

Y&Z

Yackulic, C. B., Strindberg, S., Maisels, F., & Blake, S. (2011). The spatial structure of hunter access determines the local abundance of forest elephants (Loxodonta africana cyclotis). Ecological Applications, 21(4), 1296–1307. doi.org/10.1890/09-1099.1

ZAWA, & WWF. (2014). Validation report on the presence of elephant in West Lunga National Park and surrounding GMAs. Zambia: ZAWA and WWF.

ZPWMA. (2015). Zimbabwe national elephant management plan, 2015 - 2020. Harare, Zimbabwe: Zimbabwe Parks and Wildlife Management Authority.

Zytkow, C. (2016, April 29). Personal Communication. Tanganyika population estimates. Email and map.

Comparable Estimates from Eastern & Southern Africa

REGION	COUNTRY	INPUT ZONE	YEAR	TYPE	ESTIMATE	95 % CL
EASTERN AFRICA	Kenya	Kerio Valley	2006	AT	205 ±	0
			2015	AT	311 ±	0
		Laikipia-Samburu Ecosystem	2006	AT	5,447 ±	0
			2015	AT	6,365 ±	0
		Masai Mara National Reserve	2006	AT	1,655 ±	0
			2015	AT	876 ±	0
		Masai Mara Outside	2006	AT	461 ±	0
			2015	AT	532 ±	0
		Mwingi National Reserve	2006	AT	0 ±	0
			2015	AT	0 ±	0
		Nasolot and S. Turkana	2006	AT	285 ±	0
			2015	AT	351 ±	0
		South Kitui National Reserve	2006	AT	0 ±	0
			2015	AT	0 ±	0
		Tsavo National Park	2006	AT	9,021 ±	0
			2015	AT	9,504 ±	0
		Tsavo (Outside)	2006	AT	1,335 ±	0
			2015	AT	1,612 ±	0
	Tanzania	Katavi National Park	2006	AS	4,102 ±	1,615
			2015	AS	3,128 ±	1,944
		Rukwa Game Reserve	2006	AS	1,200 ±	902
			2015	AS	122 ±	131
		Mkomazi Game Reserve	2006	AT	41 ±	0
			2015	AT	59 ±	0
		Moyowosi-Kigosi Game Reserve	2006	AS	9,541 ±	3,657
			2015	AS	1,645 ±	2,389
		Natron Landscape and West Kilimanjaro	2006	AT	70 ±	0
			2015	AT	200 ±	0
		Ruaha Rungwa Ecosystem	2006	AS	35,409 ±	11,507
			2015	AS	14,284 ±	6,123
		Sagara Nyamagoma Ecosystem	2006	AS	4,635 ±	3,028
			2015	AS	503 ±	592
		Selous Mikumi Ecosystem	2006	AS	70,406 ±	24,843
			2015	AS	14,040 ±	3,252

REGION	COUNTRY	INPUT ZONE	YEAR	TYPE	ESTIMATE		95 % CL
Eastern Africa CONT	**Tanzania** CONT	Loliondo Game Controlled Area	2006	AT	88	±	0
			2015	AT	0	±	0
		Serengeti Ecosystem	2006	AT	1,630	±	0
			2015	AT	6,087	±	0
		Lake Manyara	2006	AT	36	±	0
			2015	AT	104	±	0
		Tarangire National Park	2006	AT	1,119	±	0
			2015	AT	3,282	±	0
		Ugalla East	2006	AS	1,353	±	837
			2015	AS	146	±	278
		Ugalla Game Reserve	2006	AS	4,133	±	1,778
			2015	AS	659	±	549
	Uganda	Kidepo Valley National Park and Karenga Wildlife Community Area	2006	AT	454	±	0
			2015	AT	621	±	0
		Murchison Falls Conservation Area	2006	AS	516	±	635
			2015	AS	1,352	±	900
		Queen Elizabeth Conservation Area	2006	AS	2,959	±	1,476
			2015	AS	2,904	±	1,800
TOTALS		Totals for Eastern African Sites	2006		156,101	±	27,964
			2015		68,687	±	7,896
		Total Difference for Eastern African Sites	9		-87,414	±	29,057*

REGION	COUNTRY	INPUT ZONE	YEAR	TYPE	ESTIMATE		95 % CL
SOUTHERN AFRICA	**Botswana**	Northern Botswana	2006	AS	153,620	±	20,818
			2015	AS	129,939	±	12,501
	Mozambique	Magoe District	2006	AS	1,628	±	794
			2015	AS	1,051	±	720
		Niassa Ecosystem	2006	AS	12,477	±	2,111
			2015	AS	4,441	±	1,360
	Nambia	Etosha National Park	2006	AS	2,057	±	598
			2015	AS	2,911	±	637
		Khaudum-Kavango	2006	AS	3,848	±	2,292
			2015	AS	4,149	±	1,864
		Kunene	2006	AS	210	±	157
			2015	AS	314	±	154
		Nyae Nyae Conservancy	2006	AS	967	±	481
			2015	AS	2,264	±	1,729
		Zambezi Region	2006	AS	8,725	±	2,206
			2015	AS	13,116	±	3,413
	South Africa	Kruger National Park	2006	AT	12,427	±	0
			2015	AT	17,086	±	0
		Manyeleti Game Reserve	2006	AT	71	±	0
			2015	AT	222	±	0

REGION	COUNTRY	INPUT ZONE	YEAR	TYPE	ESTIMATE	95 % CL
Southern Africa	**Swaziland**	Hlane Royal National Park	2006	IR	13 ±	0
			2015	IR	25 ±	0
		Mkhaya Nature Reserve	2006	IR	15 ±	0
			2015	IR	14 ±	0
	Zambia	Kafue Game Management Areas	2006	AS	959 ±	492
			2015	AS	1,876 ±	1,614
		Kafue National Park	2006	AS	6,306 ±	5,227
			2015	AS	4,813 ±	2,254
		Sioma Ngwezi	2006	AS	385 ±	371
			2015	AS	48 ±	75
		Lower Zambezi Ecosystem	2006	AS	1,477 ±	744
			2015	AS	973 ±	579
		Lower Zambezi Game Management Areas	2006	AS	45 ±	53
			2015	AS	153 ±	172
		Luangwa Game Management Areas	2006	AS	3,962 ±	1,292
			2015	AS	5,869 ±	3,086
		Lukusuzi National Park	2006	AS	0 ±	0
			2015	AS	0 ±	0
		North Luangwa National Park	2006	AS	3,235 ±	695
			2015	AS	4,673 ±	1,770
		South Luangwa National Park	2006	AS	4,459 ±	1,519
			2015	AS	3,302 ±	1,186
		Chete and Sekula Islands	2006	AT	0 ±	0
			2015	AT	54 ±	0
	Zimbabwe	Tuli, Maramani, Sentinel, Nottingham	2006	AT	82 ±	0
			2015	AT	212 ±	0
		Chewore II	2006	AS	1,673 ±	705
			2015	AS	594 ±	310
		Chewore I & III	2006	AS	4,111 ±	881
			2015	AS	2,709 ±	851
		Chewore IV	2006	AS	580 ±	335
			2015	AS	0 ±	0
		Doma Safari Area	2006	AS	336 ±	383
			2015	AS	153 ±	175
		Mavuradonha Wilderness Area	2006	AS	13 ±	26
			2015	AS	0 ±	0
		Mukwiche Area	2006	AS	228 ±	290
			2015	AS	0 ±	0
		Rest of Zambezi valley	2006	AS	15,870 ±	2,224
			2015	AS	8,200 ±	2,029
		Hwange National Park	2006	AS	44,492 ±	5,770
			2015	AS	45,846 ±	6,244
		Matabeleland Communal areas	2006	AS	64 ±	79
			2015	AS	2,201 ±	3,062

REGION	COUNTRY	INPUT ZONE	YEAR	TYPE	ESTIMATE	95 % CL
Southern Africa	**Zimbabwe**	Matetsi Safari Complex	2006	AS	4,201 ±	1,670
			2015	AS	4,843 ±	2,968
		Ngamo & Sikumi Forest Areas	2006	AS	553 ±	496
			2015	AS	1,101 ±	993
		Binga Communal Lands	2006	AS	431 ±	373
			2015	AS	86 ±	162
		Chete Safari Area	2006	AS	971 ±	310
			2015	AS	278 ±	222
		Chirisa Safari Area	2006	AS	4,231 ±	1,260
			2015	AS	1,200 ±	755
		Chizarira National Park	2006	AS	3,071 ±	1,117
			2015	AS	747 ±	767
		Kariba Communal Areas	2006	AS	3,715 ±	1,033
			2015	AS	411 ±	364
		Lusulu	2006	AS	33 ±	63
			2015	AS	0 ±	0
		Matusadona National Park	2006	AS	1,925 ±	443
			2015	AS	669 ±	251
		North Gokwe Communal Lands	2006	AS	192 ±	172
			2015	AS	0 ±	0
		Siparira Forest Area	2006	AS	488 ±	333
			2015	AS	16 ±	17
		Gonarezhou National Park	2006	AS	4,987 ±	1,577
			2015	AS	11,120 ±	2,709
		Mahenye Ward	2006	AS	0 ±	0
			2015	AS	332 ±	441
		Malapati Safari Area	2006	AS	5 ±	9.4
			2015	AS	0 ±	0
		Malilangwe Conservancy	2006	AT	116 ±	0
			2015	AT	272 ±	0
		Save Valley Conservancy	2006	AS	527 ±	310
			2015	AS	1585 ±	1,295
TOTALS		Totals for Southern African Sites	2006		309,781 ±	23,062
			2015		279,868 ±	16,524
		Total Difference for Southern African Sites	9		-29,913 ±	28,371 *

** Statistically Significant Difference*

Information Quality Index & Priorities for Future Surveys

COUNTRY	REGION	PROBABLE FRACTION	ASSESSED RANGE FRACTION	IQI	CHANGE ON PREVIOUS REPORT	CONTINENTAL RANGE FRACTION	PFS
Angola	S	0.67	0.13	0.09	+0.07	10.32 %	1
Botswana	S	0.91	0.56	0.52	-0.09	7.28 %	1
Congo	C	0.18	0.57	0.10	+0.09	4.82 %	1
Democratic Republic of Congo	C	0.16	0.51	0.08	-0.02	7.13 %	1
Gabon	C	0.09	1.01	0.09	+0.06	6.81 %	1
Mozambique	S	0.58	0.82	0.48	+0.16	10.23 %	1
Namibia	S	0.84	0.51	0.43	+0.04	5.24 %	1
South Sudan	E	0.55	0.42	0.23	+0.23	9.89 %	1
Tanzania	E	0.83	0.70	0.58	+0.04	12.45 %	1
Zambia	S	0.81	0.62	0.50	+0.04	5.44 %	1
Cameroon	C	0.69	0.68	0.47	+0.47	2.86 %	2
Central African Republic	C	0.40	0.89	0.35	+0.23	0.79 %	2
Chad	C	0.69	0.46	0.32	+0.21	1.96 %	2
Côte d'Ivoire	W	0.19	0.91	0.18	+0.02	0.47 %	2
Equatorial Guinea	C	0.57	1.00	0.57	+0.57	0.63 %	2
Ethiopia	E	0.47	0.84	0.39	+0.28	0.71 %	2
Ghana	W	0.74	0.50	0.37	+0.03	0.48 %	2
Kenya	E	0.74	0.80	0.59	+0.06	4.17 %	2
Liberia	W	0.08	0.45	0.03	+0.03	0.92 %	2
Mali	W	0.83	1.00	0.83	+0.29	0.81 %	2
Nigeria	W	0.17	0.56	0.09	-0.01	0.64 %	2
South Africa	S	0.69	0.92	0.64	-0.32	0.98 %	2
Uganda	E	0.65	0.79	0.51	+0.10	0.54 %	2
Zimbabwe	S	0.89	0.97	0.86	+0.01	2.59 %	2
Benin	W	0.67	0.99	0.66	-0.33	0.29 %	3
Burkina Faso	W	0.76	0.80	0.61	-0.19	0.48 %	3
Eritrea	E	0.00	1.00	0.00	-0.92	0.17 %	3
Guinea	W	0.00	0.78	0.00	-0.18	0.05 %	3
Guinea Bissau	W	0.00	1.00	0.00	0.00	0.04 %	3
Malawi	S	0.77	0.72	0.55	+0.41	0.25 %	3
Niger	W	0.00	1.00	0.00	-0.83	0.07 %	3
Senegal	W	0.07	1.00	0.07	-0.03	0.03 %	3
Sierra Leone	W	0.00	0.64	0.00	0.00	0.04 %	3
Somalia	E	0.00	0.68	0.00	0.00	0.14 %	3
Togo	W	0.00	0.65	0.00	-0.04	0.20 %	3
Rwanda	E	0.70	0.99	0.70	+0.40	0.03 %	4
Swaziland	S	1.00	1.00	1.00	0.00	0.00 %	5

APPENDIX III

Acronyms & Abbreviations

A

AED	African Elephant Database
AERP	Amboseli Elephant Research Project (Kenya)
AESR	African Elephant Status Report
AfESG	African Elephant Specialist Group
AfRSG	African Rhino Specialist Group
ARF	Assessed Range Fraction
AS	Aerial Sample Count
AT	Aerial Total Count
AVIGREF	Associations villageoises pour la gestion des réserves de faune (Benin)

B

BGP	Big Game Parks of Swaziland
BR	Biosphere Reserve
BtR	Botanical Reserve

C

CA	Conservation Area
CAR	Central African Republic
CARPE	Central African Regional Program for the Environment
CBFP	Congo Basin Forest Partnership
CcA	Concession Area
CEESP	Commission on Environmental, Economic and Social Policy
CF	Classified Forest
CFA	Central Africa Franc
CHA	Controlled Hunting Area
CI	Confidence Interval
CIMU	Conservation Information and Monitoring Unit (Tanzania)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CL	Confidence limit
CMS	Convention on Migratory Species
COMIFAC	Conference of Ministers in Charge of Forests in Central Africa
CR	Community Reserve
CRF	Continental Range Fraction

D

DA	Different Area
DC	Dung Count
DD	Data Degraded
DEFRA	Department for Environment, Food and Rural Affairs (United Kingdom)
DFPN	Direction de la Faune et des Parcs Nationaux (Cameroon)
DNFFB	Direcção Nacional de Florestas e Fauna Bravia (Mozambique)
DRC	Democratic Republic of Congo
DRSRS	Department of Resource Surveys and Remote Sensing (Kenya)
DRWG	Data Review Working Group
DT	Different Technique
DWNP	Department of Wildlife and National Parks (Botswana)

E

EC	Elephant Corridor
ECOPAS	Ecosystèmes Protégés en Afrique Sahélienne (West Africa)
ECOWAS	Economic Community of West African States
ELESMAP	Southern African Elephant Survey and Monitoring Programme
EMOA	Elephant Management and Owners Association (South Africa)
ES	Elephant Sanctuary
ESRI	Environmental Systems Research Institute
EWCO	Ethiopia Wildlife Conservation Organization

F

FFR	Fauna and Flora Reserve
FnR	Faunal Reserve
FR	Forest Reserve

G

GD	Genetic Dung Count
GEMS	Global Environment Monitoring System
GIS	Geographical Information System
GMA	Game Management Area
GmR	Game Ranch
GP	Game Park
GPR	Game Production Reserve
GR	Game Reserve
GRID	Global Resource Information Database
GS	Ground Sample Count
GS	Game Sanctuary
GT	Ground Total Count

H

HA	Hunting Area
HR	Hunting Reserve
HZ	Hunting Zone

I

IFR	Integral Forest Reserve
IG	Informed Guess
INDEFOR	National Institute for Forestry Development (Equatorial Guinea)
INR	Integral Nature Reserve
IQI	Information Quality Index
IR	Individual Registration
IUCN	International Union for Conservation of Nature

J-L

JICA	Japan International Cooperation Agency
KAZA TFCA	Kavango-Zambezi Transfrontier Conservation Area (Southern Africa)
LAT	Latitude
LON	Longitude

M

MET	Ministry of Environment and Tourism (Namibia)
MIKE	Monitoring the Illegal Killing of Elephants

N

NA	New Analysis
NF	National Forest
NG	New Guess
NGO	Non-Governmental Organization
NIR	National Reserve
NM	Natural Monument
NNR	National Nature Reserve
NP	National Park
NP	New Population
NPe	National Park Extension
NPWMA	National Parks and Wildlife Management Authority (Zimbabwe)
NR	Nature Reserve
NRCC	Natural Resources Conservation Council
NS	National Sanctuary

O

OG	Other Guess
ORNL/ GIST	Geographic Information Science and Technology Group at the Oak Ridge National Laboratory (United States of America)

P

PAGEN	Partenariat pour l'Amélioration de la Gestion des Ecosystèmes Naturels (Burkina Faso)
PF	Probable Fraction
PFR	Partial Faunal Reserve
PFS	Priority for Future Surveys
PGR	Private Game Reserve
Pk	Park
PL	Population Lost
PNE	Protected Natural Environment
PNR	Private Nature Reserve
PR	Partial Reserve
PrP	Presidential Park
PRP	Percentage Relative Precision
PrR	Presidential Reserve
PvR	Private Reserve

R

RA	Recreation Area
RC	Reserve Complex
RDBMS	Relational database management system
RNP	Regional Nature Park
RP	Recreation Park
RS	Repeat survey
RyNP	Royal National Park

S

SA	Safari Area
SANParks	South African National Parks
SF	State Forest
SNR	Strict Nature Reserve
SNTC	Swaziland National Trust Commission
SR	Special Reserve
SSC	Species Survival Commission
Sty	Sanctuary

T

TAWIRI	Tanzania Wildlife Research Institute
TFCA	Transfrontier Conservation Area
TFR	Total Faunal Reserve
TRIDOM	Dja-Odzala-Minkébé Tri-National Park

U

UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
USFWS	United States Fish and Wildlife Service

W

WA	Wilderness Area
WCA	Wildlife Conservation Area
WCMC	World Conservation Monitoring Centre
WCS	Wildlife Conservation Society (United States of America)
WP	Wetland Park
WR	Wildlife Reserve
WS	Wildlife Sanctuary
WWF	World Wide Fund for Nature

Conversation Contents

Fwd: Trophy Hunting

Attachments:

/4. Fwd: Trophy Hunting/1.1 image001.jpg
/4. Fwd: Trophy Hunting/1.2 trophy hunting FACA comments (11.24.17) FINAL.pdf

Gloria Bell <gloria_bell@fws.gov>

From:	Gloria Bell <gloria_bell@fws.gov>
Sent:	Thu Dec 07 2017 10:24:21 GMT-0700 (MST)
To:	Greg Sheehan (b) (6) @fws.gov>
CC:	barbara_wainman@fws.gov
Subject:	Fwd: Trophy Hunting
Attachments:	image001.jpg trophy hunting FACA comments (11.24.17) FINAL.pdf

Sent from my iPhone

Begin forwarded message:

From: "Jones, Lisa" <lisa_m_jones@fws.gov>
Date: December 7, 2017 at 12:09:49 PM EST
To: Barbara Wainman <barbara_wainman@fws.gov>, Matthew Huggler <matthew_huggler@fws.gov>, Martin Kodis <martin_kodis@fws.gov>, Angela Gustavson <angela_gustavson@fws.gov>, Gavin Shire <gavin_shire@fws.gov>, Laury Parramore <laury_parramore@fws.gov>, Gloria Bell <gloria_bell@fws.gov>, Craig Hoover <craig_hoover@fws.gov>, Tim Vannorman <tim_vannorman@fws.gov>, Edward Grace <edward_grace@fws.gov>, James Gale <james_gale@fws.gov>, "Kessler, Danielle" <danielle_kessler@fws.gov>, Amy Jonach <amy_jonach@fws.gov>
Subject: Fwd: Trophy Hunting

fyi....

Lisa Hummon-Jones
Congressional and Legislative Affairs Specialist
U.S. Fish and Wildlife Service
703-358-2536 (o)
202-365-7255 (c)

---------- Forwarded message ----------

From: **Keisha Sedlacek** <ksedlacek@hslf.org>
Date: Thu, Dec 7, 2017 at 11:54 AM
Subject: Trophy Hunting
To: "lisa_m_jones@fws.gov" <lisa_m_jones@fws.gov>

Hi Lisa,

I just wanted to flag a few things for you. HSUS did a poll on trophy hunting and which revealed that voters by a margin of more than a margin of five to one, oppose allowing imports of elephant and lion trophies into the U.S. The poll was broken down by party line showing that the majority of Republicans, Democrats, and Non-partisan voters oppose trophy imports. The poll can be found here as well as a recent blog by Wayne Pacelle.

Additionally, Representative Buchanan put out a press statement on lion trophies.

Lastly, Representative Grijalva released an updated to his Trophy Hunting Report that I just wanted to make sure saw. (See below). The report outlines while it is unnecessary to create the International Wildlife Council. We submitted comments (attached) objecting to the Council and will be submitting comments tomorrow putting forward a name for consideration to sit on the Council.

Best,

Keisha

December 7, 2017

Media Contact: Adam Sarvana

(202) 225-6065 or (202) 578-6626

Rep. Grijalva Releases Updated Trophy Hunting Report as Trump-Zinke Moves Threaten Future of Multiple Endangered Species

Washington, D.C. – Natural Resources Committee Ranking Member Raul M. Grijalva (D-Ariz.) today released an updated version of a report on trophy hunting and endangered species protection that his staff initially released in 2016 in response to the tragic killing of Zimbabwe's famed Cecil the Lion. The release comes in the wake of Interior Secretary Ryan Zinke's recent announcements that he plans to create a federal advisory committee to promote the hunting of imperiled wildlife and to allow the importation of elephant and lion trophies from several African countries.

The report, titled *Missing the Mark: African Trophy Hunting Fails to Show Consistent Conservation Benefits*, takes a hard look at the rationale for allowing Americans to import hunting trophies of threatened and endangered species. It finds that the U.S. Fish and Wildlife Service often grants import permits for trophies that do not meet the legal requirement of enhancing the propagation or survival of the species in the wild and makes a number of recommendations for improving the program.

The updated report is available at http://bit.ly/2AkJju4.

Among other findings, the report showed that some countries where these species are hunted have serious corruption problems that make it nearly impossible to verify information provided on the supposed conservation impacts of trophy hunts. This is a major concern in Zimbabwe, which consistently ranked as one of the most corrupt and unstable countries in the world even before the coup that deposed Robert Mugabe last month. While the recent decision to allow elephant trophies from Zimbabwe and neighboring Zambia has been put on hold, significant work needs to be done before imports can be allowed.

The report also sheds some light on the extremely wealthy demographic that travels from the United States to Africa to kill threatened and endangered animals for sport. For example, the estimated cost to hunt, kill, and import a white rhinoceros trophy from South Africa is at least twice the annual income of the average American family.

Grijalva issued the following statement:

"President Trump wants a taxpayer-funded public relations department for his rich, elitist sons for the same reason he hates the inheritance tax: he thinks the government works for his family. Our report lays out clear recommendations to clean up the trophy hunting industry and make sure our environmental laws don't just help a privileged few. Secretary Zinke thinks the big game hunter fantasy lifestyle is the basis for real policy, and endangered species are going to suffer for it."

Grijalva is the author of H.R. 502, a bill to reauthorize the Land and Water Conservation Fund that has 211 bipartisan cosponsors, but has not been granted a hearing by Natural Resources Committee Chairman Rob Bishop. Last week, Grijalva and former Congressional Sportsmen's Caucus Chairman Mike Thompson (D-Calif.) introduced H.R. 4489, the Authorizing Critical Conservation for Sportsmen and Sportswomen (ACCESS) Act. ACCESS includes a host of titles with bipartisan support that are priorities for the sporting community and leaves out the anti-conservation and anti-gun safety provisions that sank Republicans' heavily partisan SHARE Act earlier this year.

# # #

Keisha Sedlacek

Senior Regulatory Specialist, Federal Affairs

Humane Society Legislative Fund

1255 23rd Street, NW, Suite 455

Washington, DC 20037

T: 202-955-3661

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November 24, 2017

Mr. Joshua Winchell
Council Designated Federal Officer
U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3803
joshua_winchell@fws.gov

Mr. Timothy Van Norman
Chief, Branch of Permits
U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041

Re: Comments Opposing the Establishment of an International Wildlife Conservation Council (Docket No. FWS-HQ-R-2017-N118)

Dear Mr. Winchell and Chief Van Norman,

The Humane Society of the United States ("HSUS"), Humane Society International ("HSI"), Humane Society Legislative Fund ("HSLF"), and the twenty-two undersigned organizations strongly urge the U.S. Fish and Wildlife Service ("Service") not to establish the euphemistically-named International Wildlife Conservation Council ("IWCC"), as establishing the IWCC as proposed would violate the Federal Advisory Committee Act ("FACA", 5 U.S.C. App. 2) and would be arbitrary and capricious and not in accordance with law. *See* 82 Fed. Reg. 51,857 (Nov. 8, 2017).

The Service Proposes to Create a Duplicative and Biased Advisory Council

The Service is proposing to establish the IWCC for the purpose of "**increasing public awareness** domestically regarding the **conservation**, wildlife law enforcement, and **economic benefits that result from U.S. citizens traveling to foreign nations to engage in hunting**. Additionally, the Council shall **advise the Secretary on the benefits international hunting** has on foreign wildlife and habitat conservation, anti-poaching and illegal wildlife trafficking programs, and other ways in which international hunting benefits human populations in these areas." *Id.* (emphasis added).

The duties of the IWCC would include:

- developing a plan for public engagement and education on the benefits of international hunting;
- reviewing and making recommendations for changes, when needed, on all Federal programs, and/or regulations, to ensure support of hunting as: (a) An enhancement to foreign wildlife conservation and survival, and (b) an effective tool to combat illegal trafficking and poaching;
- recommending strategies to benefit the U.S. Fish and Wildlife Service's permit office in receiving timely country data and information so as to remove barriers that impact consulting with range states;
- recommending removal of barriers to the importation into the United States of legally hunted wildlife;
- ongoing review of import suspension/bans and providing recommendations that seek to resume the legal trade of those items, where appropriate;
- reviewing seizure and forfeiture actions/practices, and providing recommendations for regulations that will lead to a reduction of unwarranted actions;
- reviewing the Endangered Species Act's foreign listed species and interaction with the Convention on International Trade in Endangered Species of Wild Flora and Fauna [*sic*], with the goal of eliminating regulatory duplications; and
- recommending methods for streamlining/expediting the process of import permits.

Id.

As detailed herein, the IWCC is unnecessary, duplicative, not in the public interest, and designed to be inappropriately influenced by the trophy hunting industry in a manner that undermines the Service's statutory duties under the Endangered Species Act (16 U.S.C. § 1531 *et seq.*) and FACA. Therefore, the IWCC cannot lawfully be established.

Requirements for Establishing a Federal Advisory Committee

The FACA provides that "new advisory committees should be established only when they are determined to be essential and their number should be kept to the minimum necessary." 5 U.S.C. App. 2 § 2(b)(2). Further, "[n]o advisory committee shall be established unless such establishment is determined…to be in the public interest in connection with the performance of duties imposed on that agency by law." *Id.* § 9(a)(2). Advisory committees can only be used "solely for advisory functions" (*id.* § 9(b)) and must serve a "clearly defined purpose" (*id.* § 5(b)(1)). The membership of an advisory committee must "be fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee" (*id.* § 5(b)(2)), and must "not be inappropriately influenced by… any special interest" (*id.* § 5(b)(3)). Agency actions contrary to the requirements of FACA are subject to judicial review under the Administrative Procedure Act (APA). *See, e.g., Fertilizer Institute v. U.S. E.P.A.*, 938 F.Supp. 52, 54-55 (D.D.C., 1996)); 5 U.S.C. § 702. *See also Food Chem. News, Inc. v. Davis*, 378 F. Supp. 1048, 1049 (D.D.C. 1974) (enjoining agency from convening advisory committee meetings unless conducted in full compliance with FACA).

Establishing the IWCC Would Violate FACA

A. The IWCC Is Duplicative and Not Essential

The purpose of FACA is "to enhance the public accountability of advisory committees established by the Executive Branch and to reduce wasteful expenditures" that result only in "worthless committee meetings and biased proposals." *Pub. Citizen v. U.S. Dep't of Justice*, 491 U.S. 440, 453, 459 (1989). To this end, it is unlawful for FWS to establish an advisory committee that exceeds the minimum number of committees necessary or to establish a committee that is not needed to advance an agency's statutory duties and regulatory agenda. *See* 5 U.S.C. App. 2 § 2(b)(2). The IWCC wholly fails to meet these standards – indeed, the IWCC raises the precise concerns that FACA was designed to guard against.

Notably, there already exists an advisory council entitled the Wildlife and Hunting Heritage Conservation Council ("WHHCC"), which has the authority to address the matters included in the IWCC's proposed purview. *See* 75 Fed. Reg. 6,056 (Feb. 5, 2010); https://www.fws.gov/whhcc/. Like the IWCC, the WHHCC's mission explicitly includes providing "advice on wildlife and habitat conservation endeavors that (1) **benefit recreational hunting**; (2) benefit wildlife resources; and (3) encourage partnerships among the public, the sporting conservation community, wildlife conservation groups, the States, Native American Tribes, and the Federal government." 75 Fed. Reg. 6,056 (Feb. 5, 2010) (emphasis added). To achieve that goal of promoting recreational hunting, the WHHCC focuses in part on "Providing appropriate access to hunting and recreational shooting on Federal lands" and "Providing recommendations to improve implementation of Federal conservation programs that benefit wildlife, hunting and outdoor recreation on private lands." *Id.* Consistent with these broad purposes, the WHHCC has multiple times discussed and formed recommendations on international trophy hunting issues.

For example, in July 2012, the WHHCC sent a letter to the Service on behalf of "millions of hunters and anglers nationwide, including many who hunt internationally and seek to import and export their trophies into and out of the United States." (Attached). That letter included criticism of the process the Service uses to interpret and apply restrictions on the import and seizure of hunting trophies, and provided eight particular recommendations relating to "1) amendments to CITES resolutions and/or decision documents; 2) modifications to FWS manuals, policies, Directors' Orders, guidance documents and/or practices; and 3) coordinating efforts with representative organizations of the international hunting community." *Id.* Similarly, in July 2014, the WHHCC sent another letter to the Service, this time urging the Service to reverse its decision to suspend the import of elephant hunting trophies from Tanzania and Zimbabwe, noting the WHHCC's "efforts on behalf of the hunting community." (Attached). That latter letter followed a June 2014 meeting of the WHHCC where Safari Club International ("SCI") presented "updates on African Lion and Elephant" trophy hunting.[1] At its March 2016 meeting, WHHCC again discussed the topic of international trophy hunting, specifically focusing on African lion import issues and including a presentation from SCI.[2] These are the precise tasks identified

[1] https://www.facadatabase.gov/committee/historymeeting.aspx?mid=123631&cid=2299&fy=2014.
[2] https://www.facadatabase.gov/committee/historymeetingdocuments.aspx?flr=135324&cid=2299&fy=2016.

in the IWCC notice, demonstrating that there already exists a forum for trophy hunters to attempt to influence FWS policy on these matters.

Indeed, the WHCC currently includes members that represent international trophy hunting interests, such as the Congressional Sportsmen's Foundation.[3] The WHCC also currently includes representatives from the Boone & Crockett Club, Backcountry Hunters & Anglers, Ducks Unlimited de Mexico, and Urban American Outdoors, many of whose members trophy hunt in the U.S.—and likely abroad. Further, the IWCC seeks representation from "the firearms or ammunition manufacturing industry," but a representative from the National Shooting Sports Foundation – a national trade association for the firearms industry – already serves as a member of the WHCC. The incredibly slight differences in the membership these councils maintain/are seeking, demonstrate the duplicative nature of the IWCC.

Therefore, it would be wholly duplicative for the Service to establish the IWCC, whose proposed purpose and tasks are matters that can and are already being carried out by another advisory group.

Similarly, the Service has failed to demonstrate that establishing the IWCC is *essential*. For example, in 2013 the Service established a Wildlife Trafficking Advisory Council to combat issues of illicit wildlife trade and to improve enforcement of wildlife trade laws. 78 Fed. Reg. 45,555 (Jul. 29, 2013). That committee discussed issues of international trophy hunting as a type of wildlife trade.[4] However, that advisory council was deemed inessential and discontinued pursuant to Executive Order No. 13811 (September 29, 2017).[5] It is arbitrary and capricious for the Service to now establish the IWCC to take on activities that were previously covered by the Wildlife Trafficking Advisory Council, which was deemed unnecessary by this Administration. Further, the duplicative nature of the IWCC is further demonstrated by the fact that the IWCC would include a representative from the U.S. Department of State – the Presidential Task Force on Wildlife Trafficking established pursuant to Executive Order No. 13,648 (July 1, 2013) already provides a forum for the Service and the State Department to discuss issues of international wildlife trade, including trade in hunting trophies.

Thus, there are already multiple fora for detailed discussion of the issues the IWCC is tasked with providing advice to the Service on, meaning that establishing the IWCC is not essential, as required by law. This is especially true given the broader statutory context, as discussed further below – the Endangered Species Act already provides the opportunity for the trophy hunting industry to submit applications for import permits that demonstrate the alleged benefit of trophy hunting and to submit comments on other permit applications and foreign species listing petitions. *See* 16 U.S.C. § 1539(c). Thus, there is no functional need

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[3] *See, e.g.,* Congressional Sportsmen's Foundation. Press Release. Aug. 7, 2013. *Sportsmen's Priorities Moving in Congress* (supporting bill allowing import of polar bear trophies hunted in Canada), http://sportsmenslink.org/the-media-room/news/sportsmens-priorities-moving-in-congress.

[4] *See* https://www.fws.gov/International/advisory-council-wildlife-trafficking/pdf/acwt-meeting-minutes-march-20.pdf.

[5] *See* https://www.whitehouse.gov/the-press-office/2017/09/29/presidential-executive-order-continuance-certain-federal-advisory.

for an advisory committee dedicated to promoting propaganda of the trophy hunting industry.

Because the IWCC is per se inessential and duplicative, chartering the IWCC would violate FACA.

B. The IWCC Is Not in the Public Interest

Chartering the IWCC would further violate FACA because its purpose is inconsistent with the public interest and the "performance of duties imposed on [the Service] by law." 5 U.S.C. App. § 9(a)(2).

The primary stated purpose of the IWCC is to *promote* trophy hunting of foreign species and to relax the legal restrictions for importing trophies of threatened and endangered species, accepting as incontrovertible fact the notion that trophy hunting promotes the conservation of wildlife species. However, this is a highly controversial and hotly debated topic, with ample scientific evidence to the contrary, and the notice of IWCC creation patently reveals the biased and unsupported positions that the council would advance.

The FACA was specifically adopted to avoid such a circumstance. *See, e.g., Moss v. C.A.B.*, 430 F.2d 891, 893 (1970) (when the "subject matter of" a FACA council's "involve[s] serious and much-debated…issues…[t]he Government's consideration of such sensitive issues must not be unduly weighted by input from the private commercial sector, lest the Government fall victim to the devastating harm of being regulated by those whom the Government is supposed to regulate in the public interest."); H.R. REP. 92-1017, 1972 U.S.C.C.A.N. 3491, 3496 ("One of the great dangers in th[e] unregulated use of advisory committees is that special interest groups may use their membership on such bodies to promote their private concerns. Testimony received [on the passage of the FACA] pointed out the danger of allowing special interest groups to exercise undue influence upon the Government through the dominance of advisory committees which deal with matters in which they have vested interests.").

Thus, forming the IWCC as proposed would be unlawful.

1. Trophy hunting undermines conservation efforts

As detailed in numerous documents in the Service's possession (*e.g.*, petitions to list African lions, elephants, and leopards as endangered under the ESA; letters submitted with respect to the import of lions and elephants from Tanzania, Zimbabwe, Zambia, and South Africa, as well as the expert declarations in support thereof; and comments opposing the import of endangered bontebok, cape mountain zebra, and black rhinoceros trophies, attached), there is ample scientific evidence that trophy hunting of threatened and endangered species does not in fact enhance the survival of the species in the wild. With respect to three of the so-called "Big Five" species targeted by trophy hunters, a summary of that evidence is as follows.

Trophy Hunting of African Lions

With the world's preeminent lion scientist as the lead author, Packer et al. (2009)[6] and Packer et al. (2010)[7] identify trophy hunting as the likely cause of multiple lion population declines in Africa.[8] In addition to direct population reduction through lethal take, trophy hunting poses a threat to lions because it can weaken a population's genetic constitution (e.g. Allendorf et al. 2008[9]). Because hunters target the biggest and strongest males, trophy hunting removes these animals from the breeding pool and unnaturally selects for smaller or weaker animals (Allendorf and Hard, 2009[10]). In this way, trophy hunting can decrease genetic variation, shift the population structure, and cause unnatural evolutionary impacts. This effect has already been documented in other species. For example, selective hunting likely increased the occurrence of mature female African elephants (*Loxodonta africana*) lacking tusks from 10% to 38% in parts of Zambia over 20 years (Jachmann et al. 1995[11]), and recent studies of bighorn sheep suggest that horn size and body weight decreased over time as a result of trophy hunting (e.g. Coltman et al., 2003[12]; Festa-Bianchet et al., 2013[13]). Further, when trophy hunting is sanctioned, poaching activity increases, likely due to the perception that species authorized for hunting are of diminished value and the perception that legal killing increases the acceptability of poaching.[14] Moreover, trophy hunting of lions has cascading lethal impacts on lion populations, as the social instability created by removing dominant males leads to infanticide of cubs sired by the male killed for a trophy (Packer et al. 2009).

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[6] Packer, C., Kosmala, M., Cooley, H.S., Brink, H., Pintea, L., Garshelis, D., Purchase, G., Strauss, M., Swanson, A., Balme, G., Hunter, L., and Nowell, K. (2009). Sport Hunting, Predator Control and Conservation of Large Carnivores. *PLoS ONE, 4*(6): e5941. DOI:10.1371/journal.pone.0005941

[7] Packer, C., Brink, H., Kissui, B.M., Maliti, H., Kushnir, H., and Caro, T. (2010) Effects of trophy hunting on lion and leopard populations in Tanzania. *Conservation Biology, 25,* 142–153.

[8] *See also* Bauer H, Henschel P, Packer C, Sillero-Zubiri C, Chardonnet B, Sogbohossou EA, et al. (2017) Lion trophy hunting in West Africa: A response to Bouché et al. PLoS ONE12(3): e0173691. https://doi.org/10.1371/journal.pone.0173691.

[9] Allendorf, F.W., England, P.R., Luikart, G., Ritchie, P.A., and Ryman, N. (2008). Genetic effects of harvest on wild animal populations. *Trends in Ecology and Evolution, 23,* 327-337. doi:10.1016/j.tree.2008.02.008

[10] Allendorf, F.W. and Hard, J.J. (2009). Human-induced evolution caused by unnatural selection through harvest of wild animals. *Proceedings of the National Academy of Sciences of the United States of America, 106*, 9987-9994. *See also* Coltman, D. W., et al. (2003). Undesirable evolutionary consequences of trophy hunting. *Nature* 426(6967): 655-658.; Palazy, L., et al. (2012). Rarity, trophy hunting and ungulates. *Animal Conservation* 15(1): 4-11.; Darimont, C. T., et al. (2015). The unique ecology of human predators. *Science* 349(6250): 858-860.

[11] Jachmann, H., Berry, P.S.M., and Imae, H. (1995). Tusklessness in African Elephants: a future trend. *African Journal of Ecology*, *33,* 230-235. DOI: 10.1111/j.1365-2028.1995.tb00800.x

[12] Coltman, D.W., O'Donoghue, P., Jorgenson, J.T., Hogg, J.T., Strobeck, C., and Festa-Bianchet, M. (2003). Undesirable evolutionary consequences of trophy hunting. *Nature*, *426,* 655-658. doi:10.1038/nature02177

[13] Festa-Bianchet, M., Pelletier, F., Jorgenson, J.T., Feder, C., and Hubbs, A. (2013). Decrease in Horn Size and Increase in Age of Trophy Sheep in Alberta Over 37 Years. *Journal of Wildlife Management*, *78*, 133-141.

[14] Chapron, G. and Treves, A., *Blood does not buy goodwill: allowing culling increases poaching of a large carnivore*, Proc. R. Soc. B 283 (2016), http://dx.doi.org/10.1098/rspb.2015.2939.

Lion scientists have produced a steady drumbeat of warnings that trophy hunting across African range states is unsustainable and is a threat to survival of the species:

African Continent:

- Rosenblatt (2014)[15]: "…overharvesting of lions has been well-documented throughout Africa", recognize trophy hunting as one of the reasons for the decline of the lion throughout its range.
- Hunter et al. (2014)[16]: "there is considerable scientific evidence of negative population impacts associated with poorly-managed trophy hunting of lions." The authors state "there have been documented negative impact on lion populations resulting from trophy hunting" and call for lion trophy hunting reform.
- Lindsey et al. (2013)[17] stated that, regarding the recent decline of lion populations, "Most of the factors that contribute to this decline are now well understood, although evidence of the impacts of trophy hunting on lions has only emerged relatively recently." The authors also state, "lion quotas remain higher than the 0.5/1,000 km2 recommended by [Packer et al. (2011)] in all countries except Mozambique" and "in all countries where data are available, harvests appear too high in a proportion of hunting blocks."

Zambia:

- Rosenblatt et al. (2014): found a declining lion population in South Luangwa National Park with low recruitment, low sub-adult and adult survivorship, depletion of adult males and an aging adult female population and attributed this to the "severe male depletion" caused by trophy hunting.
- Lindsey et al. (2014)[18]: numerous problems identified with trophy hunting in Zambia including that the Zambia Wildlife Authority establishes trophy quotas arbitrarily and "quotas of lions have been particularly excessive".
- Lindsey et al. (2013): "Excessive offtake from trophy hunting also lowered population density of lions and altered sex-ratios of lions in Hwange National Park, Zimbabwe, South Luangwa, Kafue and Lower Zambezi national parks in Zambia, and the Bénoué Complex in Cameroon." The authors also said that mean lion harvests are higher than Packer et al. (2011) 0.5/1,000 km^2 threshold in Zambia.

Tanzania:

- Dolrenry et al. (2014)[19]: populations in Tanzania are declining in part due to "overexploitation due to poor management of trophy hunting".

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[15] Rosenblatt, E., Becker, M. S., Creel, S., Droge, E., Mweetwa, T., Schuette, P. A., & Mwape, H. (2014). Detecting declines of apex carnivores and evaluating their causes: An example with Zambian lions. *Biological Conservation*, 180, 176-186.

[16] Hunter, L., Lindsey, P., Balme, G., Becker, M., Begg, C., Brink, H. …White, P., Whitman-Gelatt, K. (2014). Urgent and comprehensive reform of trophy hunting of lions is a better option than an endangered listing; a science-based consenus [sic]. Unpublished.

[17] Lindsey, P. A., Balme, G. A., Funston, P., Henschel, P., Hunter, L., Madzikanda, H., ... & Nyirenda, V. (2013). The trophy hunting of African lions: Scale, current management practices and factors undermining sustainability. PloS one, 8(9), e73808.

[18] Lindsey, P. A., Nyirenda, V. R., Barnes, J. I., Becker, M. S., McRobb, R., Tambling, C. J., ... & t'Sas-Rolfes, M. (2014). Underperformance of African Protected Area Networks and the Case for New Conservation Models: Insights from Zambia. *PloS one*, *9*(5), e94109.

- Lindsey et al. (2013): "Trophy hunting has contributed to population declines outside (and inside some) protected areas in Tanzania, a country that holds between 30-50% of Africa's lion."

Zimbabwe:

- Groom et al. (2014)[20]: the low densities of lion populations in Gonarezhou National Park and trophy hunting concessions in Tuli are due to the collapse of these populations in the past due to "unsustainably high trophy hunting within Tuli and in the concessions around Gonarezhou …." The authors concluded, "hunting has probably had a strong negative effect on lion abundance in both reserves."
- Lindsey et al. (2013): "Excessive offtake from trophy hunting also lowered population density of lions and altered sex-ratios of lions in Hwange National Park, Zimbabwe, South Luangwa, Kafue and Lower Zambezi national parks in Zambia, and the Bénoué Complex in Cameroon."
- Lindsey et al. (2013): mean lion harvests are higher than Packer et al. (2011) 0.5/1,000 km^2 threshold in Zimbabwe.

Namibia:

- Lindsey et al. (2013): mean lion harvests are higher than Packer et al. (2011) 0.5/1,000 km^2 threshold in Namibia.

Cameroon:

- Lindsey et al. (2013): "Excessive offtake from trophy hunting also lowered population density of lions and altered sex-ratios of lions in Hwange National Park, Zimbabwe, South Luangwa, Kafue and Lower Zambezi national parks in Zambia, and the Bénoué Complex in Cameroon."

Burkina Faso:

- Lindsey et al. (2013): mean lion harvests are higher than Packer et al. (2011) 0.5/1,000 km2 threshold in Burkina Faso.

Benin:

- Sogbohossou et al. (2014)[21]: the low lion density and small group size found in Pendjari Biosphere Reserve in Benin is due to human disturbance and mortality through trophy hunting, the Pendjari lion hunting quota is three times higher than recommended by Packer et al. (2011), and the existing age limit for 'old males' is not enforced.

Trophy Hunting of African Elephants

Similarly, trophy hunting is documented to undermine the conservation of African elephants. As explained in a recent scientific study, range states from which the Service

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[19] S. Dolrenry, J. Stenglein, L. Hazzah, R.S. Lutz, and L. Frank (2014). A metapopulation approach to African lion (*Panthera leo*) conservation. Plos One 9 (2), e88081.

[20] R.J. Groom, P.J. Funston and R. Mandisodza (2014). Surveys of lions Panthera leo in protected areas in Zimbabwe yield disturbing results: what is driving the population collapse? Oryx 2014: 1-9.

[21] Sogbohossou, E. A., Bauer, H., Loveridge, A., Funston, P. J., De Snoo, G. R., Sinsin, B., & De Iongh, H. H. (2014). Social Structure of Lions (*Panthera leo*) Is Affected by Management in Pendjari Biosphere Reserve, Benin. *PloS one*, *9*(1), e84674.

currently allows trophy imports (such as South Africa) may be setting unsustainably high hunting quotas: in the Greater Mapungubwe Transfrontier Conservation Area scientists found that, in contrast to current hunting allowances, "only a small number of bulls (<10/year) could be hunted sustainably. At current rates of hunting, under average ecological conditions, trophy bulls will disappear from the population in less than 10 years."[22]

Researchers have found that the selective nature of trophy hunting causes changes in desirable phenotypic traits in harvested species. In particular, trophy sizes for wild herbivores experienced temporal decline in South Africa and Tanzania. "Declines in trophy size over time due to selective harvesting could be attributed to phenotypic plasticity that may result due to a decline in abundance of big tuskers and individuals with big horns or tusks as these are mostly selected by hunters."[23] Again, because hunters target the biggest and strongest male elephants, trophy hunting removes these animals from the breeding pool and unnaturally selects for smaller or weaker animals.[24] In this way, trophy hunting can decrease genetic variation, shift the population structure, and cause unnatural evolutionary impacts. For example, selective hunting likely increased the occurrence of mature female African elephants (*Loxodonta africana*) lacking tusks from 10% to 38% in parts of Zambia over 20 years.[25] Additionally, trophy hunting has been shown to disrupt family groups and social stability, negatively impacting elephant survival.[26]

Another study reviewed the functioning of Zambia's protected areas and game management areas (GMAs), where trophy hunting occurs.[27] The authors found numerous problems that pertain to management of trophy hunting in GMAs including: uncontrolled human immigration and open access to wildlife; the Zambia Wildlife Authority (ZAWA) retains most of income derived from trophy hunting, little of this income goes to people living in GMAs with affluent community members benefiting most, and there are frequent financial

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[22] S. Selier et al. (2014), Sustainability of elephant hunting across international borders in southern Africa: A case study of the greater Mapungubwe Transfrontier Conservation Area. The Journal of Wildlife Management, 78: 122–132. http://www.researchgate.net/publication/259539652_Sustainability_of_elephant_hunting_across_international_borders_in_southern_Africa_A_case_study_of_the_greater_Mapungubwe_Transfrontier_Conservation_Area.

[23] Muposhi VK, Gandiwa E, Bartels P, Makuza SM, Madiri TH, *Trophy Hunting and Sustainability: Temporal Dynamics in Trophy Quality and Harvesting Patterns of Wild Herbivores in a Tropical Semi-Arid Savanna Ecosystem*, PLoS ONE 11(10) (2016), http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0164429.

[24] Allendorf, F.W. and Hard, J.J. (2009). Human-induced evolution caused by unnatural selection through harvest of wild animals. *Proceedings of the National Academy of Sciences of the United States of America, 106*, 9987-9994.

[25] Jachmann, H., Berry, P.S.M., and Imae, H. (1995). Tusklessness in African Elephants: a future trend. *African Journal of Ecology*, *33,* 230-235. DOI: 10.1111/j.1365-2028.1995.tb00800.x

[26] Milner J.M., Nielsen E.B., Andreassen HP, *Demographic side effects of selective hunting in ungulates and carnivores*, Conservation Biology Vol. 21:36-47 (2007), doi: 10.1111/j.1523-1739.2006.00591.x ("Such selective harvesting can destabilize social structures and the dominance hierarchy and may cause loss of social knowledge, sexually selected infanticide, habitat changes among reproductive females, and changes in offspring sex ratio.")

[27] Lindsey, P. A., Nyirenda, V. R., Barnes, J. I., Becker, M. S., McRobb, R., Tambling, C. J., ... & t'Sas-Rolfes, M. (2014). Underperformance of African Protected Area Networks and the Case for New Conservation Models: Insights from Zambia. *PloS one*, *9*(5), e94109.

irregularities associated with the distribution of this income; scouts employed in anti-poaching in GMAs are poorly and irregularly paid, insufficiently trained and equipped, and inadequate in number; ZAWA is poorly funded, has an inadequate number of staff to protect elephants against poaching, has increased hunting quotas to unsustainable levels in GMAs in order to raise money (the authors state that ZAWA 'are sometimes forced to make decisions to achieve financial survival at the expense of the wildlife they are mandated to conserve'), establishes trophy quotas arbitrarily, and does not monitor wildlife populations or trophies; and hunting concession agreements are not effectively enforced and unscrupulous concession operators are not adequately punished. The authors blame these many failures for the low numbers and diversity of wildlife, including elephants.

Thus, it is not surprising that elephant densities are lower in trophy hunting areas compared to a national park where trophy hunting is not permitted.[28] The Service itself acknowledged such impacts in 2014 when it suspended the issuance of elephant trophy imports from Tanzania and Zimbabwe.[29]

The Service has previously rejected attempts to import trophies from Zambia due to similar concerns of mismanagement including inconsistencies in reported elephant population estimates, failure to comply with monitoring requirements, absence of government funding for elephant protection, and lack of effective anti-poaching measures.[30] Further, the Service has not made enhancement findings for elephant trophy imports from either Mozambique or Cameroon even though elephant trophy hunting is allowed there.[31]

Trophy Hunting of African Leopards

Balme et al. (2010)[32] demonstrated the impact of trophy hunting on infanticide in a population of leopards in South Africa; high trophy hunting offtake resulted in particularly high male leopard mortality and high levels of male turnover; females cannot successfully raise cubs because of immigration into the population of new males; the consequences were low cub survival rates, delayed age at first parturition, reduced conception rates, and low annual litter production; the combined impact of high mortality and low reproductive

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[28] Crosmary, W. G., S. D. Cote, and H. Fritz. (2015). Does trophy hunting matter to long-term population trends in African herbivores of different dietary guilds?. Animal Conservation, 18, 117-130.

[29] *See* 80 Fed. Reg. 42524 (July 17, 2015); 79 Fed. Reg. 44459 (July 31, 2014) ("Without management plans with specific goals and actions that are measurable and reports on the progress of meeting these goals, the Service cannot determine if…Zimbabwe is implementing, on a national scale, appropriate management measures for its elephant populations."). Note that the Service's November 2017 decision to reverse this suspension was put "on hold" by President Trump and Secretary Zinke on November 17, 2017.

[30] *See Marcum v. Salazar*, 810 F.Supp.2d 56, 63 (D.D.C. 2011); *Marcum v. Salazar*, 694 F.3d 123 (D.C.Cir. 2012). Note that the Service's November 2017 decision to allow elephant trophy imports from Zambia was put "on hold" by President Trump and Secretary Zinke on November 17, 2017.

[31] *See* https://www.fws.gov/international/permits/by-activity/sport-hunted-trophies-elephants.html.

[32] Balme, G.A., Hunter, L.T., Goodman, P., Ferguson, H., Craigie, J. and Slotow, R., 2010. An adaptive management approach to trophy hunting of leopards *Panthera pardus*: a case study from KwaZulu-Natal, South Africa. *Biology and conservation of wild felids. Oxford University Press, Oxford*, pp.341-352. *See also* Braczkowski, A. R., et al. (2015). Who Bites the Bullet First? The Susceptibility of Leopards Panthera pardus to Trophy Hunting. *PLOS ONE* 10(4).

output led to a negative population growth rate. Further, the 2016 IUCN assessment for *Panthera pardus* specifically notes that "concern about unsustainable trophy hunting has lately increased" and cites studies concretely demonstrating that "trophy hunting was a key driver of Leopard population decline" (Stein et al. 2016).[33]

Moreover, few of the potential benefits from hunting are consistently realized by local communities that live amongst lions, elephants, leopards, and other species targeted by trophy hunters. According to an IUCN analysis from 2009, big-game hunting only provided one job for every 10,000 inhabitants in the area studied,[34] and many of these jobs were temporary seasonal positions like opening the trails at the start of the hunting season (IUCN 2009[35]). Trophy hunting fails to create a significant number of permanent jobs (and those that it does create do not automatically benefit conservation), but ecotourism offers a possible solution. Consider the Okavango in Botswana where, as of 2009, a safari ecotourism tourism park provided 39 times the number of jobs than would big-game hunting on an area of equal size (IUCN 2009). Another example is the Luangwa National Park in Zambia, which produced twice the number of jobs provided by Benin and Burkina Faso's trophy hunting sector combined in 2007 (IUCN 2009).

The IUCN also found that Africa's 11 main big-game hunting countries only contributed an average of 0.6% to the national GDP as of 2009 (IUCN 2009). Of this marginal profit, studies suggest that as little as 3-5% of trophy hunting revenues are actually shared with local communities (Economists at Large 2013[36]; IUCN 2009; Sachedina 2008[37]). Perhaps because of this, locals do not always view trophy hunting as the positive economic driver that hunting advocates portray it as. For example, villagers in Emboreet village in Tanzania characterized hunting as "destructive, exploitative, and disempowering," and blame hunting for jeopardizing village revenues (Sachedina 2008). The same study presents an interview with the Village Executive Officer, who explained that villagers feel more closely partnered with photographic tour operators than with hunters because hunters "are finishing off the wildlife before we've had a chance to realize a profit from it," and because villagers never see the 5% of revenue they are supposed to receive from trophy hunting (Sachedina 2008).

A 2017 report from Economists at Large[38] found that in Botswana (where trophy hunting is now prohibited since 2014), Ethiopia, Mozambique, Namibia, South Africa, Tanzania,

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[33] Stein, A.B., Athreya, V., Gerngross, P., Balme, G., Henschel, P., Karanth, U., Miquelle, D., Rostro, S., Kamler, J.F. and Laguardia, A. 2016. *Panthera pardus*. The IUCN Red List of Threatened Species 2016: e.T15954A50659089. Downloaded on 11 July 2016. http://www.iucnredlist.org/details/full/15954/0

[34] South Africa, Namibia, Tanzania, Botswana, Cameroon, Central African Republic, Burkina, and Benin.

[35] IUCN. (2009). Programme Afrique Centrale et Occidentale. Big Game Hunting in West Africa. What is its contribution to conservation?

[36] Economists at Large. (2013). The $200 million question: How much does trophy hunting really contribute to African communities? A report for the African Lion Coalition, prepared by Economists at Large, Melbourne, Australia.

[37] Sachedina, H.T. 2008. "Wildlife Is Our Oil: Conservation, Livelihoods and NGOs in the Tarangire Ecosystem, Tanzania." University of Oxford. PhD. Thesis.

[38] Economists at Large. (2017). The Lion's Share? On The Economic Benefits Of Trophy Hunting. A report for the Humane Society International, prepared by Economists at Large, Melbourne,

Zambia and Zimbabwe, trophy hunting brings in less than $132 million in tourism spending to the eight study countries out of $17 billion annual tourism spending, or just 0.78 percent. And trophy hunting has only a marginal impact on employment in these eight countries, contributing only between 7,500-15,500 jobs or 0.76 percent or less of nearly 2.6 million overall tourism jobs.

On average, American trophy hunters import more than 126,000 trophies every year.[39] While not all of these species are protected under the U.S. Endangered Species Act, it is an unfounded and sweeping generalization to assert that trophy hunting always provides a biological or economic benefit to the conservation of the species, as asserted in the IWCC notice. Therefore, an advisory council designed solely to *educate* the public on the *benefits* of trophy hunting is not in the public interest, as those alleged benefits are not supported by the best available science. Nor is that conclusion supported by the American public – indeed, in the last week alone, over 435,121 members of the public have voiced their opposition to American trophy hunters killing African lions and elephants threatened with extinction, and nearly 2 million people worldwide have taken action in opposition to elephant trophy hunting in another call to action.[40]

2. Using taxpayer dollars to promote the commercial interests of trophy hunting industry is not in the public interest

The purpose of the FACA is "to eliminate useless advisory committees, strengthen independence of remaining advisory committees, and prevent advisory groups from becoming self-serving." *Consumers Union of U.S., Inc. v. Department of Health, Ed. and Welfare*, 409 F.Supp. 473, affirmed 551 F.2d 466 (D.D.C.1976). Establishing the IWCC would require the Service to expend resources on convening and participating in the council, unnecessarily diverting resources from an already strapped agency. Indeed, the Fiscal Year 2018 budget proposes to decrease funds spent on foreign species protection by $1,000,000.[41] To use precious agency resources to create a self-serving platform for trophy hunters to amplify their voice, especially while funds are already provided for other FACA advisory committees addressing these same topics, does not meet the FACA requirements for actions in the public interest.

Therefore, the IWCC is not in the public interest and cannot be lawfully chartered.

C. The IWCC Is Designed to Undermine the Implementation of the ESA and the Service's Other Legal Obligations

The IWCC represents an effort by a commercial industry to undermine the statutory duties of an agency, and as such the establishment of the IWCC would be patently *ultra vires*.

Australia.

[39] http://www.hsi.org/assets/pdfs/report_trophy_hunting_by_the.pdf; http://www.hsi.org/assets/pdfs/trophy-madness-report.pdf; http://www.ifaw.org/sites/default/files/IFAW_TrophyHuntingReport_UK_v2.pdf.

[40] https://www.thepetitionsite.com/takeaction/721/417/558/; https://secure.avaaz.org/campaign/fr/trump_vs_elephants/.

[41] https://www.fws.gov/budget/2018/FY2018-FWS-Greenbook.pdf

As an initial matter (and to be discussed further in comments submitted on or before December 8, 2017), the proposed makeup of the IWCC is inherently biased – it would include up to eighteen members who represent "Wildlife and habitat conservation/management organizations; U.S. hunters actively engaged in international and/or domestic hunting conservation; The firearms or ammunition manufacturing industry; Archery and/or hunting sports industry; and Tourism, outfitter, and/or guide industries related to international hunting." There is no suggestion that objective conservation biologists will be invited to have a roll on this committee that would make recommendations on the management of threatened and endangered species. Indeed, even the reference to participation by conservation and management organizations is so vague that it could even include biased groups like Safari Club International/Safari Club International Foundation or the National Rifle Association, groups that have filed lawsuits against the Service to assert the interests they now seek to address via the IWCC.

The IWCC is inherently designed to allow the trophy hunting industry to have an amplified voice, with an air of formality, on the question of whether killing threatened and endangered species enhances the survival of the species as required under the Endangered Species Act. 16 U.S.C. § 1539(a)(1)(A); 50 C.F.R. § 17.40. Specifically, the IWCC would be charged with:

- recommending removal of barriers to the importation into the United States of legally hunted wildlife;
- ongoing review of import suspension/bans and providing recommendations that seek to resume the legal trade of those items, where appropriate;
- reviewing seizure and forfeiture actions/practices, and providing recommendations for regulations that will lead to a reduction of unwarranted actions;
- reviewing the Endangered Species Act's foreign listed species and interaction with the Convention on International Trade in Endangered Species of Wild Flora and Fauna [*sic*], with the goal of eliminating regulatory duplications; and
- recommending methods for streamlining/expediting the process of import permits."

The ESA mandates that the Service itself make enhancement findings and determine whether listing a species is warranted, and these are not tasks that can be delegated to the regulated industry. 16 U.S.C. §§ 1533, 1539. Indeed, even without the creation of the IWCC the trophy hunting industry has had undue influence on such decisions of the Service, as evidenced by the fact that Safari Club International announced the recent decisions to allow elephant trophy imports from Zimbabwe and Zambia before such findings were even announced by the Service[42] (and before such announcements were called into question by the President).[43]

The IWCC would also apparently take on "recommending strategies to benefit the U.S. Fish and Wildlife Service's permit office in receiving timely country data and information so as to remove barriers that impact consulting with range states." But it would be inappropriate

[42] https://www.safariclub.org/detail/news/2017/11/14/u.s.-now-allows-elephants-from-zimbabwe-zambia-to-be-imported?from=groupmessage&isappinstalled=0

[43] Statement of President Trump, Nov. 17, 2017 at 8:47 pm, https://twitter.com/realDonaldTrump/status/931685146415255552; Statement of President Trump, Nov. 19, 2017 at 6:57 pm, https://twitter.com/realDonaldTrump/status/932397369655808001.

for such bilateral governmental discussions to be mediated by a third party with a financial stake in affecting the outcome of those communications. It is clear that the trophy hunting industry is aiming to minimize the impact of the ESA (indeed, they are currently arguing both in federal court[44] and before Congress that the ESA should add no more protections than what exists under CITES, even though that treaty explicitly calls for member countries to adopt national measures[45]). The IWCC would give the regulated industry a special seat at the table, to the disadvantage of conservation and animal protection groups seeking to prevent species extinction in furtherance of the statutory mandate of the ESA.

With the establishment of the ESA, Congress created "a program for the conservation of such endangered species and threatened species" and mandated federal agencies to "utilize their authorities in furtherance of the purposes of" the ESA by committing "to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction . . ." 16 U.S.C. § 1531(a)(4), (b), (c)(1). The ESA defines the term "conserve" to mean "to use all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to [the Act] are no longer necessary." 16 U.S.C. § 1532(3). It is critical that any decisions to list species or allow imports of listed species are made based on the best available science, not pursuant to the commercial interests of the trophy hunting industry as envisioned by the IWCC.

Likewise, the IWCC would be charged with reviewing ESA listed and CITES listed species. Again, the criteria for listing species (or delisting them as the case may be) in either arena are specifically inscribed. Under the ESA, species listings/delisting are reviewed using five factors and decisions are made "solely on the basis of the best scientific and commercial data," 16 U.S.C. § 1533(b)(1)(A), and CITES uses the best information available and specific biological criteria and reliance upon the precautionary principle that the Parties to CITES act in "best interest of the conservation of the species." Res. Conf. 9.24 (Rev'd CoP17). Consideration of species listing proposals is done through a public process and by the agency, a FACA committee is unnecessary and risks abdicating the Service's responsibilities.

Equally concerning, is the IWCC delineated duty to "review[] seizure and forfeiture actions/ practices." 82 Fed. Reg. at 51,858. Seizure and forfeiture actions are entirely within the Service's prosecutorial discretion – an arena in which courts generally do not tread. *See Heckler v. Chaney*, 470 U.S. 821 (1985) (finding agencies have unreviewable prosecutorial discretion unless a statute or agency policy says otherwise). It is difficult to imagine how a FACA committee could "review" what a federal court may not.

---

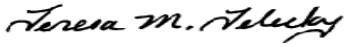
[44] *SCI et al. v. Zinke*, Case No. 1:14-cv-00670-RCL (D.D.C. 2017).

[45] This international law sets the floor, expressly providing that parties may adopt "stricter domestic measures" for species covered by CITES (as well as those that are not). CITES, Art. XIV, para. 1. *See also* FWS, *Ensuring the Future of the Black Rhino* (Nov. 25, 2014), *at* http://www.fws.gov/news/blog/index.cfm/2014/11/25/Ensuring-the-Future-of-the-Black-Rhino (acknowledging that the ESA enhancement standard is in addition to the CITES non-detriment standard and that trophy import permits should only be issued if the Service finds "that the [animal] is taken as part of a well-managed conservation program that contributes to the long-term survival of the species").

Therefore, the establishment of the IWCC is not in accordance with either the FACA or the ESA and must not be finalized. If the IWCC is finalized, HSUS, HSI, and one or more of the undersigned organizations will consider seeking legal review of this unlawful agency action. We will submit separate comments on the composition of the IWCC on or before December 8, 2017.

Sincerely,

Anna Frostic
Managing Attorney, Wildlife Litigation
The Humane Society of the United States



Teresa M. Telecky, Ph.D.
Senior Director, Wildlife Department
Humane Society International

Keisha Sedlacek
Senior Regulatory Specialist, Federal Affairs
Humane Society Legislative Fund

<u>On behalf of the following organizations</u>:

Animal Defenders International
Animal Welfare Institute
Animals Asia Foundation
Annamiticus
Big Cat Rescue
Center for Biological Diversity
Cetacean Society International
EMS Foundation
Environmental Investigation Agency
Fondation Brigitte Bardot
FOUR PAWS International
Japan Tiger and Elephant Fund
Lilongwe Wildlife Trust
Natural Resources Defense Council
One More Generation
Pegasus Foundation
Pettus Crowe Foundation
Pro Wildlife
Rainbow Eco-Farm and Training Center (South Africa)
Shark Research Institute
The Pan African Sanctuary Alliance
World Animal Protection

Conversation Contents

Fwd: Interview request from the New York Times

Craig Hoover <craig_hoover@fws.gov>

From:	Craig Hoover <craig_hoover@fws.gov>
Sent:	Mon Dec 04 2017 14:01:29 GMT-0700 (MST)
To:	Greg Sheehan (b) (6) @fws.gov>, zack_gambill@fws.gov
Subject:	Fwd: Interview request from the New York Times

Sent from my iPhone

Begin forwarded message:

From: Rachel Nuwer <rachelnuwer@gmail.com>
Date: December 4, 2017 at 3:56:24 PM EST
To: Gavin Shire <gavin_shire@fws.gov>, "Hoover, Craig" <craig_hoover@fws.gov>
Subject: Re: Interview request from the New York Times

Story just went up online: http://nyti.ms/2ihMGXe

On Thu, Nov 30, 2017 at 7:00 PM, Gavin Shire <gavin_shire@fws.gov> wrote:

> Both
>
> G
>
> Sent from my iPhone
>
> On Nov 30, 2017, at 6:58 PM, Rachel Nuwer <rachelnuwer@gmail.com> wrote:
>
> > Hi Gavin,
> >
> > Could you help clarify one thing for me? I'm confused about whether the memorandum and/or announcement pertained solely to Zimbabwe or to both Zim and Zambia? Basically, I need to ensure that this sentence reads correctly: "The United States Fish and Wildlife Service last month moved to allow elephant hunters to bring home trophies from animals killed in Zimbabwe [AND ZAMBIA?]."
> >
> > Thank you
> > Rachel

On Tue, Nov 28, 2017 at 3:27 PM, Shire, Gavin <gavin_shire@fws.gov> wrote:

> Yes, the Nov 16 memo is the finding.
>
> G
>
> Gavin Shire
> Chief of Public Affairs
> U.S. Fish and Wildlife Service
> MS: EA
> 5275 Leesburg Pike
> Falls Church, VA 22041-3803
> 703-358-2649 (o)
> 703-346-9123 (c)
> gavin_shire@fws.gov
>
> On Tue, Nov 28, 2017 at 3:21 PM, Rachel Nuwer <rachelnuwer@gmail.com> wrote:
>
> > Thanks, Gavin. By the finding do you mean the memorandum from Nov 16? Or if not, could you send the finding over, please?
> >
> > On Tue, Nov 28, 2017 at 3:17 PM, Shire, Gavin <gavin_shire@fws.gov> wrote:
> >
> > > At this point, anything regarding data and data collection that is not in the finding itself would require a FOIA request, which likely would not be doable in the time you have.
> > >
> > > G
> > >
> > > Gavin Shire
> > > Chief of Public Affairs
> > > U.S. Fish and Wildlife Service
> > > MS: EA
> > > 5275 Leesburg Pike
> > > Falls Church, VA 22041-3803
> > > 703-358-2649 (o)
> > > 703-346-9123 (c)
> > > gavin_shire@fws.gov
> > >
> > > On Tue, Nov 28, 2017 at 3:10 PM, Rachel Nuwer <rachelnuwer@gmail.com> wrote:
> > >
> > > > Hi Gavin,
> > > >
> > > > Thank you for getting back to me. If an interview won't work out, would it be possible to provide me with information about the data collection methods and with the data itself on which the decision to reopen trophy trade with Zim was based?
> > > >
> > > > Thank you
> > > > Rachel
> > > >
> > > > On Tue, Nov 28, 2017 at 3:08 PM, Shire, Gavin <gavin_shire@fws.gov> wrote:
> > > >
> > > > > Rachael,
> > > > >
> > > > > I'm sorry for the delay in responding. At this point, it looks like we're not going to be able to provide anyone for an interview in the time frame you have. If that changes, I'll be sure to contact you directly.

Regards,

Gavin

Gavin Shire
Chief of Public Affairs
U.S. Fish and Wildlife Service
MS: EA
5275 Leesburg Pike
Falls Church, VA 22041-3803
703-358-2649 (o)
703-346-9123 (c)
gavin_shire@fws.gov

On Tue, Nov 28, 2017 at 2:03 PM, Rachel Nuwer <rachelnuwer@gmail.com> wrote:

> Hello - checking back in on this.
>
> On Mon, Nov 27, 2017 at 8:42 AM, Rachel Nuwer <rachelnuwer@gmail.com> wrote:
>
> > Thanks, Craig!
> >
> > Gavin, please let me know what you need from me in order to get a quick call lined up. The story is due on Thursday.
> >
> > Rachel
> >
> > On Mon, Nov 27, 2017 at 1:38 PM, Hoover, Craig <craig_hoover@fws.gov> wrote:
> >
> > > Rachel,
> > >
> > > I'm copying Gavin Shire here, as I shared your inquiry with him. He can respond to you directly.
> > >
> > > Best,
> > >
> > > craig
> > >
> > > On Mon, Nov 27, 2017 at 7:44 AM, Rachel Nuwer <rachelnuwer@gmail.com> wrote:
> > >
> > > > Hi Tim,
> > > >
> > > > I just received Craig's out of office reply. Would you be able to help with this interview request? It would be great if we could include a FWS voice in the story. Please see below for details.
> > > >
> > > > Thank you
> > > > Rachel
> > > >
> > > > On Mon, Nov 27, 2017 at 12:42 PM, Rachel Nuwer <rachelnuwer@gmail.com> wrote:
> > > >
> > > > > Hello,
> > > > >
> > > > > Checking back in on this interview request.

Rachel

On Thu, Nov 23, 2017 at 1:45 PM, Rachel Nuwer <rachelnuwer@gmail.com> wrote:

> Dear Craig,
>
> My name is Rachel Nuwer. I'm a New York-based freelance science journalist and I'm writing a piece for the NY Times' Science section on what we know - based on evidence - about how trophy hunting does or does not benefit conservation of elephants, lions and other megafauna. I was hoping it would be possible to arrange a phone interview with you for sometime next Monday-Wednesday to discuss how the USFWS goes about assessing this, especially in terms of the recent announcement about elephant trophies imported from Zimbabwe. Please let me know if this would be possible.
>
> Thank you,
> Rachel
>
> --
> Rachel Nuwer
> Science journalist
> www.rachelnuwer.com

--
Rachel Nuwer
Science journalist
www.rachelnuwer.com

--
Rachel Nuwer
Science journalist
www.rachelnuwer.com

--
Craig Hoover
Chief, Division of Management Authority
International Affairs
U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3803
ph: 703-358-2162

www.fws.gov/international

***Sign up* for our e-newsletter to learn how we're working around the globe to protect species and their habitats!**

--
Rachel Nuwer
Science journalist
www.rachelnuwer.com

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Rachel Nuwer
Science journalist
www.rachelnuwer.com

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Rachel Nuwer
Science journalist
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Rachel Nuwer
Science journalist
www.rachelnuwer.com

Conversation Contents

positive enhancement finding in Zimbabwe

Tom Whaley <tom@loganwhaley.com>

From:	Tom Whaley <tom@loganwhaley.com>
Sent:	Mon Nov 27 2017 08:26:03 GMT-0700 (MST)
To:	undisclosed-recipients:;
Subject:	positive enhancement finding in Zimbabwe

Good day gentlemen!

I was just sending you a short note to brag on each of you for lifting the suspension of sport hunted elephant trophy imports in to the United States from Zimbabwe. This suspension was really hurting the wildlife anti poaching efforts in Zimbabwe. I witnessed proof of that with my own eyes in May of 2017, while I was on a hunt in Zimbabwe. On six separate occasions we found clear evidence of elephant poaching, it was a sad sight seeing a rotting carcass of an elephant that had been killed by poachers. They had just killed these elephants and cut the tusks away, leaving the rest of it to rot and waste. Quite a sad and sickening sight for sure! I asked the landowner about this and he told me that since the USFWS suspension was started in 2014, their funding for anti poaching was pretty much non-existent. This allowed the poachers to roam the land pretty freely, now that the suspension has been lifted the much needed funding for anti poaching efforts will make a positive difference in both Zimbabwe and Zambia.

Elephant hunting in Zimbabwe generates conservation benefits that satisfy the enhancement standard. Although hunting offtakes are negligible, elephant hunting fees create extensive conservation incentives in Zimbabwe! Put simply, hunting revenues support anti poaching efforts across Zimbabwe's elephant range, and this is largely paid for by American elephant hunters! In addition to supporting ZPWMA's enforcement capacity, hunting operators deploy their own anti poaching units to police the safari areas and fund community game scouts in CAMPFIRE areas.These anti poaching efforts are funded predominantly by hunting revenue, and protect stable populations of elephant and the third largest black rhino population in the world.

According to the CITES "Monitoring the Illegal Killing of Elephants" (MIKE) program, poaching in the Southern African countries that allow regulated tourist hunting, including Zimbabwe, is lower than anywhere else on the continent and has never reached an unsustainable level. This stands in stark contrast to the West and Central African countries that do not rely upon tourist hunting as a conservation tool.

As you are well aware, there is a tremendous amount of "FakeNews" being published by all sorts of sources! Please do not allow President Trump or anyone else to be swayed by incorrect facts.

Thanks so much for all of your hard work and dedication to our wildlife!

Sincerely,
Tom Whaley
600 Shadowood Dr
Marshall, TX 75672
tomwhaley57@gmail.com

Conversation Contents

Please Support Elephant Trophy Imports

Randy Norris <rknorris1964@gmail.com>

From:	Randy Norris <rknorris1964@gmail.com>
Sent:	Mon Nov 27 2017 08:21:11 GMT-0700 (MST)
To:	(b) (6) @fws.gov>, <exsec@ios.doi.gov>
Subject:	Please Support Elephant Trophy Imports

Dear Mr Sheehan and Mr Zinke

I would ask that you support the lifting of the suspension on the import of elephant trophies from Zimbabwe and Zambia. Both Countries have larger herds now than 25 years ago thanks in part to their governments management practices and the support of the local operators. This is because of better habitat, management and enforcement and as a side benefit it creates local jobs and provides food also to the locals. Without the revenue from big game hunters from the United States there will be an increase in poaching and a decrease in enforcement and management practices as these countries will not have the resources to provide these services.

Thank you for your consideration

Robert L Hixson, Jr.
P O Box 816028
Dallas, Tx 75381

Conversation Contents

Letter to US Fish and Wildlife on Importation of Elephant Trophies from Zambia

Attachments:

/39. Letter to US Fish and Wildlife on Importation of Elephant Trophies from Zambia/1.1 Response to US Fish and Wildlife on Elephant Trophies.pdf

Paul Zyambo <paulzya@yahoo.com>

From:	Paul Zyambo <paulzya@yahoo.com>
Sent:	Mon Nov 27 2017 05:42:56 GMT-0700 (MST)
To:	(b) (6) @fws.gov>
Subject:	Letter to US Fish and Wildlife on Importation of Elephant Trophies from Zambia
Attachments:	Response to US Fish and Wildlife on Elephant Trophies.pdf

Dear Sir,

Please receive the attached letter from the Permanent Secretary in the Ministry of Tourism and Arts, Zambia for your consideration.

Yours faithfully,

Paul Zyambo
Director-Department of National Parks and Wildlife

Tel: +260 211 223930
Fax: +260 211 223930
Telex: ZA 45510
Email: psmta@mta.gov.zm

REPUBLIC OF ZAMBIA

MINISTRY OF TOURISM AND ARTS

OFFICE OF THE PERMANENT SECRETARY

In reply please quote

No.....

KWACHA HOUSE
CAIRO ROAD
P.O. Box 30575
10101 LUSAKA

23rd November 2017

The Director
US Fish and Wildlife
Department of the Interior
1849C Street NW, Room 3358
Washington, DC 20240

Dear Sir,

RE: IMPORTATION OF ELEPHANT TROPHIES INTO THE UNITED STATES OF AMERICA

We write in reference to the above subject, especially after considering the recent occurrences in the public media. In November 2017, we received notification that USA would accept imports of elephant trophies from Zambia. However, it has been reported in the media recently that this had been put on hold. We therefore hasten to point out the following facts for your consideration on the matter:

1. There has never been a "ban" on the importation of elephant trophies from Zambia. In October 2011, the Fish and Wildlife Service (FWS) made a positive enhancement finding to authorize the import of regulated elephant hunting trophies from Zambia. However, 2013 and 2014, Zambia's Wildlife Authority suspended hunting to review practices, and obtain more current wildlife population information.

   In 2015, Zambia's government lifted the hunting suspension, and set a conservative annual quota of 80 elephants. In August 2016, the Chief of Permits sent an email indicating that the FWS was trying to issue import permits for elephant trophies from Zambia before the CITES Conference of the Parties in September 2016, based on an April 2015 Non-Detriment and Enhancement Finding the FWS received from Zambia's Wildlife Authority. At the CITES Conference of the Parties, the Chief of Permits indicated that elephant permits from Zambia would likely be issued before the end of the year.

2. Management of elephant is through a well-articulated policy, law and management plan and formalized utilization guidelines. Management guidelines have set standards of utilization and the quality of trophies in agreement with International Standards. According to these standards, exportable tusks must be either 15 kg or 1.5m or both, and more.

3. Zambia's elephant population inhabits seven sub-regions covering National Parks and Game Management Areas. According to the 2016 African Elephant Status Report, Zambia's elephant population is estimated at over 21,000. This is generally considered stable over the past 25 years, and is stable compared to Zambia's population in 1992, when the FWS determined to maintain elephant as "threatened" listed. However, several population surveys indicating an estimate closer to 30,000 were not included in the 2016 African Elephant Status Report, and Zambia's wildlife authority estimates the country's population at more than 30,000.

4. Utilization of elephant is through a carefully set quota considering the population and trends. Zambia maintains a cautious quota of way below the official voluntary quota of 80 elephants. A national quota of 80 elephants represents less than 0.4% of a population of 21,967 elephant. Actual hunting offtakes are negligible and have no impact on the national population growth rate.

   2015 Hunting offtake (% of Total Elephant Population): 3 (0.014%)
   2016 Hunting offtake (% of Total Elephant Population): 12 (0.055%)
   2017 Hunting offtake (% of Total Elephant Population): 11 (0.050%)

5. Elephant sport hunting contributes significantly not only to the income for conservation of the African Elephant itself, but also to the livelihoods of local communities through income and provision of protein in the meat distributed. Between 2010 and 2012, regulated hunting revenues accounted for approximately 32% of the operating budget funding for Zambia's wildlife authority. With a potential to generate nearly $1 million in elephant hunting fees, in 2015 and 2016, these fees amounted to only $150,000, due mainly to import restrictions. This amount is divided, on 50:50 ratio, between DNPW and the Community Resource Boards in Game Management Areas (GMA). DNPW uses this revenue for payment of Community Scout salaries and resource protection through Anti-poaching operations, as well as management, surveys, staff training, and other activities. DNPW's expenditures are mostly for anti-poaching related activities.

6. Moreover, under the wildlife management regulations in Zambia, at least 50% of harvested game meat is donated and distributed to local communities. A 2015 study found that hunting outfitters in three GMAs contributed an average of 6,000 kilograms of harvested meat per season, and estimated that outfitters across all GMAs could provide ~130 tons of much-needed protein annually. This reduces the incentive for bush meat poaching in these areas bordering and buffering Zambia's National Parks.

7. The benefits from elephant hunting mitigate the hardship of communities that they have through conflict. These benefits persuade communities to have a positive attitude towards elephants and other wildlife species.

8. The consequence of withdrawing these benefits from communities is the destruction of the species through poaching and conflict retaliation. Elephant hunting helps in the conservation of the species itself through management and conflict mitigation.

9. Hunting outfitters' concession agreements with DNPW and the Community Resource Board identify mandatory anti-poaching obligations and expenditures. At present, 75 Community Resource Boards employ over 750 wildlife Community Scouts and 79 support personnel, at a monthly cost of over $38,800. Those scouts are paid emoluments from revenues from hunting tourism. A small sample of four operators spent over $201,000 on anti-poaching in 2015, community scouts and on equipping their own anti-poaching teams. Hunters largely pay for this anti-poaching support, and over half of all hunting clients in Zambia are from the U.S.A.

With the above reflections, we remain hopeful, despite the pressures that you will favourably consider our plea that the survival of the African Elephant in Zambia and other range states largely depends on the positive decision on this matter. We also wish to encourage the US Fish and Wildlife to visit Zambia and appreciate the vital link between trophy hunting and conservation.

Yours faithfully,

Dr. Liya Mutale (Mrs.)
Permanent Secretary
Ministry of Tourism and Arts

cc: Minister of Tourism and Arts, Zambia

cc: Permanent Secretary – Ministry of Foreign Affairs, Zambia

cc: USA Ambassador to Zambia, Lusaka

cc: Director – National Parks and Wildlife

Conversation Contents

Trophy Elephant Imports

Seth Ringer <sethringer@gmail.com>

From:	Seth Ringer <sethringer@gmail.com>
Sent:	Sun Nov 26 2017 07:59:47 GMT-0700 (MST)
To:	<officeofthesecretary@ios.doi.gov>
Subject:	Trophy Elephant Imports

Dear Sirs,

Thank you for the positive enhancement findings made by the US Fish & Wildlife Service for elephant from Zimbabwe and Zambia. Please help Honorable President Trump to understand all of the scientific evidence that has gone into the enhancement findings and not be swayed by falsehoods spread by the media and anti-hunting groups. Trophy elephant hunts are a powerful conservation tool that have to be utilized.

Sincerely,
Seth Ringer
13862 SE 46th Ave
Summerfield, FL 34491

Conversation Contents

Elephant Trophy imports from Zimbabwe and Zambia

<kirkwinward@comcast.net>

From:	<kirkwinward@comcast.net>
Sent:	Sat Nov 25 2017 10:09:47 GMT-0700 (MST)
To:	(b) (6) @fws.gov>
Subject:	Elephant Trophy imports from Zimbabwe and Zambia

Dear Deputy Director Sheehan,

I am writing to thank you for your positive enhancement finding for elephant from Zimbabwe and Zambia. I believe the decision was based on sound biological data and is a critical decision for the future of elephant conservation. I know from your work with the DWR in my home state of Utah that you are well aware that the harvest of such a small number of elephants will have no meaningful impact on elephant populations, but that the money generated from regulated hunting will have a huge positive conservation impact on current and future elephant populations as it provides much needed funds and incentives for habitat preservation, anti-poaching efforts, local community benefits, and game management. Please do all you can to encourage President Trump to not be misled by the false arguments of the radical anti-hunting organizations and to allow imports to resume.

Thanks for all you do for Wildlife and Sportsmen,

Kirk Winward

Conversation Contents

Elephant hunting

Ed Greene <gwh375@yahoo.com>

From:	Ed Greene <gwh375@yahoo.com>
Sent:	Sat Nov 25 2017 09:38:17 GMT-0700 (MST)
To:	(b) (6) @fws.gov" (b) (6) @fws.gov>
Subject:	Elephant hunting

Dear Mr Deputy Director

I urge you to not let President Trump be misled by the media and anti hunting groups regarding the importation of elephant trophies. This highly regulated hunting provides funding for a tremendous amount off the expenditures fighting illegal poaching and managing the growing elephant population.

The greatest threat to the African elephant is illegal poaching. It would be wonderful to see the United States assist the affected African countries with this problem.

Thank you

Ken Allen

Reply Reply to All Forward Yahoo - login

YAHOO! **Yahoo - login**

Conversation Contents

Please allow importation of elephants!

Paul <paulvollmar@hotmail.com>

From:	Paul <paulvollmar@hotmail.com>
Sent:	Thu Nov 23 2017 13:45:45 GMT-0700 (MST)
To:	(b) (6) @fws.gov" (b) (6) @fws.gov>
Subject:	Please allow importation of elephants!

Dear Mr. Sheehan,

I am asking you to please allow the legal importation of sport hunted African elephant trophies.

I have seen first hand the benefits to all wildlife when legal hunting is allowed and complete loss of all wildlife when hunting is banned.

Elephant hunting is good for Africa and good for elephants!

Thank you for your consideration.

Paul Vollmar MR
paulvollmar@hotmail.com
402-517-1883

Sent from my iPhone

Conversation Contents

Elephant Importation

Jeffrey Martinez <jmmartinez@aol.com>

From:	Jeffrey Martinez <jmmartinez@aol.com>
Sent:	Thu Nov 23 2017 10:13:58 GMT-0700 (MST)
To:	(b) (6) @fws.gov>
Subject:	Elephant Importation

Dear Deputy Director, I am writing in support of the reinstatement of the importation of elephant trophies from Zimbabwe and Zambia. I support all of the Conservation Force's talking points. Furthermore as a big game hunter myself, I have experienced first hand the positive effects of hunting. The professional hunters I have had the pleasure of working with are exactly that ..... professional. They are overtly concerned with only harvesting game that is appropriate and won't negatively impact the herd. They carefully choose the trophy animal. Many animals are passed over to harvest the one trophy. They are dedicated to the environment and local people. They provide jobs to people in areas that otherwise would have no sustainable work. They coordinate with the local tribes to ensure that meat is delivered to the area most in need. They provide anti-poaching services 24/7 without which the animal population would be devastated. I would submit that most people not in support of sustainable hunting have investigated little beyond the the most recent news report. They don't realize that ultimately, the African human population is growing beyond the number that allows the sustainable maintenance of healthy wild animal populations. The loss of habitat is inevitable. The only hope is to maintain the populations of animals for the amount of land available to support them. In either instance, animals will die. Only through the manner of sustainable hunting do the animal populations have a chance to survive. Please add my support to the science which validates sustainable hunting, and uphold your decision to allow elephant importation from Zimbabwe and Zambia. The welfare of the countries, people, and wildlife will be better for it. Thank you. Jeff Martinez Mobile: 210-380-3715 Gig 'Em! 👍•Sent from my iPhone Jeff Martinez Mobile: 210-380-3715 Gig 'Em! 👍•Sent from my iPhone

Conversation Contents

Positive Enhancement Finding - USFWS on Elephant in Zimbabwe and Zambia

Attachments:

/64. Positive Enhancement Finding - USFWS on Elephant in Zimbabwe and Zambia/1.1 IMG_7133 3.jpeg

Todd Cusick <toddcusick@me.com>

From: Todd Cusick <toddcusick@me.com>
Sent: Thu Nov 23 2017 09:30:48 GMT-0700 (MST)
To: <(b) (6) @fws.gov>
Subject: Positive Enhancement Finding - USFWS on Elephant in Zimbabwe and Zambia
Attachments: IMG_7133 3.jpeg

Dear Mr. Sheehan:

Happy Thanksgiving from a fellow Utahn! (I think that is what we call ourselves?)

Attached you will find a photo of yourself sent to me by my friend in Arusha, Tanzania, Mike Angelides. He was was honored to meet you. He likes people from Utah and appreciated the fact that you listened to him sincerely.

From September 2, 2017, through October 17, 2017, I split my time in the bush of Africa between the Caprivi Strip in Namibia where Zambia, Zimbabwe, Botswana, and Namibia meet and southwest Tanzania near Lake Rukwa at approximately 7 degrees 23.25 South and 32 degrees 29.52 East. I am NOT sending you talking points prepared by some interest group but rather my first hand experience regarding the above topic and some additional thoughts. I am a outdoorsman and hunter and support the positive finding.

Caprivi Strip

There are simply too many elephants for the habitat in this area and the animal/human conflict is very high. I hunted elephant in this area. I approached over 3,500 elephants in the first 10 days (this was my first elephant hunt and I very carefully kept track and was concerned about whether I felt I was doing the right thing by hunting elephant; unquestionably I was). We chose to harvest a very old bull who was estimated to be over 53 years old by the presence of the last set of worn-out molar teeth they receive at approximately 49 years old. He was on the edge of a herd of 200+ elephant, well past breeding age, and not allowed in the middle of the herd by the other mature animals. There were large areas where there was no tree standing over 4-5' high due to the destruction this overpopulation is causing; it looked like a large bomb went off and wiped out all vegetation.

While hunting we provided full time jobs for 22 local people and 3 Namibian citizens who live further south. We provided much-needed protein to the locals including 2 buffalo and 1 kudu harvested at the request of the Minister of Environment of Namibia in order to have meat for an anti-poaching meeting and training in Rundu. I estimate we provided nearly 15,000 pounds of meat to the locals in 10 days. The lady who was in charge of dividing up the meat among the locals asked if we would please shoot more elephant as they are overrunning their village. It was interesting to note the evidence of poaching from the Botswana border. There was an Namibian government anti-poaching patrol in the area who we reported it to but they were out of fuel and could not pursue those who had poached 2 cow buffalo. If we do not put a value on the wildlife via hunting the locals will not protect it. It is that simple.

I was not treated kindly by some European travelers who noticed we were hunting (as we were permitted to) in the Bwabwata National Park. While I contributed over $100,000 to the preservation of wildlife they paid $3 USD per person to enter the same area. Who is really valuing and preserving wildlife in this equation? Which activity do you think the locals will value and therefore self-manage their anti-poaching? Mine or the European tourists on their self-guided tour with a rented Toyota Truck and pop-up tent? I am not suggesting they should not be allowed to participate in their activity but I think we need to be realistic about which activity is POSITIVE for wildlife preservation.

Because of this I am baffled by the media reports I read regarding this issue. It is completely counter to my experience.

Southwest Tanzania

The elephants in this area are suffering and elephant hunting is not advisable for this area at this time in my opinion. It is also interesting to note that they do not hunt elephant in this area; this is not due to habitat but simply due to the years of poaching depleting the herd and the current USFWS ban on imports. The only anti-poaching that is done in this vast area is done by the operator of the concession I hunted in who has now been in this area for about 10 years (you met him). If he is not there the poachers are. We ran off 3 poaching groups and discovered a threatening message left us by a poaching group written on the side of a cut log with charcoal. The message asked us to leave the area so they could get some food; it was written in swahili so I was relying on the locals for interpretation but that was their basic response when I asked what the message stated. In this area two years I harvested a buffalo that contained poacher's muzzleloader balls in its neck. It would be more effective for the locals to have me pay to hunt buffalo and give the locals the meat like I do each time anyway.

I have hunted this area with this operator for years. I have noticed an increase in elephants each year. It seems to me that if this operator is allowed to continue to manage this area the elephant population will continue to increase to a point that sustainable hunting could occur and would benefit the elephant herd. Once again, hunting is the only activity that puts enough value on the wildlife that the locals will consequently protect it.

On another note, importation of lion by the USFWS is currently not allowed in this area. I know this because I have a pending application for import that has been sitting in some "black-hole" with the USFWS for over a year with no response other than an acknowledgement of receipt. Here is my experience. There are so many lion in this area we could not hunt leopard because most any bait we placed was taken by lion before the leopard could get to it. MIke finally did get me on a leopard and admittedly I missed cleanly. It was a great experience anyway.

Once again, I am baffled by the media reports I read regarding the African lion; at least in my experience in the areas I have been.

In conclusion I have one more point to make. Sporting hunting is Africa is an important part of their economy just as skiing is where I live in Utah. The Africans don't come to Utah and tell us how to manage our skiing environment. We know the value of it and manage it accordingly; those

ski operators who operate on federal lands are held accountable for the rules in doing so but not by a foreign government. I think the U.S. government goes a little too far in telling the African governments how to manage their sport hunting. I agree that they could use some guidance, support, communication of our concerns, education, monitoring, and possibly at times some importation permit management, however, the consistent response I received from local people was “you U.S. people think you can see a CNN report or read a National Geographic article and you are all experts on how we should manage our wildlife."

Feel free to contact me at any time. Thanks for your service. My next door neighbor is the new congressman for Utah (Curtis) and I have come to realize very quickly by watching him that these jobs in Washington are a service with a capital S.

Sincerely,

Todd Cusick
801-850-3108
515 Sheffield Drive
Provo, UT 84604

Conversation Contents

Elephant Imports from Zimbabwe and Zambia

Mary Ann Justus <john.justus@icloud.com>

From:	Mary Ann Justus <john.justus@icloud.com>
Sent:	Thu Nov 23 2017 07:17:14 GMT-0700 (MST)
To:	<(b) (6) @fws.gov>
Subject:	Elephant Imports from Zimbabwe and Zambia

Dear Deputy Director Sheehan, I wrote you earlier in the week urging you to do all you can to keep President Trump from overturning the positive enhancement findings for Elephant hunting by USFW. I am sure the President and yourself are being inundated by anti-hunting organizations to stop the legal hunting of Elephants in these countries. I wanted to provide some scientific facts to support the continued legal hunting of Elephants from these countries. First, overall populations of Elephants from these countries is stable or in the case of Zimbabwe is increasing. Drammatically, in fact. The number of Elephant in Zimbabwe has increased from about 4,000 animals in 1990 to over 82,000 today. Secondly, the number of Elephants taken legally by hunters in these countries is extremely small, almost negligible, while the revenues generated by legal hunting contribute millions of dollars for anti-poaching, community development, provide much needed protein for local villages etc. This money allows Elephants to flourish in their native habitat, not just in the national parks which make up just a small portion of the country. It is clear, when there is value associated from these Elephants that comes from hunting, the local communities do their part to protect the species. I have seen that myself. Finally, both of these countries have sound regulations in place to ensure that legal hunting of Elephants will enhance the overall populations of Elephants. Besides, there are not that many hunters that have the desire and can also afford the cost of an Elephant hunt. This is not a complaint. it is simply that these large fees are required to provide the necessary funding to provide the enhancement needed. I only mention this because it will not be a case where “the flood gates will open” to large numbers of Elephant hunters and resulting increase in animals taken. That number will remain small. I do hope in the end, that facts will be used to make this determination. i am a hunter and likely biased in my opinion. However, when the facts are reviewed, there is no question that legal hunting of a small number of Elephants does enhance overall populations. All we as hunters ask is that this decision is made based on facts, with the species in mind and not based on emotion or dislike for us as hunters. Best regards, John Justus

Conversation Contents

Please allow ivory import from Zimbabwe

Kadi Burkhalter <kadir.burkhalter@gmail.com>

From:	Kadi Burkhalter <kadir.burkhalter@gmail.com>
Sent:	Wed Nov 22 2017 15:05:01 GMT-0700 (MST)
To:	(b) (6) @fws.gov>
Subject:	Please allow ivory import from Zimbabwe

Director Sheehan,

November 21, 2017
Deputy Director Greg Sheehan: (b) (6) **@fws.gov**
Secretary Ryan Zinke: exsec@ios.doi.gov

TALKING POINTS IN SUPPORT OF ELEPHANT TROPHY IMPORTS FROM ZIMBABWE AND ZAMBIA

ELEPHANT TROPHY IMPORTS HAVE NEVER BEEN "BANNED," AND THE POSITIVE ENHANCEMENT FINDINGS ARE BASED ON THE BEST AVAILABLE INFORMATION RECEIVED IN 2014-2016

- **There has been no "ban" on elephant trophy imports. In April 2014, the U.S. Fish and Wildlife Service (FWS) "suspended" the import of elephant trophies from Zimbabwe due to a lack of information. Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) responded to two questionnaires from the FWS in April 2014 and December 2014. However, in March 2015, the FWS extended the suspension, finding information was still lacking. The negative enhancement finding dated March 2015 repeatedly affirmed, "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA." In July 2015, May 2016, and November 2016, ZPWMA responded to additional FWS questions. The November 2017 positive enhancement finding is based on these later responses and thousands of pages of supporting documents, including Zimbabwe's National Elephant Management Action Plan, 2014 countrywide elephant population surveys, 2014-2016 actual and projected budget data, 2014 and 2015 offtakes and 2016 quota data, 2014-2016 CAMPFIRE data, and much more.**
- **Issuing import permits for elephant trophies from Zimbabwe was not a political decision by this Administration. In September 2016, before the election occurred, the FWS had already indicated to ZPWMA that the suspension would be lifted. ZPWMA was told by the Chief of Permits that the FWS needed "only one more piece of information," a prioritization of the new Elephant Management Plan, before the negative enhancement finding could be reversed. That prioritization was provided on**

November 8, 2016, before the election results were in. At the end of 2016, the FWS should have made the positive enhancement finding, but was admittedly sidetracked by an influx of thousands of new permit applications due to the listing of rosewood (used extensively in musical instruments and furniture) on the CITES Appendixes effective January 2017.

• Similarly, there has been no "ban" on the import of elephant trophies from Zambia. In October 2011, the FWS made a positive enhancement finding to authorize the import of regulated elephant hunting trophies from Zambia. However, 2013 and 2014, Zambia's wildlife authority suspended hunting to obtain more current wildlife population information. In 2015, Zambia's government lifted the hunting suspension, and set a conservative quota of 80 elephant. In August 2016, the Chief of Permits sent an email indicating that the FWS was trying to issue import permits for elephant trophies from Zambia before the CITES Conference of the Parties in September 2016, based on an April 2015 Non-Detriment and Enhancement Finding the FWS received from Zambia's wildlife authority. However, the FWS ran out of time. At the Conference of the Parties, the Chief of Permits indicated that elephant permits from Zambia would likely issue before the end of the year. Again, because of the new rosewood permits, that enhancement finding was put on a back burner.

ZIMBABWE'S ELEPHANT POPULATION IS THE SECOND-LARGEST IN AFRICA

• In 1900, it was estimated that Zimbabwe had a national population of 4,000 elephant. Since then, the population has grown to over 82,000 (a twenty-fold increase). The current population is double the target national population established in the 1980s, almost 40% larger than in 1992, when the FWS determined to maintain the Endangered Species Act (ESA) "threatened" listing, and almost 20% larger than in 1997, when the last positive enhancement finding was made (before November 2017). Elephant sub-populations in Zimbabwe are generallyconsidered stable or increasing.

- **<u>North-West Matabeleland</u>: This population is estimated at 54,000, and is most densely located in Hwange National Park (45,000 elephant). In 1928, the estimated elephant population in Hwange was 2,000.**
- **<u>Sebungwe</u>: This population is estimated at 3,500 and has declined since 2001 due to human population expansion into a previously unsettled area. The human population exploded from 45,000 in 1950 to over 700,000 in 2013, which explains the decline in the elephant population. Due to the expansion of human settlement and unlike other major elephant ranges in Zimbabwe, the habitat in this area isfragmented.**
- **<u>Mid-Zambezi Valley</u>: This area has an estimatedelephant population of about 12,000. That population declined since the 2001 countrywide survey, and it is believed the decline is due to cross-border poaching and perhaps, the cross-border movement of elephants during the survey. Anti-poaching is a major component of the Zambezi Valley/Mana Pools Regional Elephant Management Action Plan, and recently the area has been chosen as a CITES MIKES site with an ongoing project.**
- **<u>South-East Lowveld</u>: Most of this population inhabits Gonarezhou National Park, whose population has been growing consistently at 5% per annum over 20 years. This region's sub-population is estimated at 13,000 elephant between the Park, surrounding communal areas, and nearby private conservancies.**

ZAMBIA'S ELEPHANT POPULATION IS STABLE

• Zambia's elephant population inhabits seven sub-regions covering National Parks and Game Management Areas. According to the 2016 African Elephant Status Report, Zambia's elephant population is estimated at over 21,000. This is generally considered stable over the past 25 years, and is stable compared to Zambia's population in 1992, when the FWS determined to maintain elephant as "threatened" listed. However, several population surveys indicating an estimate closer to 30,000 were not included in the 2016 African Elephant Status Report, and Zambia's wildlife authority estimates the country's population at more than 30,000.

ELEPHANT HUNTING OFFTAKES IN ZIMBABWE ARE SUSTAINABLE

• Zimbabwe maintains a CITES export quota of 1,000 tusks from 500 bull elephants. A national quota of 500 elephants represents only 0.6% of a population of 82,630 elephant. Actual hunting offtakes are considerably lower, have a negligible impact on the overall population rate, and have declined in the past three years due to the import suspension.

Average Hunting Offtakes 2010-2013 (% of Total Elephant Population): 228 (0.276%)
2013 Hunting Offtakes (% of Total Elephant Population): 258 (0.312%)
2014 Hunting Offtakes (% of Total Elephant Population): 162 (0.196%)
2015 Hunting Offtakes (% of Total Elephant Population): 075 (0.091%)

ELEPHANT HUNTING OFFTAKES IN ZAMBIA ARE NEGLIGIBLE

• In 2013 and 2014, Zambia suspended regulated tourist hunting to obtain a better sense of national wildlife population trends. In 2015, Zambia set a conservative export quota of 160 tusks from 80 bull elephants. Zambia maintained the quota of 80 elephants in 2016 and 2017. A national quota of 80 elephants represents less than 0.4% of a population of 21,967 elephant. Actual hunting offtakes are negligible and have no impact on the national population rate.

2015 Hunting Offtakes (% of Total Elephant Population): 03 (0.014%)
2016 Hunting Offtakes (% of Total Elephant Population): 12 (0.055%)

ELEPHANT MANAGEMENT IN ZIMBABWE IS GUIDED BY APPROPRIATE LEGISLATION AND A STATE-OF-THE-ART MANAGEMENT PLAN

• <u>Governing Law</u>: The Zimbabwe Parks and Wild Life Act provides the regulatory mechanism for ZPWMA and its programs. The Act created ZPWMA as a parastatal authority apart from the central government and established a separate fund, apart from the Central Treasury, to sustain ZPWMA's operations. The Act sets harsh penalties for elephant-related offenses, and was amended in 2010 to impose a nine-year minimum sentence for the first offense of elephant poaching. Under the Parks and Wild Life Act, Rural District Councils and other land holders are granted "appropriate authority" to benefit directly from wildlife. Under this legislation, land holders are encouraged to maintain and increase wildlife populations because they retain the benefits of sustainable use of that wildlife.

• <u>Elephant Management Plan</u>: Elephant are managed according to the Zimbabwe National Elephant Management Plan (2015-2020). The plan incorporates specific action items, deliverables, deadlines, and responsible parties. It is an adaptive management plan utilizing prioritization of targets measured by key components,

strategic objectives, and outputs. The plan focuses on five major components: Protection and Law Enforcement; Biological Monitoring and Management; Social, Economic, and Cultural Framework; Building Conservation Capacity; and Program Management. The National management plan is supplemented by four regional plans that utilize the same framework to address the unique challenges for each major elephant range in Zimbabwe. Zimbabwe's elephant management planning process was kicked off by the FWS' elephant trophy import suspension. ZPWMA held a year of stakeholder planning workshops, including a preparatory meeting of representatives from CAMPFIRE in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley range) in March-April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld range in September 2015.

ELEPHANT HUNTING IN ZIMBABWE GENERATES CONSERVATION BENEFITS THAT SATISFY THE "ENHANCEMENT" STANDARD: Although hunting offtakes are negligible, elephant hunting fees create extensive conservation incentives in Zimbabwe.

- **Habitat: Hunting areas in Zimbabwe represent ~130,000km² of protected habitat. This represents over four times the size of Zimbabwe's National Parks (~28,000 km^2). Healthy elephant populations require large tracts of habitat; the areas set aside for regulated hunting are therefore essential to the elephant's continued survival.**
- **Management and Enforcement Revenues: Revenues generated from tourist hunting conducted on state lands comprised approximately 20% of ZPWMA's revenue stream in 2014. Over $6.2 million in trophy fees came from elephant hunts, with $5 million accruing to ZPWMA to reinvest in elephant protection and species management. Over 50% of that revenue came from U.S. clients. Almost 80% of ZPWMA's operating budget is allocated towards law enforcement in the form of staff costs and patrol provisions. ZPWMA employs 1,500 active field rangers. Put simply, hunting revenues support anti-poaching efforts across Zimbabwe's elephant range—and this is largely paid for by American elephant hunters.**
- **Operator Anti-Poaching: In addition to supporting ZPWMA's enforcement capacity, hunting operators deploy their own anti-poaching units to police the Safari Areas and fund community game scouts in CAMPFIRE Areas. For example, a small sample of 14 individual operators surveyed by the Safari Operator Association of Zimbabwe spend $957,843 on anti-poaching in 2013 and deployed 245 anti-poaching scouts. One specific operator, Charlton McCullum Safaris (CMS) in the Dande Safari Area and Mbire Communal Area, spends on average $80,000-$90,000 in patrol and equipment costs and anti-poaching rewards. From 2010 to 2016, CMS' efforts led to an 82% decline in elephant poaching in an import border region. As another example, the Save Valley and Bubye Valley Conservancies together spend over $1 million on anti-poaching each year. These anti-poaching efforts are funded predominately by hunting revenue, and protect stable populations of elephant and the third-largest black rhino population in the world.**
- **Regional Anti-Poaching: According to the CITES "Monitoring the Illegal Killing of Elephants" (MIKE) program, poaching in the Southern African countries that allow regulated tourist hunting, including Zimbabwe, is lower than anywhere else on the continent and has never reached an unsustainable level. This stands in stark contrast to the West and Central African countries that do not rely upon tourist hunting as a**

conservation tool.

• Community Benefits: Zimbabwe's CAMPFIRE program is the pioneering community-based natural resource management program in Africa. The program allows rural communities to financially benefit from wildlife, thereby incentivizing the use of communal land as wildlife habitat, and the protection of wildlife in the form of increased tolerance of destructive wildlife. An estimated 77,000 households rely on CAMPFIRE benefit from CAMPFIRE. 90% of CAMPFIRE revenue is generated from regulated hunting, and 70% of this comes from elephant hunting. Thus, prior to the import suspension, elephant hunting generated over $1.6 million per year for CAMPFIRE communities and was reinvested in the construction of classrooms and clinics, the installation of water infrastructure and solar powered facilities, the purchase of vehicles for anti-poaching support, compensation for destruction of crops or livestock by dangerous game, and other benefits that improve the livelihoods of the rural communities living in CAMPFIRE Areas. These benefits offset the damage caused by game species: from 2010 to 2015, elephant destroyed 7,495 hectares of crop fields in CAMPFIRE communities and claimed the lives of approximately 40 people.

ELEPHANT MANAGEMENT IN ZAMBIA IS UP-TO-DATE AND GENERATES SUBSTANTIAL BENEFITS TO ENCOURAGE RECOVERY OF THE SPECIES

• Governing Law: The Zambian Wildlife Act No. 14 of 2015 is the guiding legislation for elephant protection and management. This cutting-edge law consolidated the prior wildlife authority into a government Department of National Parks and Wildlife (DNPW), to address the funding concerns and shortfalls experienced by the prior authority. DNPW is made up of a Wildlife Law Enforcement Unit with over 1,250 rangers; a Conservation Unit; an Infrastructure Development Unit; and a Community-Based Natural Resource Management Unit to oversee the development of conservation planning in Game Management Areas.

• Management and Enforcement Revenues: Between 2010 and 2012, regulated hunting revenues accounted for approximately 32% of the operating budget funding for Zambia's wildlife authority. With a potential to generate nearly $1 million in elephant hunting fees, in 2015 and 2016, these fees totaled only $150,000, due mainly to import restrictions. This amount was divided between DNPW and the Community Resource Boards in Game Management Areas (GMA). DNPW uses this revenue for range salaries and resource protection, as well as management surveys, staff training, and other activities. Approximately 75% of DNPW's expenditures are for anti-poaching, and Zambia's Wildlife Law Enforcement Unit conducted over 10,500 anti-poaching patrols in 2015, involving an average of 5,878 staff per quarter and 237,028 patrol days.

• Habitat: Hunting areas in Zambia (~180,000 km²) provide almost three times the amount of protected habitat compared to the country's National Parks (~64,000 km²).

• Community Benefits: In GMAs, elephant license fees are divided equally between the DNPW and the GMA's Community Resource Board, and 20% of concession fees also accrue to the Board. In 2015 and 2016, approximately $1.36 million in hunting fees was distributed to the Boards, as well as $10,000 per concession paid by the hunting operator. Under the new Wildlife Law, Boards must invest those funds as follows: 45% towards wildlife protection and patrols, 35% towards community improvement projects such as construction of schools, clinics, and water infrastructure, and 20% towards administrative costs. Written concession agreements between the operators, DNPW, and the community Boards usually obligate the concessionaire to make further

communities investments, such as constructing a classroom and paying a teacher's salary. Operators in 13 blocks were obligated to spend over $1.1 million in community infrastructure development and 3.4 million in community lease and other payments for the duration of their leases.

• Game Meat Distributions: Moreover, under Zambian law, at least 50% of harvested game meat must be donated and distributed to local communities. A 2015 study found that operators in three GMAs contributed an average of 6,000 kilograms of harvested meat per season, and estimated that operators across all GMAs could provide ~130 tons of much-needed protein annually. This reduces the incentive for bush meat poaching in these areas bordering and buffering Zambia's National Parks.

• Operator Anti-Poaching: Hunting operators' concession agreements with DNPW and the Community Resource Board identify mandatory anti-poaching obligations and expenditures. At present, 75 Boards employ over 750 wildlife scouts and 79 support personnel, at a monthly cost of over $38,800. Those scouts are paid for by revenues from tourist hunting. A small sample of four operators spent over $201,000 on anti-poaching in 2015, to fund community scouts and fund and equip their own operator anti-poaching teams. This anti-poaching support is largely paid for by U.S. hunters, as over half of all hunting clients in Zambia are from the U.S.

[Note: Supporting documents for each of these points is available by contacting Conservation Force, cf@conservationforce.org. These Talking Points largely rely on the responses of ZPWMA and DNPW to FWS information requests and supporting documents provided as part of those responses as well as individual hunting operator enhancement reports, reports of the CAMPFIRE Association, and publicly available IUCN documents.]

MINI-ARGUMENTS REFUTING FALSE FACTS

• There has never been a "ban" on elephant trophy imports from Zimbabwe. A negative enhancement finding was made in April 2014 that "suspended" the import of elephant trophies. The FWS' negative 2015 enhancement finding stated repeatedly that once additional information was received, the negative finding would be reviewed and reversed (e.g., "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA.") A "ban" suggests a permanent prohibition; a "suspension" is a "temporary abrogation or withholding." Zimbabwe's elephant trophy imports were suspended.

• Lifting of the suspension was not a political decision. The decision should have been made in July 2015, when ZPWMA provided extensive additional documentation in response to a FWS questionnaire. The FWS requested "one more piece of information" at the CITES Conference of the Parties in September 2016. That information was provided in November 2016. No further information was needed, or requested. If the FWS had properly prioritized the issuance of elephant import permits —as they told ZPWMA they would at the CITES Conference of the Parties—the positive

enhancement finding would have been made and these permits would have issued before the current Administration was in office.

• <u>The import of elephant trophies from Zimbabwe should not have been suspended in the first place.</u> In April 2014, the FWS announced the suspension based on an asserted "lack of information." In contradiction to CITES Res. Conf. 6.7's recommendation of notifying and consulting with range states before imposing stricter domestic measures, and the Endangered Species Act's requirement of "encouraging foreign conservation programs," 16 U.S.C. § 1537(b), the FWS shut down imports under an April 2014 negative enhancement finding that the FWS later admitted was wrong with respect to Zimbabwe's elephant population and level of poaching. In fact, the correct estimate for Zimbabwe's elephant population—almost 83,000—is 16,000 elephant higher than when the last, positive enhancement finding was made in 1997. That estimate is double the size of the elephant populations of Namibia and South Africa put together, yet the FWS maintains positive enhancement findings for the import of elephant trophies from Namibia and South Africa. The trophy import suspension was based on a mistaken concern that Zimbabwe's elephant population had declined, and the FWS should have admitted the mistake and reversed the suspension immediately. The failure to do so suggests a political motivation, not a scientific one.

• <u>Zimbabwe's elephant population is not "the worst managed," but is among the best.</u> That Zimbabwe maintains a stable elephant population of over 83,000, despite a despotic government, poor economy, and exploding human population growth rate, is a testament to the country's strong management. That number is almost 40% higher than in 1992, when the FWS confirmed the "threatened" listing of elephant, and almost 20% higher than in 1997, when the FWS made a positive enhancement finding authorizing the import of elephant trophies. This is due in part to ZPWMA being a parastatal separate and separately funded from the central government. It is also due to the commitment of Zimbabwe's citizens to maintaining their elephant, notwithstanding the costs—over 40 rural Zimbabweans were killed by elephant from 2010 to 2015. Zimbabwe's strong wildlife management is also demonstrated by recent IUCN Red List assessments of lion and giraffe, which indicated increasing populations of these species in Zimbabwe. The evidence demonstrates that Zimbabwe's wildlife management, not only its elephant management, is succeeding.]

• <u>Zimbabwe's elephant management is not "poor"; it is state-of-the-art and written by one of the world's foremost elephant experts.</u> In response to the April 2014 suspension of elephant trophy imports, ZPWMA took to heart the FWS' criticism that Zimbabwe's then-current elephant management plan dated to 1997. Although that plan was adaptively implemented and monitored, it was admittedly dated. Zimbabwe immediately began the process of adopting a brand-new, state-of-the-art elephant management plan—basically, to satisfy the FWS. This included a year of stakeholder planning workshops: a preparatory meeting of representatives from Zimbabwe's community-based natural resources management program, CAMPFIRE, in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley) in early April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld region in September 2015. Zimbabwe focused on regional planning because the four regions face different management challenges. Each

planning workshop produced a regional elephant management plan that was incorporated into the final. The final document was drafted by a leading elephant scientist, and the process was monitored throughout by the IUCN's African Elephant Specialist Group.

• <u>Regulated hunting is not poaching.</u> By definition, "regulated" hunting is regulated and lawful. It is carefully monitored by ZPWMA, and offtakes are recorded in a national database. Lawfully hunted ivory tusks are marked to show that they are lawful and note the year of harvest. Moreover, regulated hunting revenues underwrite most anti-poaching expenses in Zimbabwe and the rest of Southern Africa, either by fees paid to government wildlife authorities that are used for law enforcement, or by operator-funded teams that patrol concessions and keep poachers out. Finally, revenue-sharing and contributions by hunting operators creates conservation incentives for rural communities most affected by wildlife, which disincentivizes poaching. For example, Zimbabwe's CAMPFIRE communities were receiving over $1.6 million per year in revenues from elephant hunting prior to the import suspension. These funds allow for clinics and schools to be built, teachers' salaries to be paid, boreholes to be drilled, and so on. Hunting operators in Zambia are required to share at least 50% of harvested meat with rural communities. Many tons of meat can come from elephant hunts, to reduce the need and tolerance for bushmeat poaching and protect species in addition to elephant.

• <u>Allowing imports of elephant trophies will not damage the government's efforts to control ivory trafficking.</u> Elephant trophy imports have been authorized for Namibia and South Africa for the past three years, which demonstrates that a country may maintain lawful hunting and low poaching at the same time. In fact, according to the CITES MIKE data, the Southern African countries that depend upon regulated hunting as a conservation tool have the lowest Proportion of Illegally Killed Elephant (PIKE) rates in the world. PIKE, which is used to assess whether poaching levels are unsustainable, has never risen above the sustainability threshold in Southern Africa. PIKE at Zimbabwe's MIKE sites is well below that level. Moreover, national and international law requires the marking of ivory tusks taken as lawful hunting trophies, which clearly and visibly separates these lawful tusks from illegal ones.

• <u>Photographic tourism is not a substitute in most hunting areas.</u> Opponents argue that photographic tourism would be a better option than hunting. It is true that photo-tourism is available in some places; for example, some conservancies in Namibia benefit from photographic tourism revenues alone or a mixture of photo- and hunting tourism. But photo-tourism requires decent infrastructure and scenery, and dense enough wildlife populations to draw tourists. These may not be available in remote areas of a country without access to airports or other activities, and where the wildlife populations are not yet dense enough to ensure a sighting on a two-hour game drive. This is the situation in many CAMPFIRE Areas, where photographic tourism was tried … and failed. In these areas, without the benefits of hunting, the habitat would be converted to agriculture and livestock. Benefits to the rural community stakeholders are less from photographic tourism than from tourist hunting.

Thank you,

Kadi Noble

Sent from my iPhone

Conversation Contents

Zambian Elephant imports to USA

Laura duplooy <jcrserviceszambia@gmail.com>

From:	Laura duplooy <jcrserviceszambia@gmail.com>
Sent:	Wed Nov 22 2017 06:52:33 GMT-0700 (MST)
To:	<(b) (6) @fws.gov>, <exsec@ios.doi.gov>, John du Plooy <johnduplooy1@gmail.com>
Subject:	Zambian Elephant imports to USA

For the attention of: Secretary Zinke & Deputy Director Greg Sheehan

Dear Sirs

RE: ELEPHANT AND LION IMPORTS TO THE USA

This email is written in regards to the current unknown status regarding future imports of sport hunted elephant trophies into USA, and the potential implications this may also have on the importation of other species such as lion.

It is requested that this decision is done not on emotion but on scientific data and actual facts. The negative effects caused as a result of closing imports to USA, and thereby effectively preventing the small but significant off take by US hunters of elephant and other species affected by such decisions, will be long lasting and devastating for the rural people and the wildlife in Zambia.

Please note that:

Safari hunting in Zambia is done based on scientifically supported quotas regulated by strict laws (Zambia Wildlife Act No 14 of 2015)

l aspects of the hunting concession agreements and quotas are reviewed annually.

Animal populations are regularly counted, and monitoring of the Zambian wildlife estate is constantly being done.

The Zambian elephant population is stable and has been so for the past twenty-five years. The Zambian Department of National Parks estimates the population at around 30,000 elephant with 2016 African Status Report putting the elephant population in excess of 21,000.

National off take of elephant is less than 0.4% of the population and is considered negligible with no effect on the species population.

Zambia has risen to the challenge of meeting all that has been asked of it in regards to USFW expectations.

Income to the wildlife department and the communities is being reduced to less than one fifth of its potential on key species such as elephant due to importation restrictions. With 75% expenditure on anti poaching the increase in income by allowing imports would increase training, equipment, manpower and technology in the fight against an ever more difficult and sophisticated poaching problem.

Legally hunted ivory, that is stamped, documented and monitored, will not affect the US government's ability to fight illegal poached ivory.

The Chifunda community gets 50% of the trophy fee with 45% of this in anti poaching and wildlife protection, 35% to community welfare projects and 20% for administration and other costs.

).Almost all the edible meat that is available from the hunting is donated to the community. This is delivered free of charge on a rotation basis so that all members throughout the game management area benefit. This helps to reduce the need for subsistence poaching to feed hungry families.

To give a bit of background Muchinga Adventures Ltd is:

A Zambian family owned safari-hunting company that operates in Chifunda GMA, North Luangwa, Zambia through a Hunting Concession Agreement. This agreement runs for seven years.

Bound by a strong code of ethics and hunting practices.

Meeting and exceeding all obligations and requirements of the hunting concession agreement to both the wildlife and the community of Chifunda GMA. As a result the operations and income derived from hunting give support, or contribute, in some capacity to the betterment of the lives of more than 2100 families and in excess of 10,000 children many of whom are living in extreme poverty.

As a company we respect the partnership the hunting concession agreement forms that upholds the right to earn an income from the resources on the land by the traditional leaders and their people, this is encompassed in the Zambian Lands Act. The income from elephant and lion hunting forms a significant part of the revenue that is raised each year and allows for a tolerance of these species that often hurt people, destroy property and are considered a pest. The community has regularly said without the financial

incentives and benefits derived from hunting they would be unable to prevent the people from destroying and poisoning the wildlife in retaliation for lost crops and livestock.

A destroyed crop from an elephant means that a family or group of families may face starvation. In contrast the one elephant hunted in Chifunda GMA in September 2017:

Fed over 1000 people for a month

Raised revenue to support anti poaching efforts to protect the rest of the elephant population

Supported educational programs that help the people live in tolerance with these animals.

This elephant was an old male, a member of a group that were crop raiding and the incidents of conflict have reduced significantly with the harvesting of this one elephant.

Contributed to the income of the Chifunda Community through revenue sharing of the trophy fee and concession fees which funds community projects and anti poaching

Contributed to the income of the Department of National Parks and Wildlife to ensure monitoring, regulation and protection of the species nationwide

In 2013 and 2014 Zambia closed most but not all of its hunting blocks and put a suspension on elephant, lion and leopard hunting. USFW did not close the importation of Zambian elephant, nor was a communication to this effect every issued. Sport hunted elephant, from a conservative national quota of 80, were imported from 2011 and 2012 to USA. A Non detrimental enhancement finding for Zambian elephant in April 2015 led to the written indication from the Chief of Permits that import permits were expected shortly in August 2016.

In this same period of many hunting areas being closed the expected revenue and support from the photographic and non hunting communities to replace the loss of income, anti poaching effort, community welfare and protection of the wildlife was never forth coming. In Chifunda GMA a photographic bush camp was opened in 2014 and the total revenue earned for each year has never exceeded US$350 to the community with two people employed.

The sad reality is that many hunting blocks are in remote areas of the country with limited infrastructure and as such any investment from non hunting entities are unlikely to be photographic or in the interests of sustainable and long term viability of wildlife populations.

We had one of our US clients go and spend a day in the North Luangwa National Park

earlier this year, he asked to leave early because he saw more animals in the hunting block than the national park which is heavily protected due to the presence of the rhino. This is an indication that the hunting block is not only working using hunting as a conservation tool but the wildlife are thriving under this management program.

Below is what Muchinga Adventures Ltd and hunting has done in one Zambian hunting concession in one year. This is still on going for 2017. Without the financial support from the hunting and especially lion, leopard and elephant we will not be able to operate and continue this support to a community that need it and a wildlife population that is scientifically proven through constant monitoring and regulation to be healthy with hunting.

We ask that you keep sport hunted elephant imports to US open. Your consideration of the facts and the impact of this decision on large numbers of people are appreciated.

Please feel free to contact me at any time if you have any queries or questions regarding this email. I am happy to furnish your office with any documentary evidence regarding Chifunda GMA.

Kind regards

Laura du Plooy

Muchinga Adventures Ltd - Director (Zambia)

Tel: +260 977 774815

SUMMARY OF 2017 CHIFUNDA GMA PLEDGES, OBLIGATIONS AND DONATIONS: (AS OF 9 NOVEMBER 2017)

DATE	DESCRIPTION	AMOUNT/VALUE
28/12/2016	Tourism License for 2017	K6000
7 March 2017	Hunting Concession fees – Receipt 7362310	K860,973
18 Jan 2017	Outfitter license 1111 – Receipt 7137819	US$3500

13/1/2017	Resident PH – John du Plooy license 0519	K2500
13/1/2017	Training of Zambian PH Apprentice – Nyambe Sandema – 0046	K833.40
28 March 2017	Performance Bond lodged with DNPW	Completed
09/11/17	60% trophy fees: completed as of 9/11/17 US$162,060 spent on NRHL making this 76% of the quota value with 5 safaris still scheduled to be done	US$162,060 and continuing
Jan 2017	Tax clearance up todate	completed
1/6/17	ZICCTA License RFM/SAT/1759	K4166.70
22/3/17	Public Liability Occupiers Insurance DAAAPH0001861704	completed
1/5/2017	Employ Liaison Officer – A Nkoma	On employment contract
12/8/17	$20,500 to CRB as per Hunting Concession Agreement per annum 1. US$10,000 wired 27 July 2017 2. US$10,500 wired 12 August 2017 For projects to better the whole community	US$20,500
12 June 2017	Bush camp maintenance/ assistance to the local community to run their own tourism business	US$5,000
29/9/2017	K10,000 fire management: Paid as: 1. K7800 – 24 May 2017 2. K2200 – 29 September 2017	K10,000
29/9/2017	K20,000 Infrastructure development: Paid as: 1. K13,000 – 27/4/2017 2. K7000 – 29 September 2017	K20,000
20/10/2017	K60,000 law enforcement Paid as: i. K12,562.50 – 9 June 2017 ii. K4586 – 10/6/2017 iii. KK7808.56 – 5/7/17 iv. K1960.40 – 5/7/17 v. K8,753.30 – 12 July 2017 vi. K12,000 – 11 October 2017 vii. K13,002.42 – 20/10/17	K60,673.18
5/7/17	Extra anti poaching:	K11,175 plus vehicle

	i. village sweep x14 ii. arrest of poacher x21 iii. lion skin x1 recovered iv. leopard skin x2 recovered v. elephant ivory recovered x1 vi. grysbok skin receovererd x2 vii. hartebeest tail receovered x1 viii. wildebeest tail x1 recovered ix. illegal firearm recovered x12	and transport support
12/7/2017	K10,000 wildlife resource monitoring	K10,000
24/5/2017	Establish safari camp – employment to community of more than 120 people	K15,750
24/5/2017	Fly camp (tented) – employment to community	K10,200
	80% of camp staff from Chifunda	Done
	Meat distribution – throughout year (approx 12 tons of meat)	Done
24/5/2017	Teacher x2 – paid wages for two extra teachers at the school – this is educating more than 120 extra children	K19,200
30/4/2017	Meeting with CRB at start of season. Sponsored by Muchinga Adventures	K1000
	Meeting with CRB at close of season -	Pending
30/6/2017	Vehicle donated – landcruiser	US$20,000
12/9/17	Submission of leopard and lion data to DNPW	Completed
4/09/2017	Football league support (keeping the youth busy to prevent poaching)	K4500
20/10/17	Football league support	K3500
11/10/17	Cultural ceremony support	K1000
9/10/17	Scholarship 2017 for tertiary education – DNPW member from Chifunda in wildlife, conservation, education or medicine	K19,200
8/8/17	Painted the house of HRH Chief Chifunda	K4500
27/7/17	Tyres donated for landcruiser	K4000
8/9/17	Support for medical tretament to adult female victim mauled by lion	K3500
24/7/2017	Leopard destroyed 10 goats – community member relief to prevent retaliation against leopard	K1000
27/4/2017	Support to HRH Chief Chifunda (phone communications and to assist with carrying out duties)	K5000
20/1/2017	Education assistance to DNPW member (P Sakanga)	K3500
20/1/2017	CRB Chairperson medical assistance	K1500
2017	The company has provided full time employment to more than 50 people through camp staff, administration and support to	

	operations. Four staff members were sent to do and passed a university course in early 2017 as part of the commitment to skills and development training of the community.	

In red being what the company has done over and beyond its hunting concession agreement and statutory obligations.

Conversation Contents

Letter of Support for lion and elephant imports from Zambia

Attachments:

/76. Letter of Support for lion and elephant imports from Zambia/1.1 image002.jpg

Gavin Robinson <gr.safaris@gmail.com>

From:	Gavin Robinson <gr.safaris@gmail.com>
Sent:	Wed Nov 22 2017 02:29:55 GMT-0700 (MST)
To:	<(b) (6) @fws.gov>, <exsec@ios.doi.gov>
Subject:	Letter of Support for lion and elephant imports from Zambia
Attachments:	image002.jpg

Good Morning Mr. Secretary Zinke, and Deputy Director Sheehan

On behalf of the Professional Hunters Association of Zambia (PHAZ) we fully support you in your decision to allow the import of legally hunted lion and elephant from the Republic of Zambia for the calendar years of 2016,2017 and 2018.

We are fully aware that this decision was derived at, from your good offices, after many years of fact finding and enhancement findings on the role of safari hunting in the crucial conservation of lion and elephant here in Zambia. Therefore good sirs i again extend our full support to your decision in allowing imports that we all know will provide the very funds, as paid by your american hunters, to ensure the survival of the many animals that remain. After a carefully selected trophy animal is legally and ethically hunted within the borders of Zambia and as per the laws of our country and the ethics set out not only by our association but by all professional hunters worldwide, that trophy should be allowed import into the USA.

Our association, although sovereign, is a part of something much bigger than ourselves in the form of the Safari Club International, The Operators and Professional Hunters of Africa (OPHA), Conservation Force (CF) and many more - where we all strive to ensure our members adhere and follow the most professional conduct when on safari, Not only Sirs are our members Professional Hunters but they are Professional Conservationists in the truest sense of form. They are out there in the field monitoring the game, providing immediate service to anti poaching and have a deep love of not only the fauna but also the flora and the continued well being of all those creatures and plants.

Therefore your recent announcement of the allowing of trophy imports into the United States of America (USA) was a much heralded victory for us in the conservation of the remaining wildlife in our country, Zambia.

Unfortunately the anti-conservationists used some key words like, trophy and Sport hunting and emotional video footage to place your President in a difficult situation - hence his message to put your scientific and fact based decision on 'hold'. This type of situation is not uncommon here in our third world countries, so really it comes as no shock to us, however like all courses of action that follow this type of situation, it now comes the responsibility of your good office Mr

Secretary, ably supported by your FWS department, and our associations support to you - that you kindly explain the science and the facts behind your conclusion to the highest office in your country.

I am very confident Mr Secretary that once you have explained this and provided the data and facts that the FWS have collected over the past years it will undoubtedly and irrevocably prove that funds paid by american hunters directly lead to the conservation and well being of not only the precious wildlife in Zambia but also the community living with in the area and the entire bio diversity of that area as well.

All to often these anti - conservationists have grouped together illegal (poaching) and legal hunting in the same category - you Sirs are no fools to this very bad misconception - we (you and us) are promoting the legal off take and ethical manner in which it is done for the betterment and sustainability of the wildlife, this is basic management and conservation, they are however grouping us with the illegal trade, that we know and are fighting every day, that is decimating our flora and fauna here in Zambia.

Furthermore as evidence to support our support of your office in this matter, the following points and facts gathered can be raised, all extracts from other papers we have presented on this,

Regulated hunting is not illegal - it is provided for in the Wildlife Act of 2015, there are permits and payments that have to be met prior to a safari even commencing, once these are met the safari is deemed legal as per the laws of the republic of Zambia. there is a huge difference between a legal safari and an illegal act against wildlife - we are and have only ever promoted the legal and ethical hunting of licensed game here in Zambia.

ELEPHANT TROPHY IMPORTS HAVE NEVER BEEN “BANNED,” AND THE POSITIVE ENHANCEMENT FINDINGS ARE BASED ON THE BEST AVAILABLE INFORMATION RECEIVED IN 2014-2016

- There has been no “ban” on the import of elephant trophies from Zambia. In October 2011, the FWS made a positive enhancement finding to authorize the import of regulated elephant hunting trophies from Zambia. However, 2013 and 2014, Zambia’s wildlife authority suspended hunting to obtain more current wildlife population information. In 2015, Zambia’s government lifted the hunting suspension, and set a conservative quota of 80 elephant. In August 2016, the Chief of Permits sent an email indicating that the FWS was trying to issue import permits for elephant trophies from Zambia before the CITES Conference of the Parties in September 2016, based on an April 2015 Non-Detriment and Enhancement Finding the FWS received from Zambia’s wildlife authority. However, the FWS ran out of time. At the Conference of the Parties, the Chief of Permits indicated that elephant permits from Zambia would likely issue before the end of the year. Again, because of the new rosewood permits, that enhancement finding was put on a back burner.

ZAMBIA’S ELEPHANT POPULATION IS STABLE

- Zambia’s elephant population inhabits seven sub-regions covering National Parks and Game Management Areas. According to the 2016 African Elephant Status Report, Zambia’s elephant population is estimated at over 21,000. This is generally considered stable over the past 25 years, and is stable compared to Zambia’s population in 1992, when the FWS determined to maintain elephant as “threatened” listed. However, several population surveys indicating an estimate closer to 30,000 were not included in the 2016 African Elephant Status Report, and Zambia’s wildlife authority estimates the country’s population at more than 30,000.

ELEPHANT HUNTING OFF TAKES IN ZAMBIA ARE NEGLIGIBLE

- In 2013 and 2014, Zambia suspended regulated tourist hunting to obtain a better sense of national wildlife population trends. In 2015, Zambia set a conservative export quota of 160 tusks from 80 bull elephants. Zambia maintained the quota of 80 elephants in 2016 and 2017. A national quota of 80 elephants represents less than 0.4% of a population of 21,967 elephant. Actual hunting off takes are negligible and have no impact on the national population rate.

  2015 Hunting Off takes (% of Total Elephant Population): 03 (0.014%)

  2016 Hunting Off takes (% of Total Elephant Population): 12 (0.055%)

ELEPHANT MANAGEMENT IN ZAMBIA IS UP-TO-DATE AND GENERATES SUBSTANTIAL BENEFITS TO ENCOURAGE RECOVERY OF THE SPECIES

- Governing Law: The Zambian Wildlife Act No. 14 of 2015 is the guiding legislation for elephant protection and management. This cutting-edge law consolidated the prior wildlife authority into a government Department of National Parks and Wildlife (DNPW), to address the funding concerns and shortfalls experienced by the prior authority. DNPW is made up of a Wildlife Law Enforcement Unit with over 1,250 rangers; a Conservation Unit; an Infrastructure Development Unit; and a Community-Based Natural Resource Management Unit to oversee the development of conservation planning in Game Management Areas.

- Management and Enforcement Revenues: Between 2010 and 2012, regulated hunting revenues accounted for approximately 32% of the operating budget funding for Zambia's wildlife authority. With a potential to generate nearly $1 million in elephant hunting fees, in 2015 and 2016, these fees totaled only $150,000, due mainly to import restrictions. This amount was divided between DNPW and the Community Resource Boards in Game Management Areas (GMA). DNPW uses this revenue for range salaries and resource protection, as well as management surveys, staff training, and other activities. Approximately 75% of DNPW's expenditures are for anti-poaching, and Zambia's Wildlife Law Enforcement Unit conducted over 10,500 anti-poaching patrols in 2015, involving an average of 5,878 staff per quarter and 237,028 patrol days.

- Habitat: Hunting areas in Zambia (~180,000 km²) provide almost three times the amount of protected habitat compared to the country's National Parks (~64,000 km²).

- Community Benefits: In GMAs, elephant license fees are divided equally between the DNPW and the GMA's Community Resource Board, and 20% of concession fees also accrue to the Board. In 2015 and 2016, approximately $1.36 million in hunting fees was distributed to the Boards, as well as $10,000 per concession paid by the hunting operator. Under the new Wildlife Law, Boards must invest those funds as follows: 45% towards wildlife protection and patrols, 35% towards community improvement projects such as construction of schools, clinics, and water infrastructure, and 20% towards administrative costs. Written concession agreements between the operators, DNPW, and the community Boards usually obligate the concessionaire to make further communities investments, such as constructing a classroom and paying a teacher's salary. Operators in 13 blocks were obligated to spend over $1.1 million in community infrastructure development and 3.4 million in community lease and other payments for the duration of their leases.

- Game Meat Distributions: Moreover, under Zambian law, at least 50% of harvested game meat must be donated and distributed to local communities. A 2015 study found that operators in three GMAs contributed an average of 6,000 kilograms of harvested meat per season, and estimated that operators across all GMAs could provide ~130 tons of much-needed protein annually. This reduces the incentive for bush meat poaching in these areas bordering and buffering Zambia's National Parks.

- Operator Anti-Poaching: Hunting operators' concession agreements with DNPW and the Community Resource Board identify mandatory anti-poaching obligations and expenditures. At present, 75 Boards employ over 750 wildlife scouts and 79 support personnel, at a monthly cost of over $38,800. Those scouts are paid for by revenues from tourist hunting. A small sample of four operators spent over $201,000 on anti-poaching in 2015, to fund community scouts and fund and equip their own operator anti-poaching teams. This anti-poaching support is largely paid for by U.S. hunters, as over half of all hunting clients in Zambia are from the U.S.

- Photographic tourism is not a substitute in most hunting areas. Opponents argue that photographic tourism would be a better option than hunting. It is true that photo-tourism is available in some places; for example, some conservancies in Namibia benefit from photographic tourism revenues alone or a mixture of photo- and hunting tourism. But photo-tourism requires decent infrastructure and scenery, and dense enough wildlife populations to draw tourists. These may not be available in remote areas of a country without access to airports or other activities, and where the wildlife populations are not yet dense enough to ensure a sighting on a two-hour game drive, Zambia does yet have the infrastructure for these to operate in more remote areas, therefore all photographic is currently only present around the little infrastructure we do have.

Once again be rest assured you have our support, together in the fight to conserve Zambian wildlife, we thank you very much Mr. Secretary for your tremendous effort already displayed to help us and we ask for your continuing support, having visited your great country we are well aware of how much land you set aside for parks and hunting and we are no strangers to the remarkable story of not only the whitetail and waterfowl in the US but all your fora and fauna, we too can make such a difference in Zambia for the future generations, if given a chance.

Best Regards

Gavin Robinson
+260966899800

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Zambia

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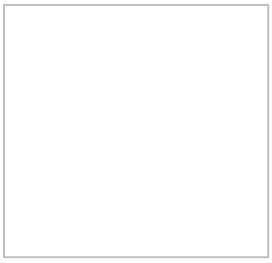

Before printing this mail make sure it is completely necessary.

THE ENVIRONMENT IS EVERYONE'S BUSINESS!

Conversation Contents

Lion and Elephant imports

GCI <wojo@gci.net>

From:	GCI <wojo@gci.net>
Sent:	Tue Nov 21 2017 16:14:00 GMT-0700 (MST)
To:	(b) (6) @fws.gov>
Subject:	Lion and Elephant imports

Mr. Deputy Director, I urge you to do whatever is in your power to support the use of science and not politics when it comes to the approval of importation of Lion and Elephant from African Range States that have demonstrated sustainable resource development such as Zimbabwe and Zambia. This decision should rest with US F& W and not the loudest voice on social media or the White House. Sincerely James M Wojciehowski (907) 350-1859

Conversation Contents

Zimbabwe Elephants

Attachments:

/82. Zimbabwe Elephants/1.1 Talking Points Elephant Trophy Imports - Final.docx

Rick Bonander <Rick@inter-mountain.com>

From:	Rick Bonander <Rick@inter-mountain.com>
Sent:	Tue Nov 21 2017 14:57:11 GMT-0700 (MST)
To:	(b) (6) @fws.gov" (b) (6) @fws.gov>
Subject:	Zimbabwe Elephants
Attachments:	Talking Points Elephant Trophy Imports - Final.docx

Hi Greg! I have attached the talking points about allowing me to import my elephant I took in March 2015. I legally hunted my elephant and have been deprived of my private property rights all based on some obscure politics. I am not sure why our Government is trying to manage wildlife in another country anyway. Rick

Richard A. Bonander
President
Inter-Mountain Pipe & Threading Co.
Office (307) 234-2058
Fax (307) 472-1903
rick@inter-mountain.com
www.inter-mountain.com

November 21, 2017

Deputy Director Greg Sheehan: (b) (6) @fws.gov
Secretary Ryan Zinke: exsec@ios.doi.gov

TALKING POINTS IN SUPPORT OF ELEPHANT TROPHY IMPORTS FROM ZIMBABWE AND ZAMBIA

ELEPHANT TROPHY IMPORTS HAVE NEVER BEEN "BANNED," AND THE POSITIVE ENHANCEMENT FINDINGS ARE BASED ON THE BEST AVAILABLE INFORMATION RECEIVED IN 2014-2016

- **There has been no "ban" on elephant trophy imports. In April 2014, the U.S. Fish and Wildlife Service (FWS) "suspended" the import of elephant trophies from Zimbabwe due to a lack of information. Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) responded to two questionnaires from the FWS in April 2014 and December 2014. However, in March 2015, the FWS extended the suspension, finding information was still lacking. The negative enhancement finding dated March 2015 repeatedly affirmed, "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA." In July 2015, May 2016, and November 2016, ZPWMA responded to additional FWS questions. The November 2017 positive enhancement finding is based on these later responses and thousands of pages of supporting documents, including Zimbabwe's National Elephant Management Action Plan, 2014 countrywide elephant population surveys, 2014-2016 actual and projected budget data, 2014 and 2015 offtakes and 2016 quota data, 2014-2016 CAMPFIRE data, and much more.**

- **Issuing import permits for elephant trophies from Zimbabwe was not a political decision by this Administration. In September 2016, before the election occurred, the FWS had already indicated to ZPWMA that the suspension would be lifted. ZPWMA was told by the Chief of Permits that the FWS needed "only one more piece of information," a prioritization of the new Elephant Management Plan, before the negative enhancement finding could be reversed. That prioritization was provided on November 8, 2016, before the election results were in. At the end of 2016, the FWS should have made the positive enhancement finding, but was admittedly sidetracked by an influx of thousands of new permit applications due to the listing of rosewood (used extensively in musical instruments and furniture) on the CITES Appendixes effective January 2017.**

- **Similarly, there has been no "ban" on the import of elephant trophies from Zambia. In October 2011, the FWS made a positive enhancement finding to authorize the import of regulated elephant hunting trophies from Zambia. However, 2013 and 2014, Zambia's**

wildlife authority suspended hunting to obtain more current wildlife population information. In 2015, Zambia's government lifted the hunting suspension, and set a conservative quota of 80 elephant. In August 2016, the Chief of Permits sent an email indicating that the FWS was trying to issue import permits for elephant trophies from Zambia before the CITES Conference of the Parties in September 2016, based on an April 2015 Non-Detriment and Enhancement Finding the FWS received from Zambia's wildlife authority. However, the FWS ran out of time. At the Conference of the Parties, the Chief of Permits indicated that elephant permits from Zambia would likely issue before the end of the year. Again, because of the new rosewood permits, that enhancement finding was put on a back burner.

ZIMBABWE'S ELEPHANT POPULATION IS THE SECOND-LARGEST IN AFRICA

- **In 1900, it was estimated that Zimbabwe had a national population of 4,000 elephant. Since then, the population has grown to over 82,000 (a twenty-fold increase). The current population is double the target national population established in the 1980s, almost 40% larger than in 1992, when the FWS determined to maintain the Endangered Species Act (ESA) "threatened" listing, and almost 20% larger than in 1997, when the last positive enhancement finding was made (before November 2017). Elephant sub-populations in Zimbabwe are generally considered stable or increasing.**
    - **<u>North-West Matabeleland</u>: This population is estimated at 54,000, and is most densely located in Hwange National Park (45,000 elephant). In 1928, the estimated elephant population in Hwange was 2,000.**
    - **<u>Sebungwe</u>: This population is estimated at 3,500 and has declined since 2001 due to human population expansion into a previously unsettled area. The human population exploded from 45,000 in 1950 to over 700,000 in 2013, which explains the decline in the elephant population. Due to the expansion of human settlement and unlike other major elephant ranges in Zimbabwe, the habitat in this area is fragmented.**
    - **<u>Mid-Zambezi Valley</u>: This area has an estimated elephant population of about 12,000. That population declined since the 2001 countrywide survey, and it is believed the decline is due to cross-border poaching and perhaps, the cross-border movement of elephants during the survey. Anti-poaching is a major component of the Zambezi Valley/Mana Pools Regional Elephant Management Action Plan, and recently the area has been chosen as a CITES MIKES site with an ongoing project.**
    - **<u>South-East Lowveld</u>: Most of this population inhabits Gonarezhou National Park, whose population has been growing consistently at 5% per annum over 20 years. This region's sub-population is estimated at 13,000 elephant between the Park, surrounding communal areas, and nearby private conservancies.**

ZAMBIA'S ELEPHANT POPULATION IS STABLE

- **Zambia's elephant population inhabits seven sub-regions covering National Parks and Game Management Areas. According to the 2016 African Elephant Status Report, Zambia's elephant population is estimated at over 21,000. This is generally considered stable over the past 25 years, and is stable compared to Zambia's population in 1992, when the FWS determined to maintain elephant as "threatened" listed. However, several population surveys indicating an estimate closer to 30,000 were not included in the 2016 African Elephant Status Report, and Zambia's wildlife authority estimates the country's population at more than 30,000.**

ELEPHANT HUNTING OFFTAKES IN ZIMBABWE ARE SUSTAINABLE

- **Zimbabwe maintains a CITES export quota of 1,000 tusks from 500 bull elephants. A national quota of 500 elephants represents only 0.6% of a population of 82,630 elephant. Actual hunting offtakes are considerably lower, have a negligible impact on the overall population rate, and have declined in the past three years due to the import suspension.**

  Average Hunting Offtakes 2010-2013 (% of Total Elephant Population): 228 (0.276%)
  2013 Hunting Offtakes (% of Total Elephant Population): 258 (0.312%)
  2014 Hunting Offtakes (% of Total Elephant Population): 162 (0.196%)
  2015 Hunting Offtakes (% of Total Elephant Population): 75 (0.091%)

ELEPHANT HUNTING OFFTAKES IN ZAMBIA ARE NEGLIGIBLE

- **In 2013 and 2014, Zambia suspended regulated tourist hunting to obtain a better sense of national wildlife population trends. In 2015, Zambia set a conservative export quota of 160 tusks from 80 bull elephants. Zambia maintained the quota of 80 elephants in 2016 and 2017. A national quota of 80 elephants represents less than 0.4% of a population of 21,967 elephant. Actual hunting offtakes are negligible and have no impact on the national population rate.**

  2015 Hunting Offtakes (% of Total Elephant Population): 3 (0.014%)
  2016 Hunting Offtakes (% of Total Elephant Population): 12 (0.055%)

ELEPHANT MANAGEMENT IN ZIMBABWE IS GUIDED BY APPROPRIATE LEGISLATION AND A STATE-OF-THE-ART MANAGEMENT PLAN

- **Governing Law: The Zimbabwe Parks and Wild Life Act provides the regulatory mechanism for ZPWMA and its programs. The Act created ZPWMA as a parastatal authority apart from the central government and established a separate fund, apart from the Central Treasury, to sustain ZPWMA's operations. The Act sets harsh penalties for elephant-related offenses, and was amended in 2010 to impose a nine-year minimum sentence for the first offense of elephant poaching. Under the Parks and Wild Life Act, Rural District Councils and other land holders are granted "appropriate authority" to benefit directly from wildlife. Under this legislation, land holders are encouraged to maintain and increase wildlife populations because they retain the benefits of sustainable use of that wildlife.**

- **Elephant Management Plan: Elephant are managed according to the Zimbabwe National Elephant Management Plan (2015-2020). The plan incorporates specific action items, deliverables, deadlines, and responsible parties. It is an adaptive management plan utilizing prioritization of targets measured by key components, strategic objectives, and outputs. The plan focuses on five major components: Protection and Law Enforcement; Biological Monitoring and Management; Social, Economic, and Cultural Framework; Building Conservation Capacity; and Program Management. The National management plan is supplemented by four regional plans that utilize the same framework to address the unique challenges for each major elephant range in Zimbabwe. Zimbabwe's elephant management planning process was kicked off by the FWS' elephant trophy import suspension. ZPWMA held a year of stakeholder planning workshops, including a preparatory meeting of representatives from CAMPFIRE in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley range) in March-April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld range in September 2015.**

ELEPHANT HUNTING IN ZIMBABWE GENERATES CONSERVATION BENEFITS THAT SATISFY THE "ENHANCEMENT" STANDARD: Although hunting offtakes are negligible, elephant hunting fees create extensive conservation incentives in Zimbabwe.

- **Habitat: Hunting areas in Zimbabwe represent ~130,000 km^2 of protected habitat. This represents over four times the size of Zimbabwe's National Parks (~28,000 km^2). Healthy elephant populations require large tracts of habitat; the areas set aside for regulated hunting are therefore essential to the elephant's continued survival.**

- **Management and Enforcement Revenues: Revenues generated from tourist hunting conducted on state lands comprised approximately 20% of ZPWMA's revenue stream in 2014. Over $6.2 million in trophy fees came from elephant hunts, with $5 million**

accruing to ZPWMA to reinvest in elephant protection and species management. Over 50% of that revenue came from U.S. clients. Almost 80% of ZPWMA's operating budget is allocated towards law enforcement in the form of staff costs and patrol provisions. ZPWMA employs 1,500 active field rangers. Put simply, hunting revenues support anti-poaching efforts across Zimbabwe's elephant range—and this is largely paid for by American elephant hunters.

- **<u>Operator Anti-Poaching</u>: In addition to supporting ZPWMA's enforcement capacity, hunting operators deploy their own anti-poaching units to police the Safari Areas and fund community game scouts in CAMPFIRE Areas. For example, a small sample of 14 individual operators surveyed by the Safari Operator Association of Zimbabwe spend $957,843 on anti-poaching in 2013 and deployed 245 anti-poaching scouts. One specific operator, Charlton McCullum Safaris (CMS) in the Dande Safari Area and Mbire Communal Area, spends on average $80,000-$90,000 in patrol and equipment costs and anti-poaching rewards. From 2010 to 2016, CMS' efforts led to an 82% decline in elephant poaching in an import border region. As another example, the Save Valley and Bubye Valley Conservancies together spend over $1 million on anti-poaching each year. These anti-poaching efforts are funded predominately by hunting revenue, and protect stable populations of elephant and the third-largest black rhino population in the world.**

- **<u>Regional Anti-Poaching</u>: According to the CITES "Monitoring the Illegal Killing of Elephants" (MIKE) program, poaching in the Southern African countries that allow regulated tourist hunting, including Zimbabwe, is lower than anywhere else on the continent and has never reached an unsustainable level. This stands in stark contrast to the West and Central African countries that do not rely upon tourist hunting as a conservation tool.**

- **<u>Community Benefits</u>: Zimbabwe's CAMPFIRE program is the pioneering community-based natural resource management program in Africa. The program allows rural communities to financially benefit from wildlife, thereby incentivizing the use of communal land as wildlife habitat, and the protection of wildlife in the form of increased tolerance of destructive wildlife. An estimated 77,000 households rely on CAMPFIRE benefit from CAMPFIRE. 90% of CAMPFIRE revenue is generated from regulated hunting, and 70% of this comes from elephant hunting. Thus, prior to the import suspension, elephant hunting generated over $1.6 million per year for CAMPFIRE communities and was reinvested in the construction of classrooms and clinics, the installation of water infrastructure and solar powered facilities, the purchase of vehicles for anti-poaching support, compensation for destruction of crops or livestock by dangerous game, and other benefits that improve the livelihoods of the rural communities living in CAMPFIRE Areas. These benefits offset the damage caused by game species: from 2010 to 2015, elephant destroyed 7,495 hectares of crop fields in CAMPFIRE communities and claimed the lives of approximately 40 people.**

ELEPHANT MANAGEMENT IN ZAMBIA IS UP-TO-DATE AND GENERATES SUBSTANTIAL BENEFITS TO ENCOURAGE RECOVERY OF THE SPECIES

- **Governing Law: The Zambian Wildlife Act No. 14 of 2015 is the guiding legislation for elephant protection and management. This cutting-edge law consolidated the prior wildlife authority into a government Department of National Parks and Wildlife (DNPW), to address the funding concerns and shortfalls experienced by the prior authority. DNPW is made up of a Wildlife Law Enforcement Unit with over 1,250 rangers; a Conservation Unit; an Infrastructure Development Unit; and a Community-Based Natural Resource Management Unit to oversee the development of conservation planning in Game Management Areas.**

- **Management and Enforcement Revenues: Between 2010 and 2012, regulated hunting revenues accounted for approximately 32% of the operating budget funding for Zambia's wildlife authority. With a potential to generate nearly $1 million in elephant hunting fees, in 2015 and 2016, these fees totaled only $150,000, due mainly to import restrictions. This amount was divided between DNPW and the Community Resource Boards in Game Management Areas (GMA). DNPW uses this revenue for range salaries and resource protection, as well as management surveys, staff training, and other activities. Approximately 75% of DNPW's expenditures are for anti-poaching, and Zambia's Wildlife Law Enforcement Unit conducted over 10,500 anti-poaching patrols in 2015, involving an average of 5,878 staff per quarter and 237,028 patrol days.**

- **Habitat: Hunting areas in Zambia (~180,000 km^2) provide almost three times the amount of protected habitat compared to the country's National Parks (~64,000 km^2).**

- **Community Benefits: In GMAs, elephant license fees are divided equally between the DNPW and the GMA's Community Resource Board, and 20% of concession fees also accrue to the Board. In 2015 and 2016, approximately $1.36 million in hunting fees was distributed to the Boards, as well as $10,000 per concession paid by the hunting operator. Under the new Wildlife Law, Boards must invest those funds as follows: 45% towards wildlife protection and patrols, 35% towards community improvement projects such as construction of schools, clinics, and water infrastructure, and 20% towards administrative costs. Written concession agreements between the operators, DNPW, and the community Boards usually obligate the concessionaire to make further communities investments, such as constructing a classroom and paying a teacher's salary. Operators in 13 blocks were obligated to spend over $1.1 million in community infrastructure development and 3.4 million in community lease and other payments for the duration of their leases.**

- **Game Meat Distributions: Moreover, under Zambian law, at least 50% of harvested game meat must be donated and distributed to local communities. A 2015 study found that operators in three GMAs contributed an average of 6,000 kilograms of harvested meat per season, and estimated that operators across all GMAs could provide ~130 tons**

of much-needed protein annually. This reduces the incentive for bush meat poaching in these areas bordering and buffering Zambia's National Parks.

- **Operator Anti-Poaching: Hunting operators' concession agreements with DNPW and the Community Resource Board identify mandatory anti-poaching obligations and expenditures. At present, 75 Boards employ over 750 wildlife scouts and 79 support personnel, at a monthly cost of over $38,800. Those scouts are paid for by revenues from tourist hunting. A small sample of four operators spent over $201,000 on anti-poaching in 2015, to fund community scouts and fund and equip their own operator anti-poaching teams. This anti-poaching support is largely paid for by U.S. hunters, as over half of all hunting clients in Zambia are from the U.S.**

[Note: Supporting documents for each of these points is available by contacting Conservation Force, cf@conservationforce.org. These Talking Points largely rely on the responses of ZPWMA and DNPW to FWS information requests and supporting documents provided as part of those responses as well as individual hunting operator enhancement reports, reports of the CAMPFIRE Association, and publicly available IUCN documents.]

MINI-ARGUMENTS REFUTING FALSE FACTS

- **There has never been a "ban" on elephant trophy imports from Zimbabwe. A negative enhancement finding was made in April 2014 that "suspended" the import of elephant trophies. The FWS' negative 2015 enhancement finding stated repeatedly that once additional information was received, the negative finding would be reviewed and reversed (e.g., "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA.") A "ban" suggests a permanent prohibition; a "suspension" is a "temporary abrogation or withholding." Zimbabwe's elephant trophy imports were suspended.**
- **Lifting of the suspension was not a political decision. The decision should have been made in July 2015, when ZPWMA provided extensive additional documentation in response to a FWS questionnaire. The FWS requested "one more piece of information" at the CITES Conference of the Parties in September 2016. That information was provided in November 2016. No further information was needed, or requested. If the FWS had properly prioritized the issuance of elephant import permits—as they told ZPWMA they would at the CITES Conference of the Parties—the positive enhancement finding would have been made and these permits would have issued before the current Administration was in office.**
- **The import of elephant trophies from Zimbabwe should not have been suspended in the first place. In April 2014, the FWS announced the suspension based on an asserted "lack of information." In contradiction to CITES Res. Conf. 6.7's recommendation of notifying and consulting with range states before imposing stricter domestic measures, and the Endangered Species Act's requirement of "encouraging foreign conservation programs," 16 U.S.C. § 1537(b), the FWS shut down imports under an April 2014 negative enhancement finding that the FWS later admitted was wrong with respect to Zimbabwe's elephant population and level of poaching. In fact, the correct estimate for Zimbabwe's elephant population—almost 83,000—is 16,000 elephant higher than when the last, positive enhancement finding was made in 1997. That estimate is double the size of the elephant populations of Namibia and South Africa put together, yet the FWS maintains positive enhancement findings for the import of elephant trophies from Namibia and South Africa. The trophy import suspension was based on a mistaken concern that Zimbabwe's elephant population had declined, and the FWS should have admitted the mistake and reversed the suspension immediately. The failure to do so suggests a political motivation, not a scientific one.**
- **Zimbabwe's elephant population is not "the worst managed," but is among the best. That Zimbabwe maintains a stable elephant population of over 83,000, despite a despotic government, poor economy, and exploding human population growth rate, is a**

testament to the country's strong management. That number is almost 40% higher than in 1992, when the FWS confirmed the "threatened" listing of elephant, and almost 20% higher than in 1997, when the FWS made a positive enhancement finding authorizing the import of elephant trophies. This is due in part to ZPWMA being a parastatal separate and separately funded from the central government. It is also due to the commitment of Zimbabwe's citizens to maintaining their elephant, notwithstanding the costs—over 40 rural Zimbabweans were killed by elephant from 2010 to 2015. Zimbabwe's strong wildlife management is also demonstrated by recent IUCN Red List assessments of lion and giraffe, which indicated increasing populations of these species in Zimbabwe. The evidence demonstrates that Zimbabwe's wildlife management, not only its elephant management, is succeeding.]

- **<u>Zimbabwe's elephant management is not "poor"; it is state-of-the-art and written by one of the world's foremost elephant experts.</u> In response to the April 2014 suspension of elephant trophy imports, ZPWMA took to heart the FWS' criticism that Zimbabwe's then-current elephant management plan dated to 1997. Although that plan was adaptively implemented and monitored, it was admittedly dated. Zimbabwe immediately began the process of adopting a brand-new, state-of-the-art elephant management plan—basically, to satisfy the FWS. This included a year of stakeholder planning workshops: a preparatory meeting of representatives from Zimbabwe's community-based natural resources management program, CAMPFIRE, in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley) in early April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld region in September 2015. Zimbabwe focused on regional planning because the four regions face different management challenges. Each planning workshop produced a regional elephant management plan that was incorporated into the final. The final document was drafted by a leading elephant scientist, and the process was monitored throughout by the IUCN's African Elephant Specialist Group.**

- **<u>Regulated hunting is not poaching.</u> By definition, "regulated" hunting is regulated and lawful. It is carefully monitored by ZPWMA, and offtakes are recorded in a national database. Lawfully hunted ivory tusks are marked to show that they are lawful and note the year of harvest. Moreover, regulated hunting revenues underwrite most anti-poaching expenses in Zimbabwe and the rest of Southern Africa, either by fees paid to government wildlife authorities that are used for law enforcement, or by operator-funded teams that patrol concessions and keep poachers out. Finally, revenue-sharing and contributions by hunting operators creates conservation incentives for rural communities most affected by wildlife, which disincentivizes poaching. For example, Zimbabwe's CAMPFIRE communities were receiving over $1.6 million per year in revenues from elephant hunting prior to the import suspension. These funds allow for clinics and schools to be built, teachers' salaries to be paid, boreholes to be drilled, and**

so on. Hunting operators in Zambia are required to share at least 50% of harvested meat with rural communities. Many tons of meat can come from elephant hunts, to reduce the need and tolerance for bushmeat poaching and protect species in addition to elephant.

- **<u>Allowing imports of elephant trophies will not damage the government's efforts to control ivory trafficking.</u> Elephant trophy imports have been authorized for Namibia and South Africa for the past three years, which demonstrates that a country may maintain lawful hunting and low poaching at the same time. In fact, according to the CITES MIKE data, the Southern African countries that depend upon regulated hunting as a conservation tool have the lowest Proportion of Illegally Killed Elephant (PIKE) rates in the world. PIKE, which is used to assess whether poaching levels are unsustainable, has never risen above the sustainability threshold in Southern Africa. PIKE at Zimbabwe's MIKE sites is well below that level. Moreover, national and international law requires the marking of ivory tusks taken as lawful hunting trophies, which clearly and visibly separates these lawful tusks from illegal ones.**
- **<u>Photographic tourism is not a substitute in most hunting areas.</u> Opponents argue that photographic tourism would be a better option than hunting. It is true that photo-tourism is available in some places; for example, some conservancies in Namibia benefit from photographic tourism revenues alone or a mixture of photo- and hunting tourism. But photo-tourism requires decent infrastructure and scenery, and dense enough wildlife populations to draw tourists. These may not be available in remote areas of a country without access to airports or other activities, and where the wildlife populations are not yet dense enough to ensure a sighting on a two-hour game drive. This is the situation in many CAMPFIRE Areas, where photographic tourism was tried … and failed. In these areas, without the benefits of hunting, the habitat would be converted to agriculture and livestock. Benefits to the rural community stakeholders are less from photographic tourism than from tourist hunting.**

Conversation Contents

Zimbabwe Elephant Imports

Jeff Nicholas <jeffnicholas@gmail.com>

From:	Jeff Nicholas <jeffnicholas@gmail.com>
Sent:	Tue Nov 21 2017 14:20:58 GMT-0700 (MST)
To:	<exsec@ios.doi.gov>, (b) (6) @fws.gov>
CC:	Jeff Nicholas <jeffnicholas@gmail.com>
Subject:	Zimbabwe Elephant Imports

Dear Secretary Zinke and Director Sheehan, I want to thank you both and the FWS for its positive enhancement finding regarding Elephant and Lion in Southern Africa, and specifically Zimbabwe. I have been to Zimbabwe three times over the past four years and can personally attest to the positive conservation impact that sport hunting provides to African wildlife. I have hunted in Metebeleland South Province and helped conservation efforts by personally spending over $100,000 over the course of three hunts, including leopard and elephant hunts. The money sportsmen spend directly benefits the local population and the wildlife. Let me please give you a specific example of elephant conservation due directly to sport hunting support. Debshan Ranch, in Metebeleland South Province comprises of 125,000 acres of privately held land. It is a working cattle ranch, but also intensively managed for wildlife. Sean Grant owns and operates Shangani River Safaris on Debshan. When he was awarded the hunting consession, he invested a great amount of money and time into an anti poaching system. He has three anti poaching units which patrol full time removing snares and engaging poachers. When Sean started he was losing over 30 elephant a year to poachers. Through his efforts, and ENTIRELY SUPPORTED BY SPORTING DOLLARS, he now averages only two to three poached elephants each year. He legally takes about 10 elephant bulls per year and only hunts old, no longer breeding bulls. The facts are that left to defend themselves, without sportsmen, the elephant will not survive. It is obvious to me from actual experience that the denial of import permits will have a severe negative impact on the very animals FWS is supposedly trying to protect. Please rely on science and actual statistics, not on emotions and “politically expedient” yet short sighted decision making and support the recent enhancement finding. African wildlife depends on our support and the value we give it Respectfully, Jeff Nicholas 501.379.8404 Jeffnicholas@gmail.com Sent from my iPhone

Conversation Contents

Elephant/lion imports fro Zimbabwe

Tony Rogers <TonyRogersSDG@aol.com>

From:	Tony Rogers <TonyRogersSDG@aol.com>
Sent:	Tue Nov 21 2017 13:43:17 GMT-0700 (MST)
To:	<(b) (6) @fws.gov>
Subject:	Elephant/lion imports fro Zimbabwe

Please support the import of elephant trophy. The dollars we spent and the value those dollars give them help to protect the species from poaching and eradication from the locals. Sincerely Tony Rogers Sent from my iPhone

Conversation Contents

Elephant and Lion Imports from Zambia and Zimbabwe

Mary Ann Justus <john.justus@icloud.com>

From:	Mary Ann Justus <john.justus@icloud.com>
Sent:	Tue Nov 21 2017 13:10:35 GMT-0700 (MST)
To:	<(b) (6) @fws.gov>
Subject:	Elephant and Lion Imports from Zambia and Zimbabwe

Dear Deputy Director Sheehan, My name is John Justus. I am an avid hunter, but more importantly a conservationist. While people may call me a “murderer” or worse, they cannot deny the value that sustainable hunting brings to the long term health and growth of wildlife populations. Unfortunately, recent decisions to close hunting in various locations throughout the world has not been based on science but rather political pressures from anti-hunting groups who do understand why we hunt or spend the time to understand the role sustainable hunting plays in wildlife conservation. We are now faced with a threat by President Trump to overturn recent rulings by the US Fish and Wildlife Service and ban the import of Elephant and Lions legally taken in Zambia and Zimbabwe. Our hope, as hunters, is that he takes the time to understand the benefits that hunting plays in enhancing the populations of these species. We are confident that if President Trump bases his decision on facts, rather than political pressures, the continued import of these species taken legally will be allowed. A ruling to ban these imports will in effect stop the sustainable hunting and therefore the resulting conservation benefits that hunting provides. Without the revenues flowing back to the communities from hunting, wildlife has no value. The result will be a major decline, if not the elimination of these important species in Zambia, Zimbabwe as well as other African countries. Sincerely, John R. Justus

Conversation Contents

Elephant Imports

Terry Scott <terryscott1@me.com>

From:	Terry Scott <terryscott1@me.com>
Sent:	Tue Nov 21 2017 11:27:54 GMT-0700 (MST)
To:	<exsec@ios.doi.gov>
CC:	(b) (6) [redacted]@fws.gov>
Subject:	Elephant Imports

Dear Secretary Zinke,and Director Sheehan, Please lift the restrictions for importation of Elephants. Not doing so causes harm and financial distress to many Africans, as well as likely the demise of the Elephant as they are so overpopulated in Zimbabwe that they are quite literally eating themselves out of house and home. Please don't listen to the press and political pundits, they have never been there to see for themselves as I have. Additionally Zimbabwe has done a fabulous job of documenting, and managing their Elephant herd. Who are we to take control of their hunting? We have no right to dictate hunting policy to their country via uninformed and liberal bias. I have been to Africa and seen the Elephants for myself if anything there are too many. Hwange National park which was determined to safely support 2000 Elephants in the 70's now has over 45,000. Please let good sense and judgement prevail. Sincerely Terry Scott

Conversation Contents

Elephant Importation

samuel noble <samnoblejr@gmail.com>

From:	samuel noble <samnoblejr@gmail.com>
Sent:	Tue Nov 21 2017 11:26:15 GMT-0700 (MST)
To:	<(b) (6) @fws.gov>
Subject:	Elephant Importation

Mr, Sheehan,

November 21, 2017

Deputy Director Greg Sheehan: (b) (6) ***@fws.gov***
Secretary Ryan Zinke: exsec@ios.doi.gov

TALKING POINTS IN SUPPORT OF ELEPHANT TROPHY IMPORTS FROM ZIMBABWE AND ZAMBIA

ELEPHANT TROPHY IMPORTS HAVE NEVER BEEN "BANNED," AND THE POSITIVE ENHANCEMENT FINDINGS ARE BASED ON THE BEST AVAILABLE INFORMATION RECEIVED IN 2014-2016

- **There has been no "ban" on elephant trophy imports. In April 2014, the U.S. Fish and Wildlife Service (FWS) "suspended" the import of elephant trophies from Zimbabwe due to a lack of information. Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) responded to two questionnaires from the FWS in April 2014 and December 2014. However, in March 2015, the FWS extended the suspension, finding information was still lacking. The negative enhancement finding dated March 2015 repeatedly affirmed, "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA." In July 2015, May 2016, and November 2016, ZPWMA responded to additional FWS questions. The November 2017 positive enhancement finding is based on these later responses and thousands of pages of supporting documents, including Zimbabwe's National Elephant Management Action Plan, 2014 countrywide elephant population surveys, 2014-2016 actual and projected budget data, 2014 and 2015 offtakes and 2016 quota data, 2014-2016 CAMPFIRE data, and much more.**

- **Issuing import permits for elephant trophies from Zimbabwe was not a political decision by this Administration. In September 2016, before the election occurred, the FWS had already indicated to ZPWMA that the suspension would be lifted. ZPWMA was told by the Chief of Permits that the FWS needed "only one more piece of information," a prioritization of the new Elephant Management Plan, before the negative enhancement finding could be reversed. That prioritization was provided on November 8, 2016, before the election results were in. At the end of 2016, the FWS should have made the positive enhancement finding, but was admittedly sidetracked by an influx of thousands of new permit applications due to the listing of rosewood (used extensively in musical instruments and furniture) on the CITES Appendixes effective**

January 2017.

- **Similarly, there has been no "ban" on the import of elephant trophies from Zambia. In October 2011, the FWS made a positive enhancement finding to authorize the import of regulated elephant hunting trophies from Zambia. However, 2013 and 2014, Zambia's wildlife authority suspended hunting to obtain more current wildlife population information. In 2015, Zambia's government lifted the hunting suspension, and set a conservative quota of 80 elephant. In August 2016, the Chief of Permits sent an email indicating that the FWS was trying to issue import permits for elephant trophies from Zambia before the CITES Conference of the Parties in September 2016, based on an April 2015 Non-Detriment and Enhancement Finding the FWS received from Zambia's wildlife authority. However, the FWS ran out of time. At the Conference of the Parties, the Chief of Permits indicated that elephant permits from Zambia would likely issue before the end of the year. Again, because of the new rosewood permits, that enhancement finding was put on a back burner.**

ZIMBABWE'S ELEPHANT POPULATION IS THE SECOND-LARGEST IN AFRICA

- **In 1900, it was estimated that Zimbabwe had a national population of 4,000 elephant. Since then, the population has grown to over 82,000 (a twenty-fold increase). The current population is double the target national population established in the 1980s, almost 40% larger than in 1992, when the FWS determined to maintain the Endangered Species Act (ESA) "threatened" listing, and almost 20% larger than in 1997, when the last positive enhancement finding was made (before November 2017). Elephant sub-populations in Zimbabwe are generally considered stable or increasing.**

    - **<u>North-West Matabeleland</u>: This population is estimated at 54,000, and is most densely located in Hwange National Park (45,000 elephant). In 1928, the estimated elephant population in Hwange was 2,000.**

    - **<u>Sebungwe</u>: This population is estimated at 3,500 and has declined since 2001 due to human population expansion into a previously unsettled area. The human population exploded from 45,000 in 1950 to over 700,000 in 2013, which explains the decline in the elephant population. Due to the expansion of human settlement and unlike other major elephant ranges in Zimbabwe, the habitat in this area is fragmented.**

    - **<u>Mid-Zambezi Valley</u>: This area has an estimated elephant population of about 12,000. That population declined since the 2001 countrywide survey, and it is believed the decline is due to cross-border poaching and perhaps, the cross-border movement of elephants during the survey. Anti-poaching is a major component of the Zambezi Valley/Mana Pools Regional Elephant Management Action Plan, and recently the area has been chosen as a CITES MIKES site with an ongoing project.**

    - **<u>South-East Lowveld</u>: Most of this population inhabits Gonarezhou National Park, whose population has been growing consistently at 5% per annum over 20 years. This region's sub-population is estimated at 13,000 elephant between the Park, surrounding communal areas, and nearby private conservancies.**

ZAMBIA'S ELEPHANT POPULATION IS STABLE

- **Zambia's elephant population inhabits seven sub-regions covering National Parks and Game Management Areas. According to the 2016 African Elephant Status Report, Zambia's elephant population is estimated at over 21,000. This is generally considered stable over the past 25 years, and is stable compared to Zambia's population in 1992, when the FWS determined to maintain elephant as "threatened" listed. However, several population surveys indicating an estimate closer to 30,000 were not included in the 2016 African Elephant Status Report, and Zambia's wildlife authority estimates the country's population at more than 30,000.**

ELEPHANT HUNTING OFFTAKES IN ZIMBABWE ARE SUSTAINABLE

- **Zimbabwe maintains a CITES export quota of 1,000 tusks from 500 bull elephants. A national quota of 500 elephants represents only 0.6% of a population of 82,630 elephant. Actual hunting offtakes are considerably lower, have a negligible impact on the overall population rate, and have declined in the past three years due to the import suspension.**

  Average Hunting Offtakes 2010-2013 (% of Total Elephant Population): 228 (0.276%)

  2013 Hunting Offtakes (% of Total Elephant Population): 258 (0.312%)

  2014 Hunting Offtakes (% of Total Elephant Population): 162 (0.196%)

  2015 Hunting Offtakes (% of Total Elephant Population): 075 (0.091%)

ELEPHANT HUNTING OFFTAKES IN ZAMBIA ARE NEGLIGIBLE

- **In 2013 and 2014, Zambia suspended regulated tourist hunting to obtain a better sense of national wildlife population trends. In 2015, Zambia set a conservative export quota of 160 tusks from 80 bull elephants. Zambia maintained the quota of 80 elephants in 2016 and 2017. A national quota of 80 elephants represents less than 0.4% of a population of 21,967 elephant. Actual hunting offtakes are negligible and have no impact on the national population rate.**

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- **Habitat: Hunting areas in Zimbabwe represent ~130,000 km² of protected habitat. This represents over four times the size of Zimbabwe's National Parks (~28,000 km^2). Healthy elephant populations require large tracts of habitat; the areas set aside for regulated hunting are therefore essential to the elephant's continued survival.**

- **Management and Enforcement Revenues: Revenues generated from tourist hunting conducted on state lands comprised approximately 20% of ZPWMA's revenue stream in 2014. Over $6.2 million in trophy fees came from elephant hunts, with $5 million accruing to ZPWMA to reinvest in elephant protection and species management. Over 50% of that revenue came from U.S. clients. Almost 80% of ZPWMA's operating budget is allocated towards law enforcement in the form of staff costs and patrol provisions. ZPWMA employs 1,500 active field rangers. Put simply, hunting revenues support anti-poaching efforts across Zimbabwe's elephant range—and this is largely paid for by American elephant hunters.**

- **Operator Anti-Poaching: In addition to supporting ZPWMA's enforcement capacity, hunting operators deploy their own anti-poaching units to police the Safari Areas and fund community game scouts in CAMPFIRE Areas. For example, a small sample of 14 individual operators surveyed by the Safari Operator Association of Zimbabwe spend $957,843 on anti-poaching in 2013 and deployed 245 anti-poaching scouts. One specific operator, Charlton McCullum Safaris (CMS) in the Dande Safari Area and Mbire Communal Area, spends on average $80,000-$90,000 in patrol and equipment costs and anti-poaching rewards. From 2010 to 2016, CMS' efforts led to an 82% decline in elephant poaching in an import border region. As another example, the Save Valley and Bubye Valley Conservancies together spend over $1 million on anti-poaching each year. These anti-poaching efforts are funded predominately by hunting revenue, and protect stable populations of elephant and the third-largest black rhino population in the world.**

- **Regional Anti-Poaching: According to the CITES "Monitoring the Illegal Killing of Elephants" (MIKE) program, poaching in the Southern African countries that allow regulated tourist hunting, including Zimbabwe, is lower than anywhere else on the continent and has never reached an unsustainable level. This stands in stark contrast to the West and Central African countries that do not rely upon tourist hunting as a conservation tool.**

- **Community Benefits: Zimbabwe's CAMPFIRE program is the pioneering community-based natural resource management program in Africa. The program allows rural communities to financially benefit from wildlife, thereby incentivizing the use of communal land as wildlife habitat, and the protection of wildlife in the form of increased tolerance of destructive wildlife. An estimated 77,000 households rely on CAMPFIRE benefit from CAMPFIRE. 90% of CAMPFIRE revenue is generated from regulated hunting, and 70% of this comes from elephant hunting. Thus, prior to the import suspension, elephant hunting generated over $1.6 million per year for CAMPFIRE communities and was reinvested in the construction of classrooms and clinics, the installation of water infrastructure and solar powered facilities, the purchase of vehicles for anti-poaching support, compensation for destruction of crops or livestock by dangerous game, and other benefits that improve the livelihoods of the rural communities living in CAMPFIRE Areas. These benefits offset the damage caused by game species: from 2010 to 2015, elephant destroyed 7,495 hectares of crop fields in CAMPFIRE communities and claimed the lives of approximately 40 people.**

ELEPHANT MANAGEMENT IN ZAMBIA IS UP-TO-DATE AND GENERATES SUBSTANTIAL BENEFITS TO ENCOURAGE RECOVERY OF THE SPECIES

- **Governing Law: The Zambian Wildlife Act No. 14 of 2015 is the guiding legislation for elephant protection and management. This cutting-edge law consolidated the prior wildlife authority into a government Department of National Parks and Wildlife (DNPW), to address the funding concerns and shortfalls experienced by the prior authority. DNPW is made up of a Wildlife Law Enforcement Unit with over 1,250 rangers; a Conservation Unit; an Infrastructure Development Unit; and a Community-Based Natural Resource Management Unit to oversee the development of conservation planning in Game Management Areas.**

- **Management and Enforcement Revenues: Between 2010 and 2012, regulated hunting revenues accounted for approximately 32% of the operating budget funding for Zambia's wildlife authority. With a potential to generate nearly $1 million in elephant hunting fees, in 2015 and 2016, these fees totaled only $150,000, due mainly to import restrictions. This amount was divided between DNPW and the Community Resource Boards in Game Management Areas (GMA). DNPW uses this revenue for range salaries and resource protection, as well as management surveys, staff training, and other activities. Approximately 75% of DNPW's expenditures are for anti-poaching, and Zambia's Wildlife Law Enforcement Unit conducted over 10,500 anti-poaching patrols in 2015, involving an average of 5,878 staff per quarter and 237,028 patrol days.**

- **Habitat: Hunting areas in Zambia (~180,000 km²) provide almost three times the amount of protected habitat compared to the country's National Parks (~64,000 km²).**

- **Community Benefits: In GMAs, elephant license fees are divided equally between the DNPW and the GMA's Community Resource Board, and 20% of concession fees also accrue to the Board. In 2015 and 2016, approximately $1.36 million in hunting fees was distributed to the Boards, as well as $10,000 per concession paid by the hunting operator. Under the new Wildlife Law, Boards must invest those funds as follows: 45% towards wildlife protection and patrols, 35% towards community improvement projects such as construction of schools, clinics, and water infrastructure, and 20% towards administrative costs. Written concession agreements between the operators, DNPW, and the community Boards usually obligate the concessionaire to make further communities investments, such as constructing a classroom and paying a teacher's salary. Operators in 13 blocks were obligated to spend over $1.1 million in community infrastructure development and 3.4 million in community lease and other payments for the duration of their leases.**

- **Game Meat Distributions: Moreover, under Zambian law, at least 50% of harvested game meat must be donated and distributed to local communities. A 2015 study found that operators in three GMAs contributed an average of 6,000 kilograms of harvested meat per season, and estimated that operators across all GMAs could provide ~130 tons of much-needed protein annually. This reduces the incentive for bush meat poaching in these areas bordering and buffering Zambia's National Parks.**

- **Operator Anti-Poaching: Hunting operators' concession agreements with DNPW and the Community Resource Board identify mandatory anti-poaching obligations and expenditures. At present, 75 Boards employ over 750 wildlife scouts and 79 support personnel, at a monthly cost of over $38,800. Those scouts are paid for by revenues from tourist hunting. A small sample of four operators spent over $201,000 on anti-poaching in 2015, to fund community scouts and fund and equip their own operator anti-poaching teams. This anti-poaching support is largely paid for by U.S. hunters, as over half of all hunting clients in Zambia are from the U.S.**

[Note: Supporting documents for each of these points is available by contacting Conservation Force, cf@conservationforce.org. These Talking Points largely rely on the responses of ZPWMA and DNPW to FWS information requests and supporting documents provided as part of those responses as well as individual hunting operator enhancement reports, reports of the CAMPFIRE Association, and publicly available IUCN documents.]

--
Samuel E. Noble, Jr., B.S., B.A., J.D.
Noble LLC
Noble Trucking LLC
Noble Logistics LLC
Elbon Farms LLC

Conversation Contents

Fwd: Lifting of elephant trophy suspension by USFWS

Rose Mandisodza-Chikerema <mandisodzar@gmail.com>

From:	Rose Mandisodza-Chikerema <mandisodzar@gmail.com>
Sent:	Mon Nov 20 2017 03:52:51 GMT-0700 (MST)
To:	(b) (6) @fws.gov>
Subject:	Fwd: Lifting of elephant trophy suspension by USFWS

---------- Forwarded message ----------
From: **Rose Mandisodza-Chikerema** <mandisodzar@gmail.com>
Date: 20 November 2017 at 12:50
Subject: Lifting of elephant trophy suspension by USFWS
To: (b) (6) @fws.org
Cc: Regina Lennox <regina.lennox@conservationforce.org>, Fulton Mangwanya <fmangwanya@zimparks.org.zw>, Geofreys Matipano <gmatipano@zimparks.org.zw>, Patience Gandiwa <patience.gandiwa@gmail.com>, John Jackson <jjjiii@att.net>, Marco Pani <pani.marco@gmail.com>

Dear Greg,

I hope this email finds you well and you had has a safe trip back home. It was good to see you. This communication is additional information to the several discussions that we had in Tanzania. The Zimbabwe Government had a meeting with Dan Ashe of USFWS at the CITES CoP 17 in Johannesburg, South Africa.

During the meeting USFWS highlighted that they need two additional documents for them to make a decision on the elephant trophy suspension. The additional information/documents was on prioritization of activities and implementation of the elephant management plan and the second document was on community benefits from elephant trophy hunting. All these documents were submitted within the agreed time frame, but we did not get any response. The Zimbabwe delegation understood that once this information was sent to the USFWS we will certainly get a positive response on the suspension of import of elephant trophies into the US.

Let us know if you need any additional information from Zimbabwe on elephants. In the meantime i will share a video with Zimbabwe elephant facts via WhatsApp. **Please bear in mind that the elephant off take in Zimbabwe is negligible in biological terms. How can the harvest of 100 elephants endanger a population of 83 000? This low off take generate crucial revenue for livelihoods of poorest if the poor in the country and conservation work for the government.**

Kind wishes

Rose
--
*Mrs Mandisodza-Chikerema R. L

“If you wait for perfect conditions, you’ll never get anything done!” (Ecclesiastes 11:4).

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*Mrs Mandisodza-Chikerema R. L
“If you wait for perfect conditions, you’ll never get anything done!” (Ecclesiastes 11:4).

Rose Mandisodza-Chikerema <mandisodzar@gmail.com>

From:	Rose Mandisodza-Chikerema <mandisodzar@gmail.com>
Sent:	Mon Nov 20 2017 05:28:13 GMT-0700 (MST)
To:	(b) (6) [redacted]@fws.gov>
CC:	Regina Lennox <regina.lennox@conservationforce.org>, John Jackson <jjjiii@att.net>, Marco Pani <pani.marco@gmail.com>, Fulton Mangwanya <fmangwanya@zimparks.org.zw>, Geofreys Matipano <gmatipano@zimparks.org.zw>, Patience Gandiwa <patience.gandiwa@gmail.com>
Subject:	Fwd: Lifting of elephant trophy suspension by USFWS

Dear Greg,

I hope this email finds you well and you had has a safe trip back home. It was good to see you. This communication is additional information to the several discussions that we had in Tanzania. The Zimbabwe Government had a meeting with Dan Ashe of USFWS at the CITES CoP 17 in Johannesburg, South Africa.

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*Mrs Mandisodza-Chikerema R. L
“If you wait for perfect conditions, you’ll never get anything done!” (Ecclesiastes 11:4).

Conversation Contents

Fwd: 1990s elephant population

John Jackson <jjjiii@att.net>

From:	John Jackson <jjjiii@att.net>
Sent:	Sun Nov 19 2017 15:05:41 GMT-0700 (MST)
To:	Greg Sheehan (b) (6) @fws.gov>
CC:	Regina Lennox <regina.lennox@conservationforce.org>, <matt.boguslawski@conservationforce.org>
Subject:	Fwd: 1990s elephant population

Greg, note this quote from the last FWS Zim enhancement finding in 1997. The population since then has increased from 1995 to today from 66 k to 82 k!

Sent from my iPad

Begin forwarded message:

From: "matt.boguslawski@conservationforce.org matt.boguslawski@conservationforce.org" <matt.boguslawski@conservationforce.org>
Date: November 19, 2017 at 11:45:25 PM GMT+2
To: jjjiii <jjjiii@att..net>
Subject: 1990s elephant population
Reply-To: "matt.boguslawski@conservationforce.org matt.boguslawski@conservationforce.org" <matt.boguslawski@conservationforce.org>

From 1997 Positive Enhancement Finding

"Zimbabwe's elephant population was estimated at approximately 46,000 elephant in 1980. The current estimates from 1995 indicate the population in Zimbabwe stands at approximately 66,000. This represent a population growth of about 5% per annum."

Matt Boguslawski
Conservation Force
3240 S I-10 Service Road W, Suite 200
Metairie, Louisiana 70001 USA
(847) 372 8390 (cell)
matt..boguslawski@conservationforce.org

Conversation Contents

Trump Tweet.png

Attachments:

/116. Trump Tweet.png/1.1 Trump Tweet.png
/116. Trump Tweet.png/1.2 ATT00001

John Jackson <jjjiii@att.net>

From:	John Jackson <jjjiii@att.net>
Sent:	Fri Nov 17 2017 22:18:06 GMT-0700 (MST)
To:	<suli@dgroups.org>
CC:	Chrissie Jackson <cjindian@bellsouth.net>, <reneesnider@comcast.net>
Subject:	Trump Tweet.png
Attachments:	Trump Tweet.png ATT00001

Conservation Force has worked on the lifting of the Zimbabwe suspension every day since it was imposed including the filing and supporting of every import permit application and funding Zim's new national and four regional elephant management/action plans, national elephant coordinator, etc. Bad news for Zimbabwe and Zambia elephant budgets. What is really wrong here is both countries were promised the lifting of the suspension (not ban) by FWS at CITES CoP 17 in Joberg before Trump even took office! Bad news for the 777 K families in CAMPFIRE. Bad news for ZIMPARKS which is a parastatal earning most of its income from regulated safari hunting. The irresponsible permitting delay has been caused by the change of administration and the CITES listing of Rosewood that has wholly consumed the FWS Permitting Office. The suspension is a problem that needed fixing not more delay. John J. Jackson III

Tweets Tweets & replies Media

Donald J. Trump @realDonaldTrump · 2h

Put big game trophy decision on hold until such time as I review all conservation facts. Under study for years. Will update soon with Secretary Zinke. Thank you!

14K 8.0K 36K

Sent from my iPad

Conversation Contents

elephant positive enhancement finding

Mroczkiewicz Steve USDM <steve.mroczkiewicz@syngenta.com>

From:	Mroczkiewicz Steve USDM <steve.mroczkiewicz@syngenta.com>
Sent:	Fri Nov 24 2017 09:43:02 GMT-0700 (MST)
To:	"(b) (6) @fws.gov" (b) (6) @fws.gov>
Subject:	elephant positive enhancement finding

Dear Mr. Sheehan,

I've been an avid supporter of President Trump and his administration and have been very pleased by many of his and his administration's actions, among them the original acceptance of the positive enhancement finding made by the USFW for Zambia and Zimbabwe elephant. So I was greatly concerned and disappointed when I heard of the possible block to this action.

I am a lifelong hunter and a Ph.D. scientist. I have modest financial means and will never travel to Zambia or Zimbabwe to hunt elephant. In fact, I'm not sure I would want to even if I could afford it. As a hunter and conservationists, however, I fully support those who have the means and desire to hunt any species that can benefit from hunter-generated revenue and sound wildlife management principals. These elephant populations clearly fit that model.

As a scientist I have been dismayed over the last several years at the number of enormously important decisions made in the name of science while flying in the face of science. The listing of polar bears due to something that could theoretically happen, years in the future, according to computer climate models, was perhaps the pinnacle of emotional and anti-science management decisions. As a scientist, it offended me. You are no doubt more aware than I how many similar examples have occurred in recent years, so I'll refrain from listing more of them. But if the scientific community is going to stand up to policies with far-reaching implications that are based upon emotion while ignoring science, it must include issues within the realm of wildlife management and not just climate change, fuel exploration, etc. Science does not and never should have favorite causes.

Please express my gratitude to President Trump for the strides he's made thus far, including installing an administration that accepted the positive elephant enhancement finding. Please also do whatever you can to see this through.

Respectfully,

Steve Mroczkiewicz, Ph.D.
Attica, IN

This message may contain confidential information. If you are not the designated recipient, please notify the sender immediately, and delete the original and any copies. Any use of the message by you is prohibited.

Conversation Contents

Elephant imports

"William L. Shores" <lshores@shorescpa.com>

From:	"William L. Shores" <lshores@shorescpa.com>
Sent:	Fri Nov 24 2017 04:20:10 GMT-0700 (MST)
To:	"(b) (6) @fws.gov" <(b) (6) @fws.gov>
Subject:	Elephant imports

Good day sir.

I am writing to express my support for allowing the the import of elephants parts from Zimbabwe and Zambia.

I believe that any action to deny the import of these animals legally taken by sport hunters from these countries is showing an arrogance by the United States indicating that we, in the US, know more about management of elephants in those countries than the people in this countries know. How would we feel if Africans met to determine how species here in the US should be managed? What if they were telling us how to manage, for example, white-tailed deer? It would be absurd. It is equally absurd that we are attempting to do the same thing to them.

I am a veteran of many safaris, 25 to be exact. I have witnessed first hand the benefits of sport hunting. Let me briefly summarize:

1- Locals are employed by the safari companies.
2- Money from the safaris companies are used to help build school, clinics, roads, water holes, etc.
3- Anti-poaching units are employed by the safari companies . These patrol on a daily basis. Where these are present, poaching of wildlife is GREATLY reduced. I have personally seen the piles of snares, gins traps, etc that these units have collected in their patrols. It is amazing. Actually shocking.
4- Meat taken from sport hunted animals is distributed amount the local villages thus reducing the incentive for them to poach.

It is interesting that once one leaves a safari area and crosses into an area where no hunting is allowed, the Africans have killed virtually every living thing. I have seen this time and time again in the 29 years I have been going to Africa. Hunters and their dollars are the ONLY thing protecting the wildlife of Africa.

Make no mistake, it is POACHING that has reduced Africa's elephant populations not legal sport hunting.

There is a substantial amount of rhetoric surrounding the current U.S. administration's looming decision on the import ban applying to elephant and lion trophies. A lot of this rhetoric is based up emotions , not facts and is coming from those who do not understand Africa or African issues. As a result, I am taking this opportunity to summarize the guiding principles influencing sustainable and ethical hunters.

First and foremost, I support and advocate for the sustainable and ethical use of wildlife – utilizing wildlife's inherent value in the most pragmatic manner to promote wildlife conservation. I believe I am qualified to speak on this issue because I have spent a substantial portion of my life researching and supporting conservation issues around the world. I am heavily involved in conservation issues right now. In fact, I am an officer and board member of a conservation organization with projects in several African countries right now. Those projects are in Uganda, Congo, Zimbabwe, Mozambique and South Africa. These projects include many species including species that are not now and never will be sport hunted. For example, we are supporting the Lwiro Chimpanzee Reserve in the Congo.

It is critically important (and reasonable) to understand that there is a vast difference between poaching and legal hunting performed in a sustainable and ethical manner. Like all conservationists, I abhor poaching and poachers and everything they represent. I likewise abhor non-sustainable and unethical hunting. I only support sustainable and ethical hunting and I sincerely believe that hunting that follows sustainable and ethical principles can be an incredible conservation tool. It has been estimated that sport hunting areas extend over 1.4 million square kms in Africa; that is approximately 22% more land than is covered by national parks in Africa. Much of the sport hunting areas rely on sport hunting as their sole "land use." It is unclear how much of that land could be viable converted to solely photographic or non-consumptive tourism. Having been to many of these areas, I cannot imagine that many of them would appeal to the photographic types. They are too remote and too rough. However, if we arguably give up hunting in those areas, some other economic activity must replace the hunting activities in order to sustain the local countries and communities. It would indeed be ironic to lose 1.4 million square kilometers of wildlife land and eliminate wildlife to make room for crops and domestic livestock – cattle being the most common large animal on the planet by far. They roam in the millions across landscapes that were once wild and teeming with wild game.
Perhaps as bad, if not worse, are crops. The Africans clear the land of EVERYTHING. They plant for a year, two at the most. After that, they move to another parcel and repeat the same thing. Africa is being decimated by these practices WHERE HUNTING IS NOT ALLOWED. Why not instead support sustainable and ethical hunting that in turn promotes animal conservation in areas where wildlife is abundant (and in some cases overpopulated – such as is the case with elephants in Zimbabwe & Botswana). Additionally, hunting activities can and do feed people in local communities as noted above. Therefore hunting activities provide for both feeding local populations and supporting and promoting the inherent value of wildlife populations. I can send you pictures and videos of the locals Africans taking ALL of the meat from elephants that have been harvested. They take EVERYTHING. In may cases, it is the only sources of protein that they have. I am more than happy to do this. One memorable experience that I have is of an African male swimming across the Zambezi river (a river loaded with crocodiles) to get a piece of elephant meat the size of a fist. He was that protein starved that he would risk his life for a small piece of meat. People here in the US do not realize that Africa is far different than here. In the bush, there are no grocery stores or restaurants. Wildlife is where the majority of their protein comes from.

I therefore ask that each of you consider the following premises:

1. The Inherent Value in Wildlife Is a Conservation Tool –
Where geographic sub-regional wildlife populations exist in healthy and sustainable numbers, sustainable and ethical hunting practices support and promote the inherent value that exists in wildlife. This result is due to the economic influx generated by the financial outlays expended by hunters that have a direct, significant and immediate impact on the local countries and communities in which wildlife exists. This inherent wildlife value promotes continued conservation initiatives and efforts at the grassroots, local governmental and international NGO levels. It is critical, however, that the hunting activities are supported by scientifically researched and competently-executed conservation practices that focus primarily on wildlife population health and sustainability. In Africa, they have a saying that is universal,"if it pays, it stays."

2. Elephant Populations Are Not Equally Distributed – The African continent (Africa) is composed of 54 different countries and many diverse habitats and ecosystems. There are, in fact, geographic areas in Africa whose elephant populations have been poached to the brink of local extinction (also known as extirpation). Comparatively, many other geographic sub-regions in Africa (especially in many southern African countries) contain successful and thriving elephant populations – in fact, in certain regions these Elephant populations are overpopulated/overcrowded to the point where the local ecosystem cannot adequately support the elephant populations. Consequently, any reasonable person must at least consider maximizing the conservation value of such populations by benefiting the communities and countries which they inhabit. By providing value to the local countries and communities in which elephant populations thrive, elephant populations become inherently valuable assets to those countries and communities and therefore encourage conservation efforts for the benefit of those elephant populations – this model is equally applicable to all wildlife populations. There are areas that I have personally been to in Botswana and Zimbabwe that are severely overpopulated with elephants . They are destroying everything. In fact, some ecosystems are being altered forever having a huge negative impact on the species that live there, not to mention the crop damage they do.

3. No Meaningful Reduction in Legal Hunting Practices – The ban on elephant imports into the United States does not meaningfully change how many elephants are hunted in legal hunts. It does however, reduce the revenue generated to the local countries and communities in which the elephant populations live, thereby reducing the population's inherent value to those local countries and communities and thusly negatively impacting conservation efforts that support those elephant populations. Consequently, any reasonable person must at least consider maximizing the inherent value of elephant populations by supporting legal, sustainable, and ethical hunting as a viable conservation alternative that has yielded successful results in Europe, the United States, and many other regions in the globe.

In addition, I would like you to consider the following facts:

1- Zimbabwe has the second largest population of elephants in Africa at approximately 82,000. in 1900, it is estimated that Zimbabwe had 4,000 elephants. The current population is DOUBLE the targeted population for the country. It is 40% larger than when the FWS (in 92) determined to maintain the "threatened" listing under the ESA and 20% larger than the last time the FWS made a positive enhancement finding (in 97) prior to the 11.17 determination.

2- The hunting of elephants results is miniscule off takes of elephants annually. The annual quota is 500 bulls. This is not even enough to stop the already drastically over populated species from continuing to increase the population. While the percentage of the population of elephants taken by sport hunters varies by year, it is always less than 1/2 of 1%.

3-Zimbabwe's elephant management is governed by appropriate legislation and a state of the art management plan guided by some of the formost experts in the world.

This has gotten a lot longer than I intended and I have more to say . Accordingly, I will not delve into Zambia.

What does this mean to the people of Zimbabwe? Why don't you see for yourself? The follow is a recent press release on this matter:

"CAMPFIRE ASSOCIATION PRESS STATEMENT ON LIFTING OF THE SUSPENSION OF ELEPHANT TROPHY IMPORTS INTO AMERICA

Zimbabwe's Community Areas Management Programme for Indigenous Resources

(CAMPFIRE) hails the recent decision by the United States Fish and Wildlife Service (USFWS) to lift the suspension of elephant trophy imports into the United States of America. We encourage the USFWS and the President of the United States to stand by the decision to issue import permits for sport-hunted elephant trophies.

Trophy fees and meat from elephant incentivize CAMPFIRE communities to dedicate land as habitat for elephant and other wildlife. U.S. citizens represent the largest share of CAMPFIRE hunting clients. CAMPFIRE communities have been negatively impacted by the suspension of trophy imports, and we look forward to increased benefits, and therefore additional conservation incentives, with the lifting of the suspension.

CAMPFIRE enables local communities, especially those residing in areas where the level of human and elephant conflict is high, to benefit from wildlife through sport hunting. Since the suspension of elephant trophy imports in 2014, CAMPFIRE Association has cooperated fully and worked closely with the Zimbabwe Parks and Wildlife Management Authority to provide the necessary information required by USFWS, and also participated in the development of a national Elephant Management Plan. Hunting generates about 90% of CAMPFIRE income, with elephant hunting contributing up to 70% of annual income. American hunters make up 60% of the clients in CAMPFIRE areas.

CAMPFIRE has a combined 2.4 million beneficiaries, made up of 200,000 households that are directly involved in the program. Another 600,000 households benefit indirectly from social services and infrastructure supported by wildlife related income. The size of wards that make up CAMPFIRE is approximately 50,000km2 or 12.7% of the country, which is roughly equivalent to the size of the National Parks estate. Under CAMPFIRE, based on voluntary interest in participation by local communities, wildlife is found on land outside national parks. By choice, these communities and their Rural District Councils (RDCs) maintain varying sizes of land free from subsistence and commercial agriculture, or other economic activities such as gold panning and mining that negatively impact on wildlife management and the conservation of natural resources. CAMPFIRE is therefore making significant contributions to the protection of between 2 and 3 million hectares of land in Zimbabwe. Reports by Safari Operators under CAMPFIRE show that the suspension of elephant trophy imports in 2014 resulted in the cancellation of 108 out of 189 (57%) elephant hunts booked by US citizens. This translated to a sharp decline in income to the CAMPFIRE programme from US$2.2m in 2013 to an average US$1.7m in 2014 through to 2016, putting the conservation of elephant in these areas at huge risk.

As recognized in the recent USFWS enhancement finding, the sharing of CAMPFIRE income has been satisfactory. An audit of CAMPFIRE income at community level for the period 2010-2015 was submitted in 2016 to USFWS to support the positive finding. At district level, wildlife income is used for administration, field patrols, monitoring of hunts, problem animal control, water provision, and fire management. Communities have drilled boreholes, constructed seasonal roads, erecting of fencing to keep out wildlife, purchase of tractors, and direct purchase of drought relief food. Children benefit from reduced walking distances through the construction of schools, procurement of learning materials, and payment of school fees from CAMPFIRE proceeds. Communities also benefit from meat in excess of the requirements of safari hunting operations, and from problem animal control.

Annual hunting quotas are granted based on the relative density of elephants in the neighbouring protected areas and those residing in the CAMPFIRE areas. The national trophy hunting quota is set at 0.3 – 0.5% of the overall population to maintain trophy quality at approximately 35kg (77lbs). The quality of hunting in CAMPFIRE areas remains good, and this is confirmed by repeated hunter arrivals each year, among other indicators. Zimbabwe's population of the African elephant, Loxodonta africana, is healthy and remains on Appendix II under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The IUCN Species Survival Commission's African Elephant Specialist Group (AfESG)'s 2016 estimate of Zimbabwe's elephant population is around 83,000.

CAMPFIRE Association objects to the ill informed press reports and releases against the lifting of the suspension, including appeals to US authorities for its reinstatement. CAMPFIRE Association supports the lifting of the suspension, which will benefit our participating districts and wards. The sharing of hunting income creates a real incentive to protect elephant and other game species, even when these species negatively impact people living in CAMPFIRE areas. 139 people in CAMPFIRE areas have lost their lives from wildlife attacks, including elephant, since 2010. Over 7,000ha of crops were destroyed by elephant between 2010 and 2015 in 10 CAMPFIRE districts. With the minimum cash value of maize at US$180/ton, the approximate loss to communities is between US$500,000 – US$1.0 million. These losses are endured by communities living in areas highly prone to drought and low rainfall, making the impact even more acute. Despite these losses, the poaching of elephant in CAMPFIRE areas is relatively low, with only 38 elephants poached since 2016 to the present. Effective local level anti-poaching operations through CAMPFIRE have resulted in the decline in elephant poaching in Mbire district from a peak of 40 cases in 2010 to only 5 so far in 2017.

The sustainability of hunting as a conservation tool, and its contribution to rural livelihoods is a reality in Zimbabwe. CAMPFIRE Association urges all conservationists, animal lovers and all institutions interested in the protection of wildlife to respect the livelihood choices of African communities, and to acknowledge that the protection of wildlife from poaching and illegal wildlife trafficking is more effective when rural people are allowed to exercise multiple options for the sustainable use of wildlife that they live with.

For more information, please contact:

Charles Jonga,

Director of CAMPFIRE Association,

Mukuvisi Woodlands, Harare, Zimbabwe.

Email: campfire@ecoweb.co.zw, Website: www.campfirezimbabwe.org”

Sir, this was not a political decision. All information necessary to make the decision to reinstate the imports was given the the FWS BEFORE the elections. The FWS asked for nothing else. The decision could have been made before the election.

I know the people against the imports mean well. However, in reality, people like them are going to be the downfall of all African wildlife. I respectfully request that you allow the imports to continue .

Thank you for your time. As noted earlier, I am happy to provide any information which may help you.

William L. (Larry) Shores, CPA
Shores, Tagman, Butler & Company, PA
17 South Magnolia Avenue
Orlando, FL 32801
(407)872-0744 extension 214

Conversation Contents

I Support the Elephant Decision

Tim Macmanus <tim@safaritime.com>

From:	Tim Macmanus <tim@safaritime.com>
Sent:	Thu Nov 23 2017 12:23:39 GMT-0700 (MST)
To:	<(b) (6) @fws.gov>
Subject:	I Support the Elephant Decision

Deputy Director Sheehan,

I just want you to know that I support the US Fish and Wildlife Service finding to allow import of elephant trophies from Zimbabwe and Zambia. That finding was based on science and not emotion. I appreciate the members of the FWS who worked on this finding and their courage in following facts and not emotion.

Appreciate your hard work to restore freedom and sustainable use to our National Parks and Forests across this great land of ours.

Adios,

Tim

Tim Macmanus
O - 972-769-8866
C - 972-977-4590
Have a Fantastic Day!
Proverbs 3.5-6

Conversation Contents

Elephant and Lion Importation into the USA

Keith Atcheson <keith@atcheson.com>

From:	Keith Atcheson <keith@atcheson.com>
Sent:	Wed Nov 22 2017 13:54:20 GMT-0700 (MST)
To:	(b) (6) @fws.gov" <(b) (6) @fws.gov>
Subject:	Elephant and Lion Importation into the USA

Dear Mr. Sheehan,

I'm writing to ask for your support in allowing elephant and lion trophy importation from Zimbabwe and Zambia for American hunters.

Our business has sent thousands of hunters to African countries for over 50 years and I've personally completed over 50 safaris myself. I believe we are very qualified and truly understand the African model of hunting, conservation, preservation and how it works. African countries do not enjoy the North American Conservation model that are funded nicely by hunters and fisherman buying licensing and sporting equipment under programs like the PR Act and others.

Africa is quite the opposite. There is no middle class. Most residents cannot own firearms or buy licenses to go hunting because the possibility does not even exist. Most areas that support healthy elephant and cat populations are heavily financially supported by worldwide hunters that pay large daily rates and trophy fees to local governments, communities, outfitters, guides, professional hunters etc… American hunters are a majority of this funding. These funds support local conservation and anti-poaching programs that actually teach people not to poach and give a value to game animals that live in areas where they co-exist with humans. It raises money for trained game guards and small game departments. Funds are also allocated to help with rural schools, hospitals and community health clinics.

If hunters are not allowed to import Lion and Elephant back into the USA it will stop many hunters from going in the first place and its extremely damaging to the very species we are all trying to protect. The anti-hunting community contributes 0 dollars into conservation and preservation of many worldwide species.

Please encourage Director Zinke and President Trump to consider the greater good for the species we all love and continue importation of well managed species like Elephant and Lion. If our government listens only to the social media hysteria line of the uninformed and ignorant anti-hunting movement it will result in far greater damage to elephant and lion populations and many other species that co-exist symbiotically.

Thank you for your consideration.

Best Regards,

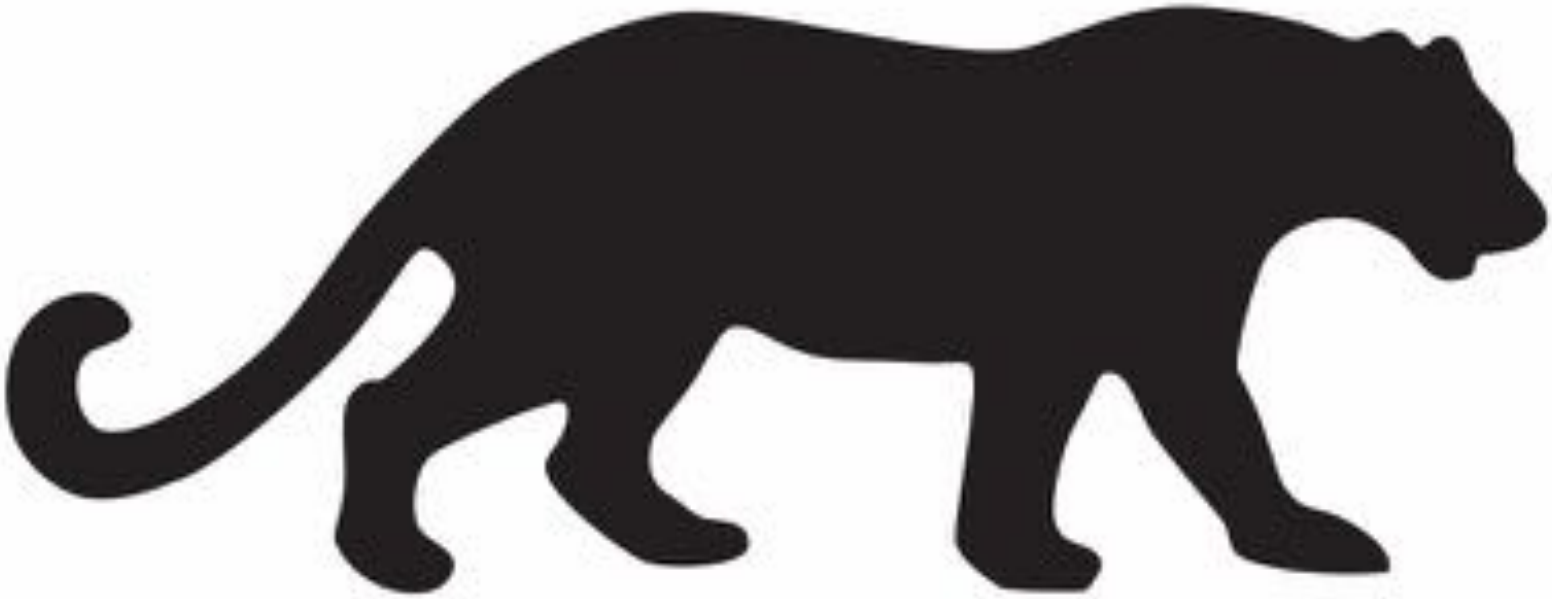
Keith Atcheson
Jack Atcheson & Sons Inc.
Worldwide Hunting Consultant
MT. Outfitter Since 1983 Lic. #180
NRA Life Member
3210 Ottawa Street
Butte, MT. 59701
406-782-2382
www.atcheson.com

Conversation Contents

Elephant Trophy Imports from Zimbabwe.
Attachments:
/77. Elephant Trophy Imports from Zimbabwe./1.1 DAPU 2017pdf.pdf

CMS <admin1@cmsafaris.com>

From:	CMS <admin1@cmsafaris.com>
Sent:	Tue Nov 21 2017 23:40:51 GMT-0700 (MST)
To:	"exsec@ios.doi.gov" <exsec@ios.doi.gov>
CC:	"(b) (6) @fws.gov" <(b) (6) @fws.gov>
Subject:	Elephant Trophy Imports from Zimbabwe.
Attachments:	DAPU 2017pdf.pdf



DAPU

DANDE ANTI POACHING UNIT

Forest Land
National Park
Recreational Park
Safari Area
Mbire District

Introduction

As you probably all know, **Charlton McCallum Safaris** is a hunting operator in the "Dande North" which is in the Mbire District. The concessions are made up of:

Dande North (communal land wards 1 & 2) = 77,500 hectares.
Dande Safari Area (National Parks) = 55,000 hectares.
Dande East (communal land wards 4 ,11,12) = 50,000 hectares
Total **= 182,500 hectares**

79 % of the area is "communal land" with a core National Parks concession. All this we operate in a genuine partnership with the council and communities under the CAMPFIRE program.

Because of:

1. People living in the area.
2. The sheer size of the Mbire district and
3. The huge and porous borders between Zimbabwe, Mozambique and Zambia.

We face a much, much larger challenge than most. For our district the CAMPFIRE model simply has got to work. People MUST get FAIR value for their game, or all is lost. So our anti poaching and conservation efforts are under pinned by:

1. Strong administrative, legal and financial i.e. we make sure that all hunting proceeds are correctly channeled into producer ward accounts.
2. Strong Sustainable Trophy Hunting Program – through adaptive quota setting and adherence to the Parks and Wildlife Act and Industry code of conduct.
3. Strong Conservation benefits – early burning, roads, anti poaching, general stewardship.
4. Strong Social benefits – transparent on-time payments, employment and meat distribution.

 # 1 Administrative, legal and financial.

At Charlton McCallum Safaris, we have always prided ourselves at being strong in the administrative, legal and economic departments.

All of our professional hunters are members of ZPGHA, CM Safaris is a paid up member of SOAZ and Myles McCallum has served on the SOAZ executive committee for 4 years.

It is extremely important to get all the administrative, legal and economics' of sport hunting correct, because ultimately the animals have to be worth money to all stakeholders in order to have broad buy in. The stakes are high for all parties to get the anti poaching and general best management practices right, as this reflects directly into the bottom line profit and thus makes it much, much easier to get everyone pulling in the same direction.

Please see slides showing distribution of revenue to Wards, National Parks, Council, ZTA and Campfire Association.

2013

Dande Safari Area, Dande North and Dande East - actual payments to National Parks and Communities

	Hunting	Social Funds	Bird quota/ Camp rental	Total	
Council	US$206,624.0	US$47,000.0	US$3,000.0	US$256,624.0	
Parks	US$190,994.0	US$0.0	US$0.0	US$190,994.0	
Ward 4	US$27,365.0	US$4,000.0	US$3,500.0	US$34,865.0	
Ward 10	US$2,000.0	US$1,000.0	US$0.0	US$3,000.0	
Ward 11	US$21,057.0	US$2,000.0	US$0.0	US$23,057.0	
Ward 12	US$6,000.0	US$2,500.0	US$0.0	US$8,500.0	
Ward 1	US$41,237.5	US$5,500.0	US$0.0	US$46,737.5	
Ward 2	US$59,947.5	US$5,500.0	US$0.0	US$65,447.5	
Campfire	US$12,608.0	US$0.0	US$0.0	US$12,608.0	
ZTA	US$	US$0.0	US$0.0	US$29,799.00	
DAPU	US$0.0	US$0.0	US$0.0	US$60,000.0	(estimated)
Total Paid	**US$567,833.0**	**US$67,500.0**	**US$6,500.0**	**US$731,632.00**	

2014

Dande Safari Area, Dande North and Dande East - actual payments to National Parks and Communities

	Hunting	Social Funds	Camp rental/ bird quota	Total	
Council	US$225,172.0	US$47,000.0	US$3,000.0	US$275,172.0	
Parks	US$147,374.0	US$0.0	US$0.0	US$147,374.0	
Ward 4	US$33,520.0	US$4,000.0	US$3,000.0	US$40,520.0	
Ward 10	US$525.0	US$1,000.0	US$0.0	US$1,525.0	
Ward 11	US$26,597.8	US$2,000.0	US$0.0	US$28,597.8	
Ward 12	US$0.0	US$2,500.0	US$0.0	US$2,500.0	
Ward 1	US$49,217.0	US$5,500.0	US$0.0	US$54,717.0	
Ward 2	US$71,352.3	US$5,500.0	US$0.0	US$76,852.3	
Campfire	US$14,650.0	US$0.0	US$0.0	US$14,650.0	
ZTA	US$24,466.00	$0	$0	US$24,466.00	
DAPU	US$0.0	US$0.0	US$0.0	US$71,968.0	(actual)
Total Paid	**US$568,408.1**	**US$67,500.0**	**US$6,000.0**	**US$738,342.00**	

2015

Dande Safari Area, Dande North and Dande East - actual payments to National Parks and Communities

	Hunting	Social funds	Camp rental/ Bird quota	Total	Notes
Council	$166,022.75	$47,000.00	$4,000.00	$171,693.00	
Parks	$146,158.00	$0	$0	$146,158.00	
Ward 4	$22,261.91	$4,000.00	$3,500	$29,762.00	
Ward 10	$3,862.50	$1,000.00	$0	$4,862.00	
Ward 11	$15,950.05	$2,000.00	$0	$17,950.00	
Ward 12	$0	$2,500.00	$0	$2,500.00	
Ward 1	$35,582.86	$5,500.00	$0	$41,082.00	
Ward 2	$56,419.73	$5,500.00	$0	$61,919.00	
Campfire	$9,715.00	$0	$0	$9,715.00	
ZTA	$18,164.00	$0	$0	$18,164.00	
DAPU	$0	$0	$0	$74,813.00	(Actual)
Total Paid	**$474,136,8**	**$67,500.00**	**$7,500.00**	**$549,136.00**	

2016

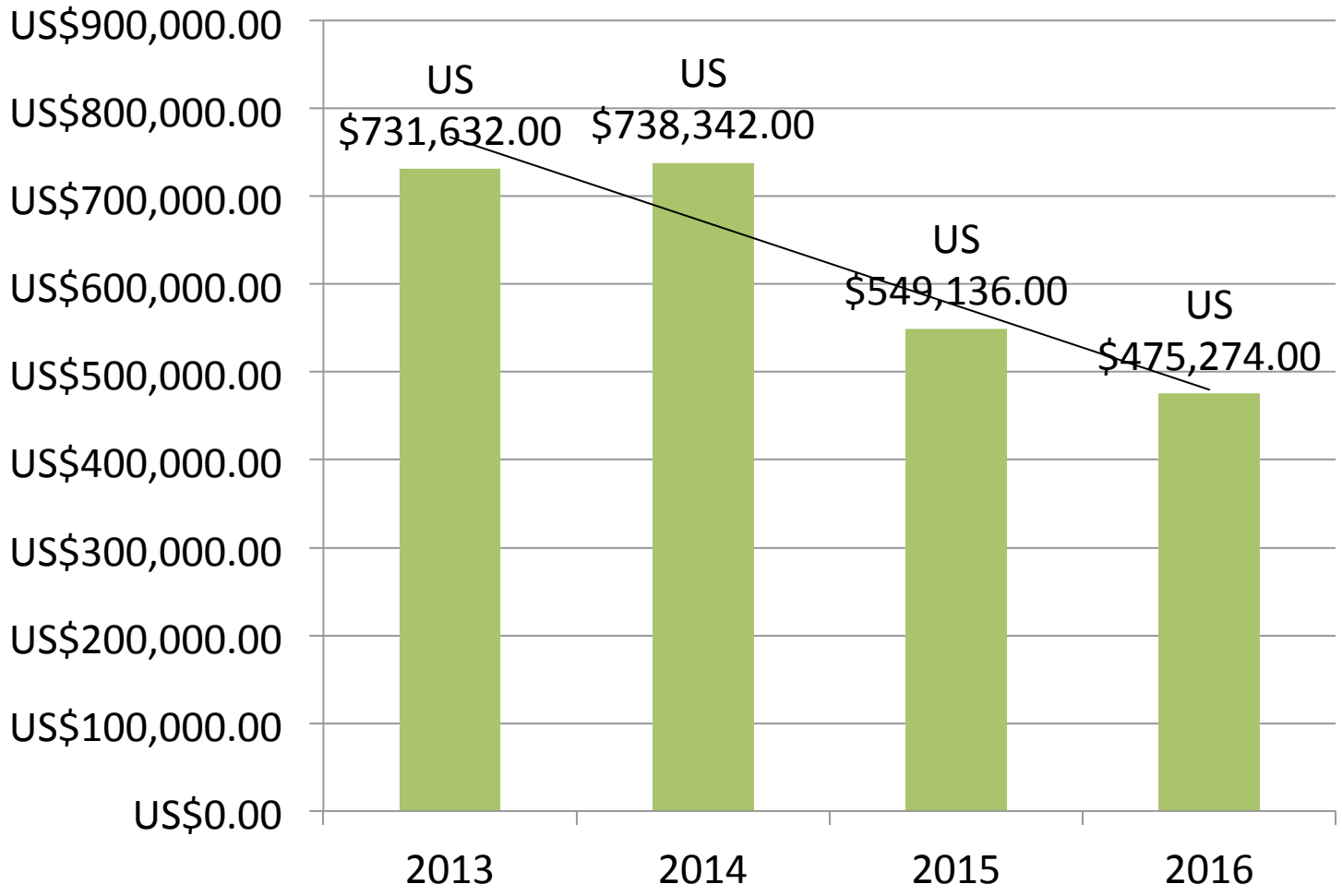
Dande Safari Area, Dande North and Dande East - actual payments to National Parks and Communities

	Hunting	Social funds	Camp rental/ Bird quota	Total	Notes
Council	$79,010.00	$47,000	$3,000.00	$129,010.00	
Parks	$119,190.00	$0	$0	$119,190.00	
Ward 4	$11,300.00	$4,000.00	$3,000	$18,300	
Ward 9& 10	$611.61	$1,000.00	$0	1,611.61	
Ward 11	$6,875.00	$2,000.00	$0	$8,875.00	
Ward 12	$0.00	$2,500.00	$0	$2,500.00	
Ward 1	$44,894	$5,500.00	$0	$50,394.00	
Ward 2	$22,195	$5,500.00	$0	$27,695.00	
Campfire	$6,879.00	$0	$0	$6,879.00	
ZTA	$15,814.77	$0	$0	$15,814.00	
DAPU	$95,006	$0	$0	$95,006.00	(Actual)
Total Paid	**$401,775.38**	**$67,500.00**	**$6,000.00**	**$475,274.00**	

Four year earnings in US$ Dande – decrease due to USFWS elephant and lion bans.

Note 36% decrease in earnings in 2016 compared to 2014

Note combined loss in revenue $452,274.00 2015 and 2016 combined



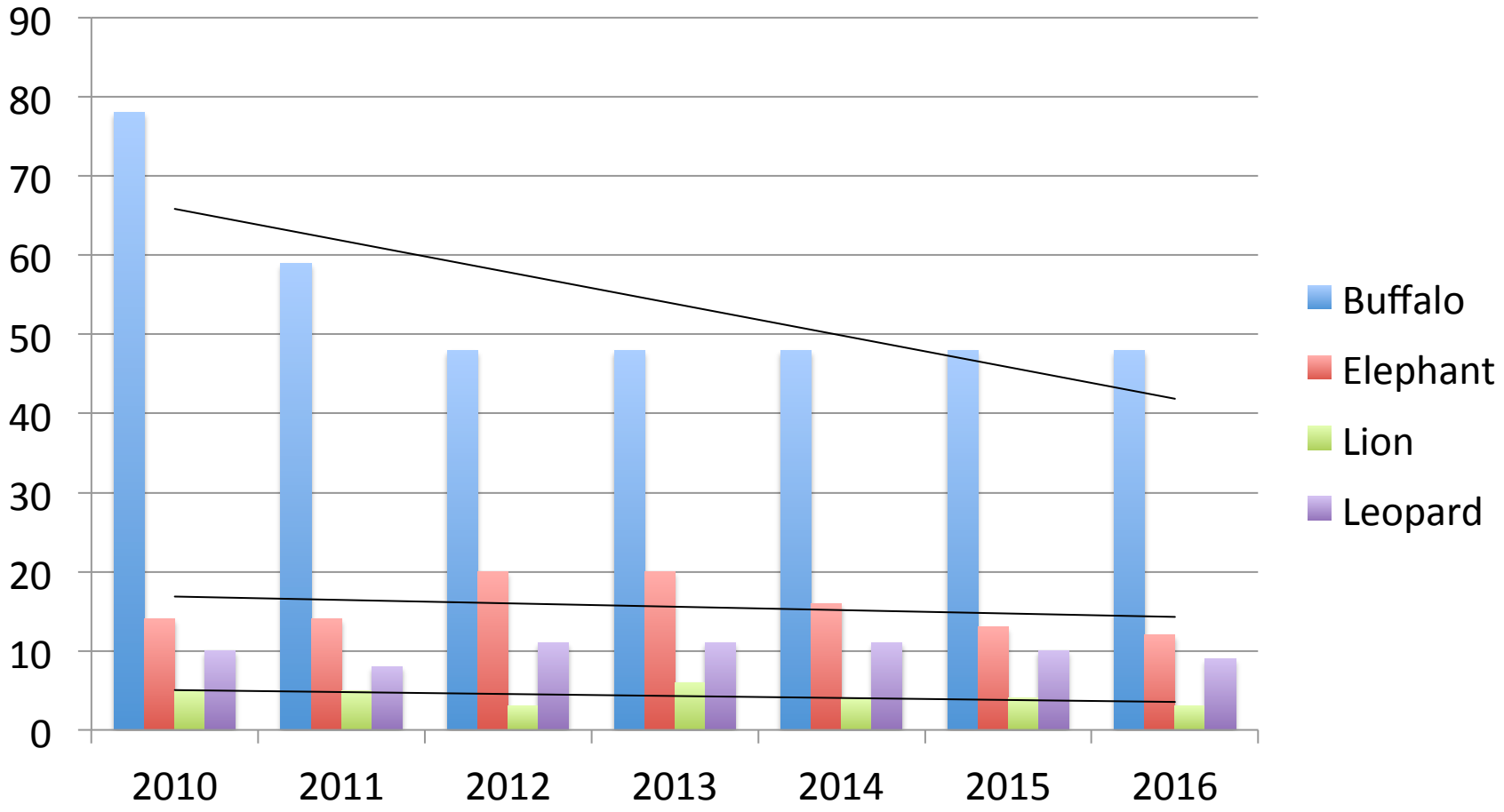
2 SUSTAINABLE HUNTING PROGRAM
(Adaptive quota setting)

Zimbabwe uses an *"adaptive quota setting system*". Information is collected annually at different levels at workshops, and is fed into the national plan. At the end of this, the government of Zimbabwe issues a "sport hunting quota "per area.

1. Ward quota setting – information is collected at ward level amongst the villages.
2. Company quota setting – CM Safaris collects information from scouts, staff and professional hunters.
3. District quota setting – information from ward and company quota setting is fed into the District plan.
4. Provincial quota setting – The results from the Mbire district quota setting feeds into the Provincial plan at the quota setting workshop.
5. National quota setting – this is done by provincial ecologists from National Parks in conjunction with the Ministry of Environment Water and Climate.

All sorts of information is collected – water hole counts, aerial counts, spoor transects, trophy quality trends, trophy ages and it is surprisingly accurate. National parks is able to cross reference numbers from all these different sources.

Sustainable Trophy Hunting Program
(Adaptive quota setting)
Mbire North, Dande Safari Area and Dande East.



3 Social Responsibility and Benefits.

Some of the things that Charlton McCallum Safaris does annually:

1. Pays $67,500.00 per annum to individual wards and council (as per tables above). This money is used per Ward and Council's discretion and must be on a capital project (house, classroom block etc…).
2. Fair and on-time distribution of revenue as per contract (see tables above)
3. Distribution of meat.
4. As per contract, we only employ locals and our annual wage bill is + $110,000 per annum (not listed in any tables above).
5. Attention to Problem animal reports.
6. Financial and physical contributions towards National holidays (Heroes, Independence, Christmas).
7. Contributions to orphans and kids in need.
8. Various sponsorships towards soccer teams and tournaments.
9. Recognition and sponsorship of the local "spirit mediums" as per local culture.
10. Financial and physical help towards main road maintenance.

3 Conservation Benefits

At Charlton McCallum Safaris we pride ourselves on having the very finest:

1. Early burning and fire management.
2. Road maintenance for - ease of access, fire breaks and security.
3. New roads into areas previously unmanaged.
4. Anti poaching – DAPU.
5. Water – dams and boreholes.
6. Cut lines and boundaries to help with zoning.

All of this has meant a real long term improvement in all aspects of the concession – greater game populations, lower poaching and greater community benefits.

Practical anti poaching.

1. Poor rural communities on the **frontline** of elephant and human conflict zones **simply will not tolerate any crop damage and will take the law in to their own hands.** These same communities are what we call **the producer wards** and currently they enjoy the benefits of hunting.

2. Currently the communities in producer wards act as our eyes and ears and actually do not want to see their hunting benefits being depleted by poachers. HOWEVER, if there are no rewards to be had from legal hunting they will in turn actively assist or actually poach those same elephants for reward.

3. The use of **POISON** is a **GAME CHANGER.** Not only are poisons readily available, but also their use is almost risk free from a poachers point of view – silent and supremely efficient . They have an added benefit from a poachers/ disgruntled communities point of view of killing lions, leopards and hyenas too.

DAPU – on the ground operations.

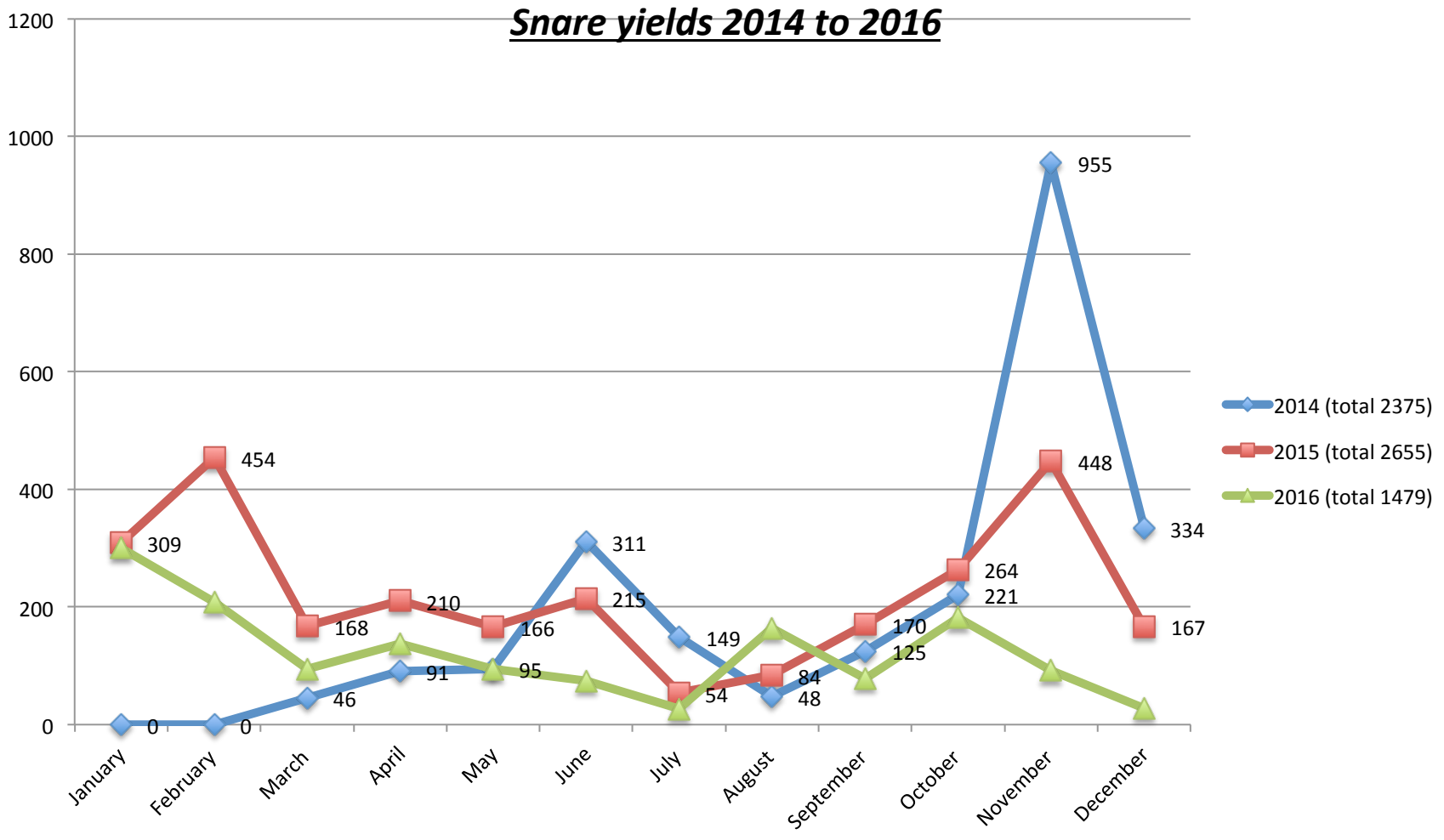
We found when we began in 2010 that the "community scouts" were thoroughly discouraged as often they went up to a year without any pay. Immediately we began support of the community scouts (10 to begin with) in Dande East. The ward paid them half their salary and we paid the other half as well as fed and equipped them. The results were gratifying and almost immediately the poachers were on the back foot and thousands of snares had been picked up and dozens of poachers were arrested.

DAPU has;

1. Two full time "managers" employed.
2. Two dedicated land cruisers allocated.
3. 22 "community scouts" under DAPU control.
4. Access to 18 "Council Scouts".
5. Access to 18 "Parks Rangers".

3 year poaching trend 2014 , 2015 and 2016 (indexed in snares found).

You will notice a gradual downwards trend and also a massive decrease during the hunting season



Elephant poaching statistics (90% accurate)

Year	No of Carcasses
2010	40
2011	36
2012	16
2013	4
2014	9
2015	4
2016	7

DAPU Reward for Anti Poaching efforts/incentive

Category 1 - elephant poaching (all rewards paid on conviction ONLY)

	Reward/ Tariff	Paid to
"Gunner" or shooter ea.	500	Scouts involved in arrests
Accomplices ea.	250	Scouts involved in arrests
Informer/Information	100	To informers/informant
Sergeant/Manager per "gunner"	150	CMS Manager (Bongi/ Muno)
Sergeant/Manager per "accomplice"	100	CMS Manager (Bongi/ Muno)

Category 2 - meat poaching (all rewards paid on conviction ONLY

	Reward/ Tariff	Paid to
Poacher ea.	100	Scouts involved in arrests
Dogs ea.	10	Scouts involved in arrests
Snares ea.	2	Scouts involved
Informer/Information	50	To informers/informant
Sergeant/Manager (per poacher)	50	CMS Manager (Bongi/ Muno)

- **<u>Category 3 - fish poaching (all rewards on conviction ONLY)</u>**

	Reward/ Tariff	Paid to
Poacher ea.	100	Scouts involved in arrests
Dogs ea.	10	Scouts involved in arrests
Snares ea.	2	Scouts involved
Informer/Information	50	To informers/informant
Sergeant/Manager (per poacher)	50	CMS Manager (Bongi/ Muno)

2014 Successes

	No. Snares	Dogs shot	Meat poachers convicted	Elephant poachers convicted	Weapons retrieved	Nets retrieved	Poached elephants	Canoes confiscated	Rewards paid
March	46	2	5	0	2	1	0	1	422
April	91	1	0	0	4	0	0	0	212
May	95	1	2	0	4	0	0	0	670
June	311	0	6	0	5	0	0	0	1597
July	149	0	1	0	1	0	0	0	503
August	48	0	0	0	0	0	0	0	96
September	125	1	0	0	0	0	0	0	250
October	221	2	2	0	1	0	0	0	597
November	955	2	2	2	2	0	0	0	4190
December	334	0	1	2	3	0	0	0	1065
	2375	**9**	**19**	**4 (1Deceased)**	**22**	**1**	**9**	**1**	**$9,602**

2015 Successes

	No. Snares	Dogs shot	Meat poachers convicted	Elephant poachers convicted	Weapons retrieved	Nets retrieved	Poached Elephants	Canoes confiscated	Rewards paid
January	309	0	5	0	0	0	0	0	1518
February	454	0	0	0	0	0	2	0	908
March	168	1	1	0	0	0	1	0	336
April	210	1	1	0	0	0	0	0	420
May	166	0	0	0	0	0	0	0	166
June	161	0	0	0	0	0	0	0	176
July	54	0	0	0	0	0	0	0	97
August	84	0	0	0	0	0	0	0	135
September	172	7	0	0	9	0	0	0	386
October	264	6	2	0	0	0	0	0	899
November	448	5	1	5	2	0	1	0	3493
December	167	0	1 (leopard)	0	0	0	0	0	710
	2655	**20**	**11**	**5**	**11**		**4**		**$9,244.00**

2016 successes

	No. Snares	Dogs shot	Meat poachers convicted	Elephant poachers convicted	Weapons retrieved	Nets retrieved	Poached Elephants	Canoes confiscated	Rewards paid
January	300	0	3	0	0	0	0	0	821
February	208	0	0	2	0	0	2	0	978
March	95	0	0	0	0	0	1	0	97
April	137	0	1	0	2	0	0	0	321
May	94	0	5	0	4	0	0	0	1310
June	75	0	0	0	0	0	4	0	83
July	27	0	0	0	2	0	0	0	67
August	164	1	0	0	0	0	0	0	254
September	78	0	1	0	1	0	0	0	97
October	181	0	2	0	1	0	0	0	447
November	92	0	0	0	0	0	0	0	442
December	28	0	0	0	0	0	0	0	532
	1479	**1**	**12**	**2**	**10**	**25**	**7**	**7**	**$5,499.00**

DAPU 2014,2015,2016 Budgets

DAPU actual 2016 BUDGET and proposed 2017.							
	2017 Budget	% Variance	2016 actual	2016 (proposed)	2015 (actual)	2014 (actual)	
Reciepts							
From Sylvarnus Trust, SCI & clients	US$50,571	48%	US$50,571	US$34,056.00	US$34,956.00	US$35,904.00	
Charlton McCallum Safaris	US$44,435	-5%	US$44,435	US$46,653.00	US$49,756.70	US$36,064.00	
	US$95,006	**18%**	**US$95,006**	**US$80,709**	**US$84,713**	**US$71,968**	
Less Expenses							
Wages (scouts)	US$14,300	0%	US$14,300	US$14,300.00	US$14,300.00	US$13,075.00	
Management	US$20,865	15%	US$20,865	US$18,200.00	US$18,200.00	US$18,200.00	
Rations (from January x 22 scouts).	US$9,240	0%	US$9,240	US$9,240.00	US$9,240.00	US$7,980.00	
Rewards	US$5,449	-43%	US$5,449	US$9,582.00	US$9,582.00	US$9,602.00	
Equipment	US$14,937	76%	US$14,937	US$8,500.00	US$2,603.00	US$6,861.00	
Landcruiser opperating costs	US$30,215	45%	US$30,215	US$20,888.00	US$20,888.00	US$16,250.00	
	US$95,006	**18%**	**US$95,006**	**US$80,710.00**	**US$74,813.00**	**US$71,968.00**	
Shortfall	**US$0**	**0%**	**US$0**	**-US$1.00**	**US$0.00**	**US$0.00**	

Biggest Challenges

1. Financial-With by far the biggest area to look after and with the most challenges I am sure I join the list of all other organizations here pleading poverty. We really are under-staffed and short of kit but are doing our best with what we can afford.
2. Short leases – are a challenge as there is little incentive to plough back in to Anti poaching and communities.
3. Meddling foreign politicians i.e the communities and National Parks lost $452,274.00 in 2015 and 2016 (compared to 2014).This is a direct result of the elephant and lion import ban to the USA. We expect a further drop in 2017. All this affects us (who no one cares about) as well as the communities – who people ought to care about. Ultimately at a time when we all need to be spending more money on anti poaching, that ability has been eroded by the EU and USFWS.
4. We have a border with Mozambique of over 100Km's and poaching there is rife and out of control. This directly affects our operations.
5. We have a porous 15km border with Zambia – which is a common threat with other folk here.
6. Human population increases.
7. Often times hugely lenient sentences by the judiciary.

Conclusion

Generally in Dande we are quite pleased with our results. I think especially if one takes into account the immense size of the area and other complicating factors I have already mentioned.

With the help of all our hunting clients, together with DAPU, National Parks and the Mbire RDC we have managed to:

- Keep safe the habitat in key areas.
- Improve game populations by approximately 50 – 100% in seven years.
- Improve the lives of the local people.
- Reduce poaching to an all time low.

All this has been achieved on a sustainable, long term basis. However if the district is to catapult itself into the next category up, then we will need funding for sure. There is huge potential for much greater game populations and that will lead to much better economies long term.

MBIRE POPULATION

(ORANGE ARE WARDS RELATED TO CAMPFIRE)

ward	Males	Females	Total	House holds
1	1558	1622	3180	705
2	2337	2514	4851	1149
3	3073	3033	6106	1337
4	3529	3587	7116	1578
5	2608	2681	5289	1192
6	1950	2112	4062	900
7	1293	1256	2549	569
8	4182	4235	8417	1751
9	2462	2437	4899	1126
10	3414	3503	6917	1489
11	829	809	1638	332
12	3292	3493	6785	1508
13	2820	2925	5745	1258
14	1235	1174	2409	553
15	2464	2698	5162	1224
16	1493	1503	2996	624
17	1920	1892	3812	834
Total	40459	41474	81933	18129

PAC HISTORY TO DATE 2015

ANIMALS KILLED ON PAC

Animal	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Elephant	9	16	14	11	12	7	8	6	2	7	8	4	5
Buffalo	10	9	15	12	12	8	6	1	0	1	1	1	0
Crocodile	0	2	0	0	0	4	1	2	1	0	1	1	2
Lion	0	0	0	0	0	2	1	12	1	0	1	2	1
Hippo	1	0	0	0	1	3	2	0	0	1	1	1	0

DOMESTIC ANIMALS KILLED BY LIONS JAN 2010 TO 2015

Ward	Cattle	Donkey	Goat	Dog	Chicken
1. Kanyemba	1	0	60	6	0
2. Angwa	25	10	48	0	0
3. Shange	22	8	30	0	0
4. Gonono	20	10	20	0	0
7. Hambe	30	5	15	0	0
8. Mhokwe	30	0	10	0	0
9. Mushumbi	12	0	10	0	0
10. Chitsungo	60	12	35	1	0
11. Masoka	0	2	20	103	74
TOTAL	200	47	248	110	74

HUMAN AND WILDLIFE CONFLICT/DEATHS

Animal	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Elephant	1	0	2	0	2	0	0	2	0	1	1	0	1
Buffalo	1	1	1	0	3	2	2	0	1	0	0	1	0
Crocodile	1	1	0	0	4	2	1	6	1	0	0	1	2
Lion	0	0	0	0	0	3	1	3	0	0	0	0	1
Hippo	0	0	0	0	0	1	0	0	0	0	0	0	0
Snake	0	0	0	0	0	0	3	6	4	1	0	1	1
Bee	0	0	0	0	0	0	1	3	0	0	0	0	1
Jackal	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3	2	3	0	9	8	8	20	6	2	1	3	6

HUMAN AND WILDLIFE CONFLICT/INJURIES

Animal	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Lion	0	0	2	0	0	1	0	1	1	0	0	0	0
Buffalo	0	2	1	2	0	2	1	0	0	0	0	1	0
Crocodile	0	2	2	0	2	2	4	7	6	2	4	5	5
Snake	0	0	0	0	0	0	0	4	6	0	0	0	4
Hippo	0	0	0	0	0	0	0	1	0	0	1	2	0
Jackal	0	0	0	0	0	0	0	0	1	0	0	2	0
Elephant	0	0	0	0	0	0	0	0	2	4	2	2	0
TOTAL	0	4	5	2	2	5	5	13	16	6	7	12	9

Conversation Contents

Support for USFW on Elephant Imports

Attachments:

/78. Support for USFW on Elephant Imports/1.1 Letter to Mr. Sheehan.docx

<lr@stopallpoaching.org>

From:	<lr@stopallpoaching.org>
Sent:	Tue Nov 21 2017 18:39:30 GMT-0700 (MST)
To:	<(b) (6) @fws.gov>
Subject:	Support for USFW on Elephant Imports
Attachments:	Letter to Mr. Sheehan.docx

Mr. Sheehan,

Please find attached my letter representing International Wildlife Crimestoppers support for the efforts of USFW concerning the latest determination on Elephant imports from Zimbabwe and Zambia.

Sincerely,

Lewis Rather
Executive Director
International Wildlife Crimestoppers
PO Box 2925
Fredericksburg, Texas 78624
(830)998-8725
www.wildlifecrimestoppers.org

INTERNATIONAL WILDLIFE CRIMESTOPPERS, INC.

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Executive Director

Chris Simmons (ME)
Asst. Executive Director

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President

Wayne Saunders (NH)
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Brian Eller (NV)
1st Vice President

Lee Ellis (SC)
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Candice Henderson (GA)
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Marty Markl
International Liaison

Larry Weishuhn
Industry Liaison

Regional Directors

Bob Thompson (CO)
West

Jennifer Wolf (MI)
Mid-west

Wade Law (GA)
Southeast

Justin Stedman (VT)
Northeast

Brian Voogd (Alberta)
Canada

November 21, 2017

Mr. Greg J Sheehan
Principal Deputy Director, USFW
1849 C Street, N.W.
Washington, DC 20240

Mr. Sheehan,

As the Executive Director for International Wildlife Crimestoppers (IWC), I am brutally aware of the impact of poaching on global wildlife. Unfortunately, I am also aware of the massive negative impact of emotional knee jerk policy decisions that ignore the facts and proven positive effects of science based wildlife management. I won't go into the specifics as your department has already made its determination based on the range country's respective studies as well as your own and because those opposing this determination are basing opposition on emotion verses science.

IWC represents global wildlife law enforcement officers that not only enforce the law, but I can say with surety, each and every one, no matter what part of the world, are committed to seeing wildlife thrive. The law that we are all sworn to uphold is, with few exceptions, based on proven science to the benefit of all. That is how these determinations were made and that is what we support. Being that we represent ALL stake holders we represent a unique moral authority in that our members and associates collectively place their lives on the line every day around the world protecting those resources for all. Therefore, we strongly support the USFW determinations and we ask that you please do not allow these new determinations permitting the importation of legally hunted Elephant and Lion trophies to be reversed or postponed.

Sincerely,

Lewis Rather
Executive Director
International Wildlife Crimestoppers

cc: Ryan Zinke, U.S. Secretary of the Interior

Conversation Contents

Zambia and Zimbabwe Trophies

Eric Rau <eer@edsdrilling.com>

From:	Eric Rau <eer@edsdrilling.com>
Sent:	Tue Nov 21 2017 15:04:19 GMT-0700 (MST)
To:	<(b) (6) @fws.gov>
Subject:	Zambia and Zimbabwe Trophies

Mr. Sheehan,

I write to urge you to renew…allow…and permit the import of elephant and lion trophies from Zimbabwe and Zambia.

I won't bore you with repeating talking points except to say that the evidence is clear that hunting provides real value to the animal populations…and an income to the countries that can't be replaced by tourism, photography safaris and the like.

Without hunting, anti-poaching will dwindle to an ineffective close as the animals disappear.

Without hunting, the animals in Zambia and Zimbabwe will disappear despite the professional management of the herds as documented for USFWS.

I urge your support and actions to allow import of these trophies and close by thanking you for your consideration.

Eric E. Rau
3583 Massey Ford Rd.
Union, MO 63084
636.239.4748 ext #2, work.

Conversation Contents

Urgent

Attachments:

/86. Urgent/1.1 image001.jpg
/86. Urgent/1.2 image002.jpg
/86. Urgent/1.3 image003.gif
/86. Urgent/1.4 image004.jpg
/86. Urgent/1.5 image005.jpg
/86. Urgent/1.6 image006.jpg

James Reed <jreed@sportsafield.com>

From:	James Reed <jreed@sportsafield.com>
Sent:	Tue Nov 21 2017 13:44:00 GMT-0700 (MST)
To:	(b) (6) @fws.gov" (b) (6) @fws.gov>
Subject:	Urgent
Attachments:	image001.jpg image002.jpg image003.gif image004.jpg image005.jpg image006.jpg

Dear Greg,
I first want to thank you for all you have done and are doing in support of hunters. I have met you before in Salt Lake as a guest of SFW. I was recently at the Congressional Sportsmen Foundation event at Richard Childress's and had the pleasure to meet Secretary Zinke there. Greg, as a hunter I know you care about wildlife and conservation. That said I cannot express to you how important it is to lift the ban on elephant and lion importation. I am writing you from Africa and I can't express to you the excitement from not only the leaders in hunting and conservation but the locals to hear this ban might be lifted. I had a black lady at the airport in Johannesburg praising President Trump when news that the ban might be lifted broke. She was yelling in the airport "Thank you Trump! Thank you trump!" That said, in Africa if animals have no value they are eliminated. If the local people do not benefit from these wild creatures they want them gone. If they receive financial benefit, jobs and meat they tolerate and even protect these great beasts. I can tell you there is not much more of a rewarding thing than to hunt an elephant after days or weeks of hard work then see the smiles and elation on the faces of the locals to get a handful of meat. Or to deliver thousands of pounds of meat to a school or orphanage. I shot an elephant in Botswana in 2009 before they closed hunting. The whole animal was utilized and the next day we were still passing women walking 20 miles away with meat from my bull. Many people try to say photo safaris will take the place of hunting. This is so far from true as most places wildlife inhabit are far removed from the typical scenic tourist destinations. What about the elephants in these remote locations? And no photographer I know will pay $35,000 to $70,000 to take a picture of one elephant.

I am passionate about wildlife and conservation and an avid supporter of this President and administration but I have to say the news President Trump might not reverse this was like a kick to the stomach and I felt extreme disappointment in him for the first time. Please use any influence you have in your power to right this wrong ban that is in place because of emotion and contrary to the scientific evidence that shows these iconic species benefit as a whole from regulated sustainable use conservation through hunting. I will give you another quick example. I was talking with a gentleman today who has several rhinos on his property. He says right now he can't sell the horn. Permits to hunt them are hard to get. So right now the rhino are only costing him money. He is either ready to just get rid of them, shoot them or let poachers shoot them because with no value he can't afford to pay to keep and protect them. Again "if it pays it stays". Please from one passionate hunter and conservationist to another, please work to reverse this ban. And while you're at it, how about polar bears. 😊•

Best Regards,
James

J R Cover

James C. Reed
Director of Sales
Sports Afield
23185 Hwy 75
Challis, ID 83226
208 520 1600
JReed@sportsafield.com

“The calling of the red gods takes the hunter to the pure bosom of nature, whose every phase is replete with beauty, of good fellowship, of love for nature and forgetfulness of the unspeakably disgusting vulgarities of the “civilized” battle for life”

Description: Description: SAlogo_4C_

Description: Untitled-1

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Description Description S_Logo_gr copy

Sportsafield.com **Sportsafieldtrophyproperties.com** **Rowlandward.com**
Safaripress.com

Conversation Contents

Elephant Trophy Imports

Attachments:

/88. Elephant Trophy Imports/1.1 USFW IWC Letter 112117 1.pdf
/88. Elephant Trophy Imports/1.2 ATT00001

Marty Markl <martym@energyfinancing.us>

From:	Marty Markl <martym@energyfinancing.us>
Sent:	Tue Nov 21 2017 13:25:38 GMT-0700 (MST)
To:	<exsec@ios.doi.gov>, <(b) (6) @fws.gov>
CC:	"John J. Jackson, III" <cf@conservationforce.org>, Lewis Rather <lr@stopallpoaching.org>, Sandy Edwards <Sandy_Edwards@cornyn.senate.gov>
Subject:	Elephant Trophy Imports
Attachments:	USFW IWC Letter 112117 1.pdf ATT00001

Mr Secretary and Mr Deputy Director,

Below please find a letter from International Wildlife Crimestoppers in support of the recent determination to again begin allowing the importation of legally hunted Lions and Elephants from respective range states. I sincerely hope that you will consider the input from the men and women around the world that protect these resources.

I have also taken the liberty to copy personally United States Senator and Senate Majority Whip John Cornyn of Texas and United States Senator James Lankford of Oklahoma.

Best Regards
Marty Markl
International Liaison IWC

E. Martin (Marty) Markl III

Energy Financing, Inc.

P.O. Box 1887 Boyd, TX 76023

817-673-0000- Office

817-291-1315— Cell

mm@energyfinancing.us

IWC

INTERNATIONAL WILDLIFE CRIMESTOPPERS, INC.

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President

Ron Ollis (Ohio)
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Brian Eller (Nevada)
2nd Vice President

Candice Henderson
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Lewis Rather (Texas)
Past President

Lewis Rather (Texas)
Executive Director

Chris Simmons (Maine)
Asst. Executive Director

Marty Markl
International Liaison

Larry Weishuhn
Industry Liaison

Regional Directors

Bob Thompson (CO)
West

Jennifer Wolf (MI)
Mid-west

Mike England (GA)
Southeast

Justin Stedman (VT)
Northeast

Brian Voogd (Alberta)
Canada

Secretary of the Interior, Mr. Ryan Zinke (exsec@ios.doi.gov)

Deputy Director of USFW, Mr. Greg Sheehan (Greg_J_Sheehan@fws.gov)

Department of the Interior

1849 C Street, N.W.

Washington DC 20240

Sent via email 21 November 2017

Mr. Secretary and Mr. Deputy Director,

As the International Liaison for International Wildlife Crimestoppers and as a Director of Texas Operation Game Thief appointed by the Director of Texas Parks and Wildlife, I am brutally aware of the impact of poaching on global wildlife. Unfortunately I am also aware of the massive negative impact of emotional knee jerk policy decisions that ignore the facts and the proven positive effects of science based wild life management. I won't go into the specifics as your department has already made its determination based on the range country's respective studies as well as your own and because those opposing this is are now making this about emotion, not science.

IWC represents global wildlife law enforcement officers that not only enforce the law, but I can say with surety, each and every one, no matter what part of the word, is committed to seeing wildlife thrive. The law that we are all sworn to uphold is, with few exceptions, based on proven science to the benefit of all. That is how these determinations were made, with science, and that is what we support. Being that we represent ALL stakeholders we represent a unique moral authority in that our members and associates collectively place their lives on the line every day around the world protecting those resources for all.

INTERNATIONAL WILDLIFE CRIMESTOPPERS, INC.

Therefore we strongly support the USFW determinations and we ask that you please do not allow these new determinations permitting the importation of legally hunted Elephant and Lion trophies to be reversed or postponed.

I am sure that you are aware of the facts and the falsehoods involved but here are some things to be aware of:

TALKING POINTS IN SUPPORT OF ELEPHANT TROPHY IMPORTS FROM ZIMBABWE AND ZAMBIA

ELEPHANT TROPHY IMPORTS HAVE NEVER BEEN "BANNED," AND THE POSITIVE ENHANCEMENT FINDINGS ARE BASED ON THE BEST AVAILABLE INFORMATION RECEIVED IN 2014-2016

- **There has been no "ban" on elephant trophy imports. In April 2014, the U.S. Fish and Wildlife Service (FWS) "suspended" the import of elephant trophies from Zimbabwe due to a lack of information. Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) responded to two questionnaires from the FWS in April 2014 and December 2014. However, in March 2015, the FWS extended the suspension, finding information was still lacking. The negative enhancement finding dated March 2015 repeatedly affirmed, "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA." In July 2015, May 2016, and November 2016, ZPWMA responded to additional FWS questions. The November 2017 positive enhancement finding is based on these later responses and thousands of pages of supporting documents, including Zimbabwe's National Elephant Management Action Plan, 2014 countrywide elephant population surveys, 2014-2016 actual and projected budget data, 2014 and 2015 offtakes and 2016 quota data, 2014-2016 CAMPFIRE data, and much more.**

- **Issuing import permits for elephant trophies from Zimbabwe was not a political decision by this Administration. In September 2016, before the election occurred, the FWS had already indicated to ZPWMA that the suspension would be lifted. ZPWMA was told by the Chief of Permits that the FWS needed "only one more piece of information," a prioritization of the new Elephant Management Plan, before the negative enhancement finding could be reversed. That prioritization was provided on November 8, 2016, before the election results were in. At the end of 2016, the FWS should have made the positive enhancement finding, but was admittedly sidetracked by an influx of thousands of new permit applications due to the listing of rosewood (used extensively in musical instruments and furniture) on the CITES Appendixes effective January 2017.**

- **Similarly, there has been no "ban" on the import of elephant trophies from Zambia. In October 2011, the FWS made a positive enhancement finding to authorize the import of regulated elephant hunting trophies from Zambia. However, 2013 and 2014, Zambia's wildlife authority suspended hunting to obtain more current wildlife population information. In 2015, Zambia's government lifted the hunting suspension, and set a conservative quota of 80 elephant. In August 2016, the Chief of Permits sent an email indicating that the**

FWS was trying to issue import permits for elephant trophies from Zambia before the CITES Conference of the Parties in September 2016, based on an April 2015 Non-Detriment and Enhancement Finding the FWS received from Zambia's wildlife authority. However, the FWS ran out of time. At the Conference of the Parties, the Chief of Permits indicated that elephant permits from Zambia would likely issue before the end of the year. Again, because of the new rosewood permits, that enhancement finding was put on a back burner.

ZIMBABWE'S ELEPHANT POPULATION IS THE SECOND-LARGEST IN AFRICA

- **In 1900, it was estimated that Zimbabwe had a national population of 4,000 elephant. Since then, the population has grown to over 82,000 (a twenty-fold increase). The current population is double the target national population established in the 1980s, almost 40% larger than in 1992, when the FWS determined to maintain the Endangered Species Act (ESA) "threatened" listing, and almost 20% larger than in 1997, when the last positive enhancement finding was made (before November 2017). Elephant sub-populations in Zimbabwe are generally considered stable or increasing.**

- **North-West Matabeleland: This population is estimated at 54,000, and is most densely located in Hwange National Park (45,000 elephant). In 1928, the estimated elephant population in Hwange was 2,000.**

- **Sebungwe: This population is estimated at 3,500 and has declined since 2001 due to human population expansion into a previously unsettled area. The human population exploded from 45,000 in 1950 to over 700,000 in 2013, which explains the decline in the elephant population. Due to the expansion of human settlement and unlike other major elephant ranges in Zimbabwe, the habitat in this area is fragmented.**

- **Mid-Zambezi Valley: This area has an estimated elephant population of about 12,000. That population declined since the 2001 countrywide survey, and it is believed the decline is due to cross-border poaching and perhaps, the cross-border movement of elephants during the survey. Anti-poaching is a major component of the Zambezi Valley/Mana Pools Regional Elephant Management Action Plan, and recently the area has been chosen as a CITES MIKES site with an ongoing project.**

- **South-East Lowveld: Most of this population inhabits Gonarezhou National Park, whose population has been growing consistently at 5% per annum over 20 years. This region's sub-population is estimated at 13,000 elephant between the Park, surrounding communal areas, and nearby private conservancies.**

ZAMBIA'S ELEPHANT POPULATION IS STABLE

- **Zambia's elephant population inhabits seven sub-regions covering National Parks and Game Management Areas. According to the 2016 African Elephant Status Report, Zambia's elephant population is estimated at over 21,000. This is generally considered stable over the past 25 years, and is stable compared to Zambia's**

population in 1992, when the FWS determined to maintain elephant as "threatened" listed. However, several population surveys indicating an estimate closer to 30,000 were not included in the 2016 African Elephant Status Report, and Zambia's wildlife authority estimates the country's population at more than 30,000.

ELEPHANT HUNTING OFFTAKES IN ZIMBABWE ARE SUSTAINABLE

- **Zimbabwe maintains a CITES export quota of 1,000 tusks from 500 bull elephants. A national quota of 500 elephants represents only 0.6% of a population of 82,630 elephant. Actual hunting offtakes are considerably lower, have a negligible impact on the overall population rate, and have declined in the past three years due to the import suspension.**

Average Hunting Offtakes 2010-2013 (% of Total Elephant Population): 228 (0.276%)

2013 Hunting Offtakes (% of Total Elephant Population): 258 (0.312%)

2014 Hunting Offtakes (% of Total Elephant Population): 162 (0.196%)

2015 Hunting Offtakes (% of Total Elephant Population): 75 (0.091%)

ELEPHANT HUNTING OFFTAKES IN ZAMBIA ARE NEGLIGIBLE

- **In 2013 and 2014, Zambia suspended regulated tourist hunting to obtain a better sense of national wildlife population trends. In 2015, Zambia set a conservative export quota of 160 tusks from 80 bull elephants. Zambia maintained the quota of 80 elephants in 2016 and 2017. A national quota of 80 elephants represents less than 0.4% of a population of 21,967 elephant. Actual hunting offtakes are negligible and have no impact on the national population rate.**

2015 Hunting Offtakes (% of Total Elephant Population): 3 (0.014%)

2016 Hunting Offtakes (% of Total Elephant Population): 12 (0.055%)

ELEPHANT MANAGEMENT IN ZIMBABWE IS GUIDED BY APPROPRIATE LEGISLATION AND A STATE-OF-THE-ART MANAGEMENT PLAN

- **Governing Law: The Zimbabwe Parks and Wild Life Act provides the regulatory mechanism for ZPWMA and its programs. The Act created ZPWMA as a parastatal authority apart from the central government and established a separate fund, apart from the Central Treasury, to sustain ZPWMA's operations. The Act sets harsh penalties for elephant-related offenses, and was amended in 2010 to impose a nine-year minimum sentence for the first offense of elephant poaching. Under the Parks and Wild Life Act, Rural District**

Councils and other land holders are granted "appropriate authority" to benefit directly from wildlife. Under this legislation, land holders are encouraged to maintain and increase wildlife populations because they retain the benefits of sustainable use of that wildlife.

- Elephant Management Plan: Elephant are managed according to the Zimbabwe National Elephant Management Plan (2015-2020). The plan incorporates specific action items, deliverables, deadlines, and responsible parties. It is an adaptive management plan utilizing prioritization of targets measured by key components, strategic objectives, and outputs. The plan focuses on five major components: Protection and Law Enforcement; Biological Monitoring and Management; Social, Economic, and Cultural Framework; Building Conservation Capacity; and Program Management. The National management plan is supplemented by four regional plans that utilize the same framework to address the unique challenges for each major elephant range in Zimbabwe. Zimbabwe's elephant management planning process was kicked off by the FWS' elephant trophy import suspension. ZPWMA held a year of stakeholder planning workshops, including a preparatory meeting of representatives from CAMPFIRE in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley range) in March-April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld range in September 2015.

ELEPHANT HUNTING IN ZIMBABWE GENERATES CONSERVATION BENEFITS THAT SATISFY THE "ENHANCEMENT" STANDARD: Although hunting offtakes are negligible, elephant hunting fees create extensive conservation incentives in Zimbabwe.

- Habitat: Hunting areas in Zimbabwe represent ~130,000 km² of protected habitat. This represents over four times the size of Zimbabwe's National Parks (~28,000 km²). Healthy elephant populations require large tracts of habitat; the areas set aside for regulated hunting are therefore essential to the elephant's continued survival.

- Management and Enforcement Revenues: Revenues generated from tourist hunting conducted on state lands comprised approximately 20% of ZPWMA's revenue stream in 2014. Over $6.2 million in trophy fees came from elephant hunts, with $5 million accruing to ZPWMA to reinvest in elephant protection and species management. Over 50% of that revenue came from U.S. clients. Almost 80% of ZPWMA's operating budget is allocated towards law enforcement in the form of staff costs and patrol provisions. ZPWMA employs 1,500 active field rangers. Put simply, hunting revenues support anti-poaching efforts across Zimbabwe's elephant range—and this is largely paid for by American elephant hunters.

- Operator Anti-Poaching: In addition to supporting ZPWMA's enforcement capacity, hunting operators deploy their own anti-poaching units to police the Safari Areas and fund community game scouts in CAMPFIRE Areas. For example, a small sample of 14 individual operators surveyed by the Safari Operator Association of Zimbabwe spend $957,843 on anti-poaching in 2013 and deployed 245 anti-poaching

scouts. One specific operator, Charlton McCullum Safaris (CMS) in the Dande Safari Area and Mbire Communal Area, spends on average $80,000-$90,000 in patrol and equipment costs and anti-poaching rewards. From 2010 to 2016, CMS' efforts led to an 82% decline in elephant poaching in an import border region. As another example, the Save Valley and Bubye Valley Conservancies together spend over $1 million on anti-poaching each year. These anti-poaching efforts are funded predominately by hunting revenue, and protect stable populations of elephant and the third-largest black rhino population in the world.

- Regional Anti-Poaching: According to the CITES "Monitoring the Illegal Killing of Elephants" (MIKE) program, poaching in the Southern African countries that allow regulated tourist hunting, including Zimbabwe, is lower than anywhere else on the continent and has never reached an unsustainable level. This stands in stark contrast to the West and Central African countries that do not rely upon tourist hunting as a conservation tool.

- Community Benefits: Zimbabwe's CAMPFIRE program is the pioneering community-based natural resource management program in Africa. The program allows rural communities to financially benefit from wildlife, thereby incentivizing the use of communal land as wildlife habitat, and the protection of wildlife in the form of increased tolerance of destructive wildlife. An estimated 77,000 households rely on CAMPFIRE benefit from CAMPFIRE. 90% of CAMPFIRE revenue is generated from regulated hunting, and 70% of this comes from elephant hunting. Thus, prior to the import suspension, elephant hunting generated over $1.6 million per year for CAMPFIRE communities and was reinvested in the construction of classrooms and clinics, the installation of water infrastructure and solar powered facilities, the purchase of vehicles for anti-poaching support, compensation for destruction of crops or livestock by dangerous game, and other benefits that improve the livelihoods of the rural communities living in CAMPFIRE Areas. These benefits offset the damage caused by game species: from 2010 to 2015, elephant destroyed 7,495 hectares of crop fields in CAMPFIRE communities and claimed the lives of approximately 40 people.

ELEPHANT MANAGEMENT IN ZAMBIA IS UP-TO-DATE AND GENERATES SUBSTANTIAL BENEFITS TO ENCOURAGE RECOVERY OF THE SPECIES

- Governing Law: The Zambian Wildlife Act No. 14 of 2015 is the guiding legislation for elephant protection and management. This cutting-edge law consolidated the prior wildlife authority into a government Department of National Parks and Wildlife (DNPW), to address the funding concerns and shortfalls experienced by the prior authority. DNPW is made up of a Wildlife Law Enforcement Unit with over 1,250 rangers; a Conservation Unit; an Infrastructure Development Unit; and a Community-Based Natural Resource Management Unit to oversee the development of conservation planning in Game Management Areas.

- Management and Enforcement Revenues: Between 2010 and 2012, regulated hunting revenues accounted for approximately 32% of the operating budget funding for Zambia's wildlife authority. With a potential to generate nearly $1 million in elephant hunting fees, in 2015 and 2016, these fees totaled only $150,000, due

mainly to import restrictions. This amount was divided between DNPW and the Community Resource Boards in Game Management Areas (GMA). DNPW uses this revenue for range salaries and resource protection, as well as management surveys, staff training, and other activities. Approximately 75% of DNPW's expenditures are for anti-poaching, and Zambia's Wildlife Law Enforcement Unit conducted over 10,500 anti-poaching patrols in 2015, involving an average of 5,878 staff per quarter and 237,028 patrol days.

- **Habitat: Hunting areas in Zambia (~180,000 km²) provide almost three times the amount of protected habitat compared to the country's National Parks (~64,000 km²).**

- **Community Benefits: In GMAs, elephant license fees are divided equally between the DNPW and the GMA's Community Resource Board, and 20% of concession fees also accrue to the Board. In 2015 and 2016, approximately $1.36 million in hunting fees was distributed to the Boards, as well as $10,000 per concession paid by the hunting operator. Under the new Wildlife Law, Boards must invest those funds as follows: 45% towards wildlife protection and patrols, 35% towards community improvement projects such as construction of schools, clinics, and water infrastructure, and 20% towards administrative costs. Written concession agreements between the operators, DNPW, and the community Boards usually obligate the concessionaire to make further communities investments, such as constructing a classroom and paying a teacher's salary. Operators in 13 blocks were obligated to spend over $1.1 million in community infrastructure development and 3.4 million in community lease and other payments for the duration of their leases.**

- **Game Meat Distributions: Moreover, under Zambian law, at least 50% of harvested game meat must be donated and distributed to local communities. A 2015 study found that operators in three GMAs contributed an average of 6,000 kilograms of harvested meat per season, and estimated that operators across all GMAs could provide ~130 tons of much-needed protein annually. This reduces the incentive for bush meat poaching in these areas bordering and buffering Zambia's National Parks.**

- **Operator Anti-Poaching: Hunting operators' concession agreements with DNPW and the Community Resource Board identify mandatory anti-poaching obligations and expenditures. At present, 75 Boards employ over 750 wildlife scouts and 79 support personnel, at a monthly cost of over $38,800. Those scouts are paid for by revenues from tourist hunting. A small sample of four operators spent over $201,000 on anti-poaching in 2015, to fund community scouts and fund and equip their own operator anti-poaching teams. This anti-poaching support is largely paid for by U.S. hunters, as over half of all hunting clients in Zambia are from the U.S.**

INTERNATIONAL WILDLIFE CRIMESTOPPERS, INC.

[Note: Supporting documents for each of these points is available by contacting Conservation Force, cf@conservationforce.org. These Talking Points largely rely on the responses of ZPWMA and DNPW to FWS information requests and supporting documents provided as part of those responses as well as individual hunting operator enhancement reports, reports of the CAMPFIRE Association, and publicly available IUCN documents.]

Sincerely

E. Martin Markl III

International Liaison

International Wildlife Crimestoppers

PO Box 217, Blairsville, Georgia 30514 (404) 680-4670
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Conversation Contents

Please Allow Elephant/Lion Imports to support conservation of the species

"Oropallo, Michael A." <MOropallo@barclaydamon.com>

From:	"Oropallo, Michael A." <MOropallo@barclaydamon.com>
Sent:	Tue Nov 21 2017 11:27:39 GMT-0700 (MST)
To:	"(b) (6) @fws.gov" <(b) (6) @fws.gov>
Subject:	Please Allow Elephant/Lion Imports to support conservation of the species

- **There has never been a "ban" on elephant trophy imports from Zimbabwe. A negative enhancement finding was made in April 2014 that "suspended" the import of elephant trophies. The FWS' negative 2015 enhancement finding stated repeatedly that once additional information was received, the negative finding would be reviewed and reversed (e.g., "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA.") A "ban" suggests a permanent prohibition; a "suspension" is a "temporary abrogation or withholding." Zimbabwe's elephant trophy imports were suspended.**
- **Lifting of the suspension was not a political decision. The decision should have been made in July 2015, when ZPWMA provided extensive additional documentation in response to a FWS questionnaire. The FWS requested "one more piece of information" at the CITES Conference of the Parties in September 2016. That information was provided in November 2016. No further information was needed, or requested. If the FWS had properly prioritized the issuance of elephant import permits—as they told ZPWMA they would at the CITES Conference of the Parties—the positive enhancement finding would have been made and these permits would have issued before the current Administration was in office.**
- **The import of elephant trophies from Zimbabwe should not have been suspended in the first place. In April 2014, the FWS announced the suspension based on an asserted "lack of information." In contradiction to CITES Res. Conf. 6.7's recommendation of notifying and consulting with range states before imposing stricter domestic measures, and the Endangered Species Act's requirement of "encouraging foreign conservation programs," 16 U.S.C. § 1537(b), the FWS shut down imports under an April 2014 negative enhancement finding that the FWS later admitted was wrong with respect to Zimbabwe's elephant population and level of poaching. In fact, the correct estimate for Zimbabwe's elephant population—almost 83,000—is 16,000 elephant higher than when the last, positive enhancement finding was made in 1997. That estimate is double the size of the elephant populations of Namibia and South Africa put together, yet the FWS maintains positive enhancement findings for the import of elephant trophies from Namibia and South Africa. The trophy import suspension was based on a mistaken concern that Zimbabwe's elephant population had declined, and the FWS should have admitted the mistake and reversed the suspension immediately. The failure to do so suggests a political motivation, not a scientific one.**
- **Zimbabwe's elephant population is not "the worst managed," but is among the best. That Zimbabwe maintains a stable elephant population of over 83,000, despite a despotic government, poor economy, and exploding human population growth rate, is a testament to the country's strong management. That number is almost 40% higher than in 1992, when the FWS confirmed the "threatened" listing of elephant, and almost 20% higher than in 1997, when the FWS made a positive enhancement finding authorizing the import of elephant trophies. This is due in part to ZPWMA being a parastatal separate and separately funded from the central government. It is also due to the commitment of Zimbabwe's citizens to maintaining their elephant, notwithstanding the costs—over 40 rural Zimbabweans were killed by elephant from 2010 to 2015. Zimbabwe's strong wildlife management is also demonstrated by recent IUCN Red List assessments of lion and giraffe, which indicated increasing populations of these species**

in Zimbabwe. The evidence demonstrates that Zimbabwe's wildlife management, not only its elephant management, is succeeding.]

- **<u>Zimbabwe's elephant management is not "poor"; it is state-of-the-art and written by one of the world's foremost elephant experts.</u> In response to the April 2014 suspension of elephant trophy imports, ZPWMA took to heart the FWS' criticism that Zimbabwe's then-current elephant management plan dated to 1997. Although that plan was adaptively implemented and monitored, it was admittedly dated. Zimbabwe immediately began the process of adopting a brand-new, state-of-the-art elephant management plan—basically, to satisfy the FWS. This included a year of stakeholder planning workshops: a preparatory meeting of representatives from Zimbabwe's community-based natural resources management program, CAMPFIRE, in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley) in early April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld region in September 2015. Zimbabwe focused on regional planning because the four regions face different management challenges. Each planning workshop produced a regional elephant management plan that was incorporated into the final. The final document was drafted by a leading elephant scientist, and the process was monitored throughout by the IUCN's African Elephant Specialist Group.**
- **<u>Regulated hunting is not poaching.</u> By definition, "regulated" hunting is regulated and lawful. It is carefully monitored by ZPWMA, and offtakes are recorded in a national database. Lawfully hunted ivory tusks are marked to show that they are lawful and note the year of harvest. Moreover, regulated hunting revenues underwrite most anti-poaching expenses in Zimbabwe and the rest of Southern Africa, either by fees paid to government wildlife authorities that are used for law enforcement, or by operator-funded teams that patrol concessions and keep poachers out. Finally, revenue-sharing and contributions by hunting operators creates conservation incentives for rural communities most affected by wildlife, which disincentivizes poaching. For example, Zimbabwe's CAMPFIRE communities were receiving over $1.6 million per year in revenues from elephant hunting prior to the import suspension. These funds allow for clinics and schools to be built, teachers' salaries to be paid, boreholes to be drilled, and so on. Hunting operators in Zambia are required to share at least 50% of harvested meat with rural communities. Many tons of meat can come from elephant hunts, to reduce the need and tolerance for bushmeat poaching and protect species in addition to elephant.**
- **<u>Allowing imports of elephant trophies will not damage the government's efforts to control ivory trafficking.</u> Elephant trophy imports have been authorized for Namibia and South Africa for the past three years, which demonstrates that a country may maintain lawful hunting and low poaching at the same time. In fact, according to the CITES MIKE data, the Southern African countries that depend upon regulated hunting as a conservation tool have the lowest Proportion of Illegally Killed Elephant (PIKE) rates in the world. PIKE, which is used to assess whether poaching levels are unsustainable, has never risen above the sustainability threshold in Southern Africa. PIKE at Zimbabwe's MIKE sites is well below that level. Moreover, national and international law requires the marking of ivory tusks taken as lawful hunting trophies, which clearly and visibly separates these lawful tusks from illegal ones.**
- **<u>Photographic tourism is not a substitute in most hunting areas.</u> Opponents argue that photographic tourism would be a better option than hunting. It is true that photo-tourism is available in some places; for example, some conservancies in Namibia benefit from photographic tourism revenues alone or a mixture of photo- and hunting tourism. But photo-tourism requires decent infrastructure and scenery, and dense enough wildlife populations to draw tourists. These may not be available in remote areas of a country without access to airports or other activities, and where the wildlife populations are not yet dense enough to ensure a sighting on a two-hour game drive. This is the situation in many CAMPFIRE Areas, where photographic tourism was tried … and failed. In these areas, without the benefits of hunting, the habitat would be converted to agriculture and livestock. Benefits to the rural community stakeholders are less from photographic tourism than from tourist hunting.**

Partner

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Conversation Contents

Zimbabwe

Attachments:

/96. Zimbabwe/1.1 image001.gif

Chad Arnette <chad.arnette@kellyhart.com>

From:	Chad Arnette <chad.arnette@kellyhart.com>
Sent:	Tue Nov 21 2017 11:11:53 GMT-0700 (MST)
To:	(b) (6) @fws.gov" <(b) (6) @fws.gov>, "exsec@ios.doi.gov" <exsec@ios.doi.gov>
Subject:	Zimbabwe
Attachments:	image001.gif

Deputy Director Sheehan and Secretary Zinke:

I, along with other informed sportsman, am dismayed at comments made by President Trump in the last few days regarding the importation of lion and elephant trophies from Zimbabwe. President Trump is clearly uninformed and has been incredibly irresponsible in his commentary. Below are the facts. To the extent President Trump maintains his current, uninformed position, and to the extent the FWS follows suit, he will undoubtedly harm the very wildlife he purports to protect. And he will certainly no longer have my support in any of his endeavors. Thank you for considering the below information.

Chad Arnette
Partner

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ELEPHANT TROPHY IMPORTS HAVE NEVER BEEN "BANNED," AND THE POSITIVE ENHANCEMENT FINDINGS ARE BASED ON THE BEST AVAILABLE INFORMATION RECEIVED IN 2014-2016

- **There has been no "ban" on elephant trophy imports. In April 2014, the U.S. Fish and Wildlife Service (FWS) "suspended" the import of elephant trophies from Zimbabwe due to a lack of information. Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) responded to two questionnaires from the FWS in April 2014 and December 2014. However, in March 2015, the FWS extended the suspension, finding information was still lacking. The negative enhancement finding dated March 2015 repeatedly affirmed, "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA." In July 2015, May 2016, and November 2016, ZPWMA responded to additional FWS questions. The November 2017 positive enhancement finding is based on these later responses and thousands of pages of supporting documents, including Zimbabwe's National Elephant Management Action Plan,**

2014 countrywide elephant population surveys, 2014-2016 actual and projected budget data, 2014 and 2015 offtakes and 2016 quota data, 2014-2016 CAMPFIRE data, and much more.

- **Issuing import permits for elephant trophies from Zimbabwe was not a political decision by this Administration. In September 2016, before the election occurred, the FWS had already indicated to ZPWMA that the suspension would be lifted. ZPWMA was told by the Chief of Permits that the FWS needed "only one more piece of information," a prioritization of the new Elephant Management Plan, before the negative enhancement finding could be reversed. That prioritization was provided on November 8, 2016, before the election results were in. At the end of 2016, the FWS should have made the positive enhancement finding, but was admittedly sidetracked by an influx of thousands of new permit applications due to the listing of rosewood (used extensively in musical instruments and furniture) on the CITES Appendixes effective January 2017.**
- **Similarly, there has been no "ban" on the import of elephant trophies from Zambia. In October 2011, the FWS made a positive enhancement finding to authorize the import of regulated elephant hunting trophies from Zambia. However, 2013 and 2014, Zambia's wildlife authority suspended hunting to obtain more current wildlife population information. In 2015, Zambia's government lifted the hunting suspension, and set a conservative quota of 80 elephant. In August 2016, the Chief of Permits sent an email indicating that the FWS was trying to issue import permits for elephant trophies from Zambia before the CITES Conference of the Parties in September 2016, based on an April 2015 Non-Detriment and Enhancement Finding the FWS received from Zambia's wildlife authority. However, the FWS ran out of time. At the Conference of the Parties, the Chief of Permits indicated that elephant permits from Zambia would likely issue before the end of the year. Again, because of the new rosewood permits, that enhancement finding was put on a back burner.**

ZIMBABWE'S ELEPHANT POPULATION IS THE SECOND-LARGEST IN AFRICA

- **In 1900, it was estimated that Zimbabwe had a national population of 4,000 elephant. Since then, the population has grown to over 82,000 (a twenty-fold increase). The current population is double the target national population established in the 1980s, almost 40% larger than in 1992, when the FWS determined to maintain the Endangered Species Act (ESA) "threatened" listing, and almost 20% larger than in 1997, when the last positive enhancement finding was made (before November 2017). Elephant sub-populations in Zimbabwe are generally considered stable or increasing.**
    - **<u>North-West Matabeleland</u>: This population is estimated at 54,000, and is most densely located in Hwange National Park (45,000 elephant). In 1928, the estimated elephant population in Hwange was 2,000.**
    - **<u>Sebungwe</u>: This population is estimated at 3,500 and has declined since 2001 due to human population expansion into a previously unsettled area. The human population exploded from 45,000 in 1950 to over 700,000 in 2013, which explains the decline in the elephant population. Due to the expansion of human settlement and unlike other major elephant ranges in Zimbabwe, the habitat in this area is fragmented.**
    - **<u>Mid-Zambezi Valley</u>: This area has an estimated elephant population of about 12,000. That population declined since the 2001 countrywide survey, and it is believed the decline is due to cross-border poaching and perhaps, the cross-border movement of elephants during the survey. Anti-poaching is a major component of the Zambezi Valley/Mana Pools Regional Elephant Management Action Plan, and recently the area has been chosen as a CITES MIKES site with an ongoing project.**
    - **<u>South-East Lowveld</u>: Most of this population inhabits Gonarezhou National Park, whose population has been growing consistently at 5% per annum over 20 years. This region's sub-population is estimated at 13,000 elephant between the Park, surrounding communal areas, and nearby private conservancies.**

ZAMBIA'S ELEPHANT POPULATION IS STABLE

- **Zambia's elephant population inhabits seven sub-regions covering National Parks and Game Management Areas. According to the 2016 African Elephant Status Report, Zambia's elephant population is estimated at over 21,000. This is generally considered stable over the past 25 years, and is stable compared to Zambia's population in 1992, when the FWS determined to maintain elephant as "threatened" listed. However, several population surveys indicating an estimate closer to 30,000 were not included in the 2016 African Elephant Status Report, and Zambia's wildlife authority estimates the country's population at more than 30,000.**

ELEPHANT HUNTING OFFTAKES IN ZIMBABWE ARE SUSTAINABLE

- **Zimbabwe maintains a CITES export quota of 1,000 tusks from 500 bull elephants. A national quota of 500 elephants represents only 0.6% of a population of 82,630 elephant. Actual hunting offtakes are considerably lower, have a negligible impact on the overall population rate, and have declined in the past three years due to the import suspension.**
  - **Average Hunting Offtakes 2010-2013 (% of Total Elephant Population): 228 (0.276%)**
  - **2013 Hunting Offtakes (% of Total Elephant Population): 258 (0.312%)**
  - **2014 Hunting Offtakes (% of Total Elephant Population): 162 (0.196%)**
  - **2015 Hunting Offtakes (% of Total Elephant Population): 075 (0.091%)**

ELEPHANT HUNTING OFFTAKES IN ZAMBIA ARE NEGLIGIBLE

- **In 2013 and 2014, Zambia suspended regulated tourist hunting to obtain a better sense of national wildlife population trends. In 2015, Zambia set a conservative export quota of 160 tusks from 80 bull elephants. Zambia maintained the quota of 80 elephants in 2016 and 2017. A national quota of 80 elephants represents less than 0.4% of a population of 21,967 elephant. Actual hunting offtakes are negligible and have no impact on the national population rate.**
  - **2015 Hunting Offtakes (% of Total Elephant Population): 03 (0.014%)**
  - **2016 Hunting Offtakes (% of Total Elephant Population): 12 (0.055%)**

ELEPHANT MANAGEMENT IN ZIMBABWE IS GUIDED BY APPROPRIATE LEGISLATION AND A STATE-OF-THE-ART MANAGEMENT PLAN

- **<u>Governing Law</u>: The Zimbabwe Parks and Wild Life Act provides the regulatory mechanism for ZPWMA and its programs. The Act created ZPWMA as a parastatal authority apart from the central government and established a separate fund, apart from the Central Treasury, to sustain ZPWMA's operations. The Act sets harsh penalties for elephant-related offenses, and was amended in 2010 to impose a nine-year minimum sentence for the first offense of elephant poaching. Under the Parks and Wild Life Act, Rural District Councils and other land holders are granted "appropriate authority" to benefit directly from wildlife. Under this legislation, land holders are encouraged to maintain and increase wildlife populations because they retain the benefits of sustainable use of that wildlife.**
- **<u>Elephant Management Plan</u>: Elephant are managed according to the Zimbabwe National Elephant Management Plan (2015-2020). The plan incorporates specific action items, deliverables, deadlines, and responsible parties. It is an adaptive management plan utilizing prioritization of targets measured by key components, strategic objectives, and outputs. The plan focuses on five major components: Protection and Law Enforcement; Biological Monitoring and Management; Social, Economic, and Cultural Framework; Building Conservation Capacity; and Program Management. The National management plan is supplemented by four regional plans that utilize the same framework to address the unique challenges for each major elephant range in Zimbabwe. Zimbabwe's elephant management planning process was kicked off by the FWS' elephant trophy import suspension. ZPWMA held a year of stakeholder planning workshops, including a preparatory meeting of representatives from CAMPFIRE in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley range) in March-April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld range in September 2015.**

ELEPHANT HUNTING IN ZIMBABWE GENERATES CONSERVATION BENEFITS THAT SATISFY THE "ENHANCEMENT" STANDARD: Although hunting offtakes are negligible, elephant hunting fees create extensive conservation incentives in Zimbabwe.

- **<u>Habitat</u>: Hunting areas in Zimbabwe represent ~130,000 km² of protected habitat. This represents over four times the size of Zimbabwe's National Parks (~28,000 km^2). Healthy elephant populations require large tracts of habitat; the areas set aside for regulated hunting are therefore essential to the elephant's continued survival.**
- **<u>Management and Enforcement Revenues</u>: Revenues generated from tourist hunting conducted on state lands comprised approximately 20% of ZPWMA's revenue stream in 2014. Over $6.2 million in trophy fees came from elephant hunts, with $5 million accruing to ZPWMA to reinvest in elephant protection and species management. Over 50% of that revenue came from U.S. clients. Almost 80% of ZPWMA's operating budget is allocated towards law enforcement in the form of staff costs and patrol provisions. ZPWMA employs 1,500 active field rangers.**

Put simply, hunting revenues support anti-poaching efforts across Zimbabwe's elephant range —and this is largely paid for by American elephant hunters.

- **Operator Anti-Poaching: In addition to supporting ZPWMA's enforcement capacity, hunting operators deploy their own anti-poaching units to police the Safari Areas and fund community game scouts in CAMPFIRE Areas. For example, a small sample of 14 individual operators surveyed by the Safari Operator Association of Zimbabwe spend $957,843 on anti-poaching in 2013 and deployed 245 anti-poaching scouts. One specific operator, Charlton McCullum Safaris (CMS) in the Dande Safari Area and Mbire Communal Area, spends on average $80,000-$90,000 in patrol and equipment costs and anti-poaching rewards. From 2010 to 2016, CMS' efforts led to an 82% decline in elephant poaching in an import border region. As another example, the Save Valley and Bubye Valley Conservancies together spend over $1 million on anti-poaching each year. These anti-poaching efforts are funded predominately by hunting revenue, and protect stable populations of elephant and the third-largest black rhino population in the world.**
- **Regional Anti-Poaching: According to the CITES "Monitoring the Illegal Killing of Elephants" (MIKE) program, poaching in the Southern African countries that allow regulated tourist hunting, including Zimbabwe, is lower than anywhere else on the continent and has never reached an unsustainable level. This stands in stark contrast to the West and Central African countries that do not rely upon tourist hunting as a conservation tool.**
- **Community Benefits: Zimbabwe's CAMPFIRE program is the pioneering community-based natural resource management program in Africa. The program allows rural communities to financially benefit from wildlife, thereby incentivizing the use of communal land as wildlife habitat, and the protection of wildlife in the form of increased tolerance of destructive wildlife. An estimated 77,000 households rely on CAMPFIRE benefit from CAMPFIRE. 90% of CAMPFIRE revenue is generated from regulated hunting, and 70% of this comes from elephant hunting. Thus, prior to the import suspension, elephant hunting generated over $1.6 million per year for CAMPFIRE communities and was reinvested in the construction of classrooms and clinics, the installation of water infrastructure and solar powered facilities, the purchase of vehicles for anti-poaching support, compensation for destruction of crops or livestock by dangerous game, and other benefits that improve the livelihoods of the rural communities living in CAMPFIRE Areas. These benefits offset the damage caused by game species: from 2010 to 2015, elephant destroyed 7,495 hectares of crop fields in CAMPFIRE communities and claimed the lives of approximately 40 people.**

ELEPHANT MANAGEMENT IN ZAMBIA IS UP-TO-DATE AND GENERATES SUBSTANTIAL BENEFITS TO ENCOURAGE RECOVERY OF THE SPECIES

- **Governing Law: The Zambian Wildlife Act No. 14 of 2015 is the guiding legislation for elephant protection and management. This cutting-edge law consolidated the prior wildlife authority into a government Department of National Parks and Wildlife (DNPW), to address the funding concerns and shortfalls experienced by the prior authority. DNPW is made up of a Wildlife Law Enforcement Unit with over 1,250 rangers; a Conservation Unit; an Infrastructure Development Unit; and a Community-Based Natural Resource Management Unit to oversee the development of conservation planning in Game Management Areas.**
- **Management and Enforcement Revenues: Between 2010 and 2012, regulated hunting revenues accounted for approximately 32% of the operating budget funding for Zambia's wildlife authority. With a potential to generate nearly $1 million in elephant hunting fees, in 2015 and 2016, these fees totaled only $150,000, due mainly to import restrictions. This amount was divided between DNPW and the Community Resource Boards in Game Management Areas (GMA). DNPW uses this revenue for range salaries and resource protection, as well as management surveys, staff training, and other activities. Approximately 75% of DNPW's expenditures are for anti-poaching, and Zambia's Wildlife Law Enforcement Unit conducted over 10,500 anti-poaching patrols in 2015, involving an average of 5,878 staff per quarter and 237,028 patrol days.**
- **Habitat: Hunting areas in Zambia (~180,000 km²) provide almost three times the amount of protected habitat compared to the country's National Parks (~64,000 km²).**
- **Community Benefits: In GMAs, elephant license fees are divided equally between the DNPW and the GMA's Community Resource Board, and 20% of concession fees also accrue to the Board. In 2015 and 2016, approximately $1.36 million in hunting fees was distributed to the Boards, as well as $10,000 per concession paid by the hunting operator. Under the new Wildlife Law, Boards must invest those funds as follows: 45% towards wildlife protection and patrols, 35% towards community improvement projects such as construction of schools, clinics, and water infrastructure, and 20% towards administrative costs. Written concession agreements between the operators, DNPW, and the community Boards usually obligate the concessionaire**

to make further communities investments, such as constructing a classroom and paying a teacher's salary. Operators in 13 blocks were obligated to spend over $1.1 million in community infrastructure development and 3.4 million in community lease and other payments for the duration of their leases.

- **Game Meat Distributions: Moreover, under Zambian law, at least 50% of harvested game meat must be donated and distributed to local communities. A 2015 study found that operators in three GMAs contributed an average of 6,000 kilograms of harvested meat per season, and estimated that operators across all GMAs could provide ~130 tons of much-needed protein annually. This reduces the incentive for bush meat poaching in these areas bordering and buffering Zambia's National Parks.**
- **Operator Anti-Poaching: Hunting operators' concession agreements with DNPW and the Community Resource Board identify mandatory anti-poaching obligations and expenditures. At present, 75 Boards employ over 750 wildlife scouts and 79 support personnel, at a monthly cost of over $38,800. Those scouts are paid for by revenues from tourist hunting. A small sample of four operators spent over $201,000 on anti-poaching in 2015, to fund community scouts and fund and equip their own operator anti-poaching teams. This anti-poaching support is largely paid for by U.S. hunters, as over half of all hunting clients in Zambia are from the U.S.**

[Note: Supporting documents for each of these points is available by contacting Conservation Force, cf@conservationforce.org. These Talking Points largely rely on the responses of ZPWMA and DNPW to FWS information requests and supporting documents provided as part of those responses as well as individual hunting operator enhancement reports, reports of the CAMPFIRE Association, and publicly available IUCN documents.]

MINI-ARGUMENTS REFUTING FALSE FACTS

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government, poor economy, and exploding human population growth rate, is a testament to the country's strong management. That number is almost 40% higher than in 1992, when the FWS confirmed the "threatened" listing of elephant, and almost 20% higher than in 1997, when the FWS made a positive enhancement finding authorizing the import of elephant trophies. This is due in part to ZPWMA being a parastatal separate and separately funded from the central government. It is also due to the commitment of Zimbabwe's citizens to maintaining their elephant, notwithstanding the costs—over 40 rural Zimbabweans were killed by elephant from 2010 to 2015. Zimbabwe's strong wildlife management is also demonstrated by recent IUCN Red List assessments of lion and giraffe, which indicated increasing populations of these species in Zimbabwe. The evidence demonstrates that Zimbabwe's wildlife management, not only its elephant management, is succeeding.]

- **<u>Zimbabwe's elephant management is not "poor"; it is state-of-the-art and written by one of the world's foremost elephant experts.</u> In response to the April 2014 suspension of elephant trophy imports, ZPWMA took to heart the FWS' criticism that Zimbabwe's then-current elephant management plan dated to 1997. Although that plan was adaptively implemented and monitored, it was admittedly dated. Zimbabwe immediately began the process of adopting a brand-new, state-of-the-art elephant management plan—basically, to satisfy the FWS. This included a year of stakeholder planning workshops: a preparatory meeting of representatives from Zimbabwe's community-based natural resources management program, CAMPFIRE, in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley) in early April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld region in September 2015. Zimbabwe focused on regional planning because the four regions face different management challenges. Each planning workshop produced a regional elephant management plan that was incorporated into the final. The final document was drafted by a leading elephant scientist, and the process was monitored throughout by the IUCN's African Elephant Specialist Group.**
- **<u>Regulated hunting is not poaching.</u> By definition, "regulated" hunting is regulated and lawful. It is carefully monitored by ZPWMA, and offtakes are recorded in a national database. Lawfully hunted ivory tusks are marked to show that they are lawful and note the year of harvest. Moreover, regulated hunting revenues underwrite most anti-poaching expenses in Zimbabwe and the rest of Southern Africa, either by fees paid to government wildlife authorities that are used for law enforcement, or by operator-funded teams that patrol concessions and keep poachers out. Finally, revenue-sharing and contributions by hunting operators creates conservation incentives for rural communities most affected by wildlife, which disincentivizes poaching. For example, Zimbabwe's CAMPFIRE communities were receiving over $1.6 million per year in revenues from elephant hunting prior to the import suspension. These funds allow for clinics and schools to be built, teachers' salaries to be paid, boreholes to be drilled, and so on. Hunting operators in Zambia are required to share at least 50% of harvested meat with rural communities. Many tons of meat can come from elephant hunts, to reduce the need and tolerance for bushmeat poaching and protect species in addition to elephant.**
- **<u>Allowing imports of elephant trophies will not damage the government's efforts to control ivory trafficking.</u> Elephant trophy imports have been authorized for Namibia and South Africa for the past three years, which demonstrates that a country may maintain lawful hunting and low poaching at the same time. In fact, according to the CITES MIKE data, the Southern African countries that depend upon regulated hunting as a conservation tool have the lowest Proportion of Illegally Killed Elephant (PIKE) rates in the world. PIKE, which is used to assess whether poaching levels are unsustainable, has never risen above the sustainability threshold in Southern Africa. PIKE at Zimbabwe's MIKE sites is well below that level. Moreover, national and international law requires the marking of ivory tusks taken as lawful hunting trophies, which clearly and visibly separates these lawful tusks from illegal ones.**
- **<u>Photographic tourism is not a substitute in most hunting areas.</u> Opponents argue that photographic tourism would be a better option than hunting. It is true that photo-tourism is available in some places; for example, some conservancies in Namibia benefit from photographic tourism revenues alone or a mixture of photo- and hunting tourism. But photo-tourism requires decent infrastructure and scenery, and dense enough wildlife populations to draw tourists. These may not be available in remote areas of a country without access to airports or other activities, and where the wildlife populations are not yet dense enough to ensure a sighting on a two-hour game drive. This is the situation in many CAMPFIRE Areas, where photographic tourism was tried … and failed. In these areas, without the benefits of hunting, the habitat would be converted to agriculture and livestock. Benefits to the rural community stakeholders are less from photographic tourism than from tourist hunting.**

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Conversation Contents

Zimbabwe & Zambia Elephant & Lion Import Permits

Richard Meyer <rich.meyer@qwestoffice.net>

From:	Richard Meyer <rich.meyer@qwestoffice.net>
Sent:	Fri Dec 01 2017 14:40:47 GMT-0700 (MST)
To:	(b) (6) [redacted]@fws.gov>, <exsec@ios.doi.gov>
Subject:	Zimbabwe & Zambia Elephant & Lion Import Permits

Dear Secretary Zinke and Deputy Sheehan:

Having recently hunted in Zambia and Zimbabwe, I believe it is imperative to the conservation of their elephant and lion populations that the Fish & Wildlife service issue permits to U.S. citizens to import their elephant and lion trophies from these countries.

Zimbabwe and Zambia desperately need the revenue from American hunters to support their wildlife conservation programs. Removal of Robert Mugabe as president renews hopes that funds from hunting activities will go for the intended conservation programs and not to corrupt politicians.

If African wildlife cannot contribute to the African economy, it will be a nuisance to the population and result in its extermination. Raymond Bonner did an extensive economic evaluation of benefits of big game hunting in Africa in At the Hand of Man published in 1993.

Failure of the U.S. Fish & Wildlife Service to issue permits for legally taken hunting trophies from these countries will have the unintended consequence of the extermination of those species.

Thank you for your consideration.

Richard Meyer
Attorney at Law
104 N 7th St
Estherville, IA 51334

Conversation Contents

Importation of Elephant Trophies from Zimbabwe and Zambia into the US.

Michael Ambrose <mvambrose@ambroseconsulting.net>

From:	Michael Ambrose <mvambrose@ambroseconsulting.net>
Sent:	Fri Nov 24 2017 05:34:04 GMT-0700 (MST)
To:	(b) (6) @fws.gov" (b) (6) @fws.gov>
Subject:	Importation of Elephant Trophies from Zimbabwe and Zambia into the US.

Dear Secretary Sheehan,
I would like to present you with the real facts about Elephant populations and the effect allowing Trophy Hunting and the importation of their trophies into the US has on Elephant herd populations of the world. I am an ex Navy Seal and an Avid Big Game hunter and know these to be true from first hand experience. Also the voice of the populations who live in these areas should be heard and considered with equal weight as outside experts. I think you will find overwhelming support for Trophy Hunting in these areas.

ELEPHANT TROPHY IMPORTS HAVE NEVER BEEN "BANNED," AND THE POSITIVE ENHANCEMENT FINDINGS ARE BASED ON THE BEST AVAILABLE INFORMATION RECEIVED IN 2014-2016

- There has been no "ban" on elephant trophy imports. In April 2014, the U.S. Fish and Wildlife Service (FWS) "suspended" the import of elephant trophies from Zimbabwe due to a lack of information. Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) responded to two questionnaires from the FWS in April 2014 and December 2014. However, in March 2015, the FWS extended the suspension, finding information was still lacking. The negative enhancement finding dated March 2015 repeatedly affirmed, "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA." In July 2015, May 2016, and November 2016, ZPWMA responded to additional FWS questions. The November 2017 positive enhancement finding is based on these later responses and thousands of pages of supporting documents, including Zimbabwe's National Elephant Management Action Plan, 2014 countrywide elephant population surveys, 2014-2016 actual and projected budget data, 2014 and 2015 offtakes and 2016 quota data, 2014-2016 CAMPFIRE data, and much more.
- Issuing import permits for elephant trophies from Zimbabwe was not a political decision by this Administration. In September 2016, before the election occurred, the FWS had already indicated to ZPWMA that the suspension would be lifted. ZPWMA was told by the Chief of Permits that the FWS needed "only one more piece of information," a prioritization of the new Elephant Management Plan, before the negative enhancement finding could be reversed. That prioritization was provided on November 8, 2016, before the election results were in. At the end of 2016, the FWS should have made the positive enhancement finding, but was admittedly sidetracked by an influx of thousands of new permit applications due to the listing of rosewood (used extensively in musical instruments and furniture) on the CITES Appendixes effective January 2017.
- Similarly, there has been no "ban" on the import of elephant trophies from Zambia. In October 2011, the FWS made a positive enhancement finding to authorize the import of regulated elephant hunting trophies from Zambia. However, 2013 and 2014, Zambia's wildlife authority suspended hunting to obtain more current wildlife population information. In 2015, Zambia's government lifted the hunting suspension, and set a conservative quota of 80 elephant. In August 2016, the Chief of Permits sent an email indicating that the FWS was trying to issue import permits for elephant trophies from Zambia before the CITES Conference of the Parties in September 2016, based on an April 2015 Non-Detriment and Enhancement Finding the FWS received from Zambia's wildlife authority. However, the FWS ran out of time. At the Conference of the Parties, the Chief of Permits indicated that elephant permits from Zambia would likely issue before the end of the year. Again, because of the new

rosewood permits, that enhancement finding was put on a back burner.

ZIMBABWE'S ELEPHANT POPULATION IS THE SECOND-LARGEST IN AFRICA

- In 1900, it was estimated that Zimbabwe had a national population of 4,000 elephant. Since then, the population has grown to over 82,000 (a twenty-fold increase). The current population is double the target national population established in the 1980s, almost 40% larger than in 1992, when the FWS determined to maintain the Endangered Species Act (ESA) "threatened" listing, and almost 20% larger than in 1997, when the last positive enhancement finding was made (before November 2017). Elephant sub-populations in Zimbabwe are generally considered stable or increasing.
    - North-West Matabeleland: This population is estimated at 54,000, and is most densely located in Hwange National Park (45,000 elephant). In 1928, the estimated elephant population in Hwange was 2,000.
    - Sebungwe: This population is estimated at 3,500 and has declined since 2001 due to human population expansion into a previously unsettled areas. The human population exploded from 45,000 in 1950 to over 700,000 in 2013, which explains the decline in the elephant population. Due to the expansion of human settlement and unlike other major elephant ranges in Zimbabwe, the habitat in this area is fragmented.
    - Mid-Zambezi Valley: This area has an estimated elephant population of about 12,000. That population declined since the 2001 countrywide survey, and it is believed the decline is due to cross-border poaching and perhaps, the cross-border movement of elephants during the survey. Anti-poaching is a major component of the Zambezi Valley/Mana Pools Regional Elephant Management Action Plan, and recently the area has been chosen as a CITES MIKES site with an ongoing project.
    - South-East Lowveld: Most of this population inhabits Gonarezhou National Park, whose population has been growing consistently at 5% per annum over 20 years. This region's sub-population is estimated at 13,000 elephant between the Park, surrounding communal areas, and nearby private conservancies.

ZAMBIA'S ELEPHANT POPULATION IS STABLE

- Zambia's elephant population inhabits seven sub-regions covering National Parks and Game Management Areas. According to the 2016 African Elephant Status Report, Zambia's elephant population is estimated at over 21,000. This is generally considered stable over the past 25 years, and is stable compared to Zambia's population in 1992, when the FWS determined to maintain elephant as "threatened" listed. However, several population surveys indicating an estimate closer to 30,000 were not included in the 2016 African Elephant Status Report, and Zambia's wildlife authority estimates the country's population at more than 30,000.

ELEPHANT HUNTING OFFTAKES IN ZIMBABWE ARE SUSTAINABLE

- Zimbabwe maintains a CITES export quota of 1,000 tusks from 500 bull elephants. A national quota of 500 elephants represents only 0.6% of a population of 82,630 elephant. Actual hunting offtakes are considerably lower, have a negligible impact on the overall population rate, and have declined in the past three years due to the import suspension.

    Average Hunting Offtakes
    2010-2013 (% of Total Elephant Population): 228 (0.276%)
    2013 Hunting Offtakes (% of Total Elephant Population): 258 (0.312%)
    2014 Hunting Offtakes (% of Total Elephant Population): 162 (0.196%)
    2015 Hunting Offtakes (% of Total Elephant Population): 075 (0.091%)

ELEPHANT HUNTING OFFTAKES IN ZAMBIA ARE NEGLIGIBLE

- In 2013 and 2014, Zambia suspended regulated tourist hunting to obtain a better sense of national wildlife population trends. In 2015, Zambia set a conservative export quota of 160 tusks from 80 bull elephants. Zambia maintained the quota of 80 elephants in 2016 and 2017. A national quota of 80 elephants represents less than 0.4% of a population of 21,967 elephant. Actual hunting offtakes are negligible and have no impact on the national population rate.

    2015 Hunting Offtakes (% of Total Elephant Population): 03 (0.014%)
    2016 Hunting Offtakes (% of Total Elephant Population): 12 (0.055%)

ELEPHANT MANAGEMENT IN ZIMBABWE IS GUIDED BY APPROPRIATE LEGISLATION AND A STATE-OF-THE-ART MANAGEMENT PLAN

- Governing Law: The Zimbabwe Parks and Wild Life Act provides the regulatory mechanism for ZPWMA and its programs. The Act created ZPWMA as a parastatal authority apart from the central government and established a separate fund, apart from the Central Treasury, to sustain ZPWMA's

operations. The Act sets harsh penalties for elephant-related offenses, and was amended in 2010 to impose a nine-year minimum sentence for the first offense of elephant poaching. Under the Parks and Wild Life Act, Rural District Councils and other land holders are granted "appropriate authority" to benefit directly from wildlife. Under this legislation, land holders are encouraged to maintain and increase wildlife populations because they retain the benefits of sustainable use of that wildlife.

- Elephant Management Plan: Elephant are managed according to the Zimbabwe National Elephant Management Plan (2015-2020). The plan incorporates specific action items, deliverables, deadlines, and responsible parties. It is an adaptive management plan utilizing prioritization of targets measured by key components, strategic objectives, and outputs. The plan focuses on five major components: Protection and Law Enforcement; Biological Monitoring and Management; Social, Economic, and Cultural Framework; Building Conservation Capacity; and Program Management. The National management plan is supplemented by four regional plans that utilize the same framework to address the unique challenges for each major elephant range in Zimbabwe. Zimbabwe's elephant management planning process was kicked off by the FWS' elephant trophy import suspension. ZPWMA held a year of stakeholder planning workshops, including a preparatory meeting of representatives from CAMPFIRE in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley range) in March-April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld range in September 2015.

ELEPHANT HUNTING IN ZIMBABWE GENERATES CONSERVATION BENEFITS THAT SATISFY THE "ENHANCEMENT" STANDARD: Although hunting offtakes are negligible, elephant hunting fees create extensive conservation incentives in Zimbabwe.

- Habitat: Hunting areas in Zimbabwe represent ~130,000 km² of protected habitat. This represents over four times the size of Zimbabwe's National Parks (~28,000 km^2). Healthy elephant populations require large tracts of habitat; the areas set aside for regulated hunting are therefore essential to the elephant's continued survival.
- Management and Enforcement Revenues: Revenues generated from tourist hunting conducted on state lands comprised approximately 20% of ZPWMA's revenue stream in 2014. Over $6.2 million in trophy fees came from elephant hunts, with $5 million accruing to ZPWMA to reinvest in elephant protection and species management. Over 50% of that revenue came from U.S. clients. Almost 80% of ZPWMA's operating budget is allocated towards law enforcement in the form of staff costs and patrol provisions. ZPWMA employs 1,500 active field rangers. Put simply, hunting revenues support anti-poaching efforts across Zimbabwe's elephant range—and this is largely paid for by American elephant hunters.
- Operator Anti-Poaching: In addition to supporting ZPWMA's enforcement capacity, hunting operators deploy their own anti-poaching units to police the Safari Areas and fund community game scouts in CAMPFIRE Areas. For example, a small sample of 14 individual operators surveyed by the Safari Operator Association of Zimbabwe spend $957,843 on anti-poaching in 2013 and deployed 245 anti-poaching scouts. One specific operator, Charlton McCullum Safaris (CMS) in the Dande Safari Area and Mbire Communal Area, spends on average $80,000-$90,000 in patrol and equipment costs and anti-poaching rewards. From 2010 to 2016, CMS' efforts led to an 82% decline in elephant poaching in an import border region. As another example, the Save Valley and Bubye Valley Conservancies together spend over $1 million on anti-poaching each year. These anti-poaching efforts are funded predominately by hunting revenue, and protect stable populations of elephant and the third-largest black rhino population in the world.
- Regional Anti-Poaching: According to the CITES "Monitoring the Illegal Killing of Elephants" (MIKE) program, poaching in the Southern African countries that allow regulated tourist hunting, including Zimbabwe, is lower than anywhere else on the continent and has never reached an unsustainable level. This stands in stark contrast to the West and Central African countries that do not rely upon tourist hunting as a conservation tool.
- Community Benefits: Zimbabwe's CAMPFIRE program is the pioneering community-based natural resource management program in Africa. The program allows rural communities to financially benefit from wildlife, thereby incentivizing the use of communal land as wildlife habitat, and the protection of wildlife in the form of increased tolerance of destructive wildlife. An estimated 777,000 households (200,000 direct participants and 600,000 secondary beneficiary families) rely on benefits from CAMPFIRE. 90% of CAMPFIRE revenue is generated from regulated hunting, and 70% of this comes from elephant hunting. Thus, prior to the import suspension, elephant hunting generated over $1.6 million per year for CAMPFIRE communities and was reinvested in the construction of classrooms and clinics, the installation of water infrastructure and solar powered facilities, the purchase of vehicles for anti-poaching support, compensation for destruction of crops or livestock by dangerous game, and other benefits that improve the livelihoods of the rural communities living in

CAMPFIRE Areas. These benefits offset the damage caused by game species: from 2010 to 2015, elephant destroyed 7,495 hectares of crop fields in CAMPFIRE communities and claimed the lives of approximately 40 people.

ELEPHANT MANAGEMENT IN ZAMBIA IS UP-TO-DATE AND GENERATES SUBSTANTIAL BENEFITS TO ENCOURAGE RECOVERY OF THE SPECIES

- Governing Law: The Zambian Wildlife Act No. 14 of 2015 is the guiding legislation for elephant protection and management. This cutting-edge law consolidated the prior wildlife authority into a government Department of National Parks and Wildlife (DNPW), to address the funding concerns and shortfalls experienced by the prior authority. DNPW is made up of a Wildlife Law Enforcement Unit with over 1,250 rangers; a Conservation Unit; an Infrastructure Development Unit; and a Community-Based Natural Resource Management Unit to oversee the development of conservation planning in Game Management Areas.
- Management and Enforcement Revenues: Between 2010 and 2012, regulated hunting revenues accounted for approximately 32% of the operating budget funding for Zambia's wildlife authority. With a potential to generate nearly $1 million in elephant hunting fees, in 2015 and 2016, these fees totaled only $150,000, due mainly to import restrictions. This amount was divided between DNPW and the Community Resource Boards in Game Management Areas (GMA). DNPW uses this revenue for ranger salaries and resource protection, as well as management surveys, staff training, and other activities. Approximately 75% of DNPW's expenditures are for anti-poaching, and Zambia's Wildlife Law Enforcement Unit conducted over 10,500 anti-poaching patrols in 2015, involving an average of 5,878 staff per quarter and 237,028 patrol days.
- Habitat: Hunting areas in Zambia (~180,000 km²) provide almost three times the amount of protected habitat compared to the country's National Parks (~64,000 km²).
- Community Benefits: In GMAs, elephant license fees are divided equally between the DNPW and the GMA's Community Resource Board, and 20% of concession fees also accrue to the Board. In 2015 and 2016, approximately $1.36 million in hunting fees was distributed to the Boards, as well as $10,000 per concession paid by the hunting operator. Under the new Wildlife Law, Boards must invest those funds as follows: 45% towards wildlife protection and patrols, 35% towards community improvement projects such as construction of schools, clinics, and water infrastructure, and 20% towards administrative costs. Written concession agreements between the operators, DNPW, and the community Boards usually obligate the concessionaire to make further community investments, such as constructing a classroom and paying a teacher's salary. Operators in 13 blocks were obligated to spend over $1.1 million in community infrastructure development and 3.4 million in community lease and other payments for the duration of their leases.
- Game Meat Distributions: Moreover, under Zambian law, at least 50% of harvested game meat must be donated and distributed to local communities. A 2015 study found that operators in three GMAs contributed an average of 6,000 kilograms of harvested meat per season, and estimated that operators across all GMAs could provide ~130 tons of much-needed protein annually. This reduces the incentive for bush meat poaching in these areas bordering and buffering Zambia's National Parks.
- Operator Anti-Poaching: Hunting operators' concession agreements with DNPW and the Community Resource Board identify mandatory anti-poaching obligations and expenditures. At present, 75 Boards employ over 750 wildlife scouts and 79 support personnel, at a monthly cost of over $38,800. Those scouts are paid for by revenues from tourist hunting. A small sample of four operators spent over $201,000 on anti-poaching in 2015, to fund community scouts and fund and equip their own operator anti-poaching teams. This anti-poaching support is largely paid for by U.S. hunters, as over half of all hunting clients in Zambia are from the U.S.

[**Note:** Supporting documents for each of these points is available by contacting Conservation Force, cf@conservationforce.org. These Talking Points largely rely on the responses of ZPWMA and DNPW to FWS information requests and supporting documents provided as part of those responses as well as individual hunting operator enhancement reports, reports of the CAMPFIRE Association, and publicly available IUCN documents.]

MINI-ARGUMENTS REFUTING FALSE FACTS

- **There has never been a "ban" on elephant trophy imports from Zimbabwe.** A negative enhancement finding was made in April 2014 that "suspended" the import of elephant trophies. The FWS' negative 2015 enhancement finding stated repeatedly that once additional information was received, the negative finding would be reviewed and reversed (e.g., "The suspension … could be

lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA.") A "ban" suggests a permanent prohibition; a "suspension" is a "temporary abrogation or withholding." Zimbabwe's elephant trophy imports were suspended.

- **Lifting of the suspension was not a political decision.** The decision should have been made in July 2015, when ZPWMA provided extensive additional documentation in response to a FWS questionnaire. The FWS requested "one more piece of information" at the CITES Conference of the Parties in September 2016. That information was provided in November 2016. No further information was needed, or requested. If the FWS had properly prioritized the issuance of elephant import permits—as they told ZPWMA they would at the CITES Conference of the Parties—the positive enhancement finding would have been made and these permits would have issued before the current Administration was in office.
- **The import of elephant trophies from Zimbabwe should not have been suspended in the first place.** In April 2014, the FWS announced the suspension based on an asserted "lack of information." In contradiction to CITES Res. Conf. 6.7's recommendation of notifying and consulting with range states before imposing stricter domestic measures, and the Endangered Species Act's requirement of "encouraging foreign conservation programs," 16 U.S.C. § 1537(b), the FWS shut down imports under an April 2014 negative enhancement finding that the FWS later admitted was wrong with respect to Zimbabwe's elephant population and level of poaching. In fact, the correct estimate for Zimbabwe's elephant population—almost 83,000—is 16,000 elephant higher than when the last, positive enhancement finding was made in 1997. That estimate is double the size of the elephant populations of Namibia and South Africa put together, yet the FWS maintains positive enhancement findings for the import of elephant trophies from Namibia and South Africa. The trophy import suspension was based on a mistaken concern that Zimbabwe's elephant population had declined, and the FWS should have admitted the mistake and reversed the suspension immediately. The failure to do so suggests a political motivation, not a scientific one.
- **Zimbabwe's elephant population is not "the worst managed," but is among the best.** That Zimbabwe maintains a stable elephant population of over 83,000, despite a despotic government, poor economy, and exploding human population growth rate, is a testament to the country's strong management. That number is almost 40% higher than in 1992, when the FWS confirmed the "threatened" listing of elephant, and almost 20% higher than in 1997, when the FWS made a positive enhancement finding authorizing the import of elephant trophies. This is due in part to ZPWMA being a parastatal separate and separately funded from the central government. It is also due to the commitment of Zimbabwe's citizens to maintaining their elephant, notwithstanding the costs—over 40 rural Zimbabweans were killed by elephant from 2010 to 2015. Zimbabwe's strong wildlife management is also demonstrated by recent IUCN Red List assessments of lion and giraffe, which indicated increasing populations of these species in Zimbabwe. The evidence demonstrates that Zimbabwe's wildlife management, not only its elephant management, is succeeding.]
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- **Regulated hunting is not poaching.** By definition, "regulated" hunting is regulated and lawful. It is carefully monitored by ZPWMA, and offtakes are recorded in a national database. Lawfully hunted ivory tusks are marked to show that they are lawful and note the year of harvest. Moreover, regulated hunting revenues underwrite most anti-poaching expenses in Zimbabwe and the rest of Southern Africa, either by fees paid to government wildlife authorities that are used for law enforcement, or by operator-funded teams that patrol concessions and keep poachers out. Finally, revenue-sharing and contributions by hunting operators creates conservation incentives for rural communities most affected by wildlife, which disincentivizes poaching. For example, Zimbabwe's CAMPFIRE communities were receiving over $1.6 million per year in revenues from elephant hunting prior to the

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- **Allowing imports of elephant trophies will not damage the government's efforts to control ivory trafficking.** Elephant trophy imports have been authorized for Namibia and South Africa for the past three years, which demonstrates that a country may maintain lawful hunting and low poaching at the same time. In fact, according to the CITES MIKE data, the Southern African countries that depend upon regulated hunting as a conservation tool have the lowest Proportion of Illegally Killed Elephant (PIKE) rates in the world. PIKE, which is used to assess whether poaching levels are unsustainable, has never risen above the sustainability threshold in Southern Africa. PIKE at Zimbabwe's MIKE sites is well below that level. Moreover, national and international law requires the marking of ivory tusks taken as lawful hunting trophies, which clearly and visibly separates these lawful tusks from illegal ones.
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Conversation Contents

Support of Elephant Trophy Imports from Zimbabwe and Zambia

Attachments:

/90. Support of Elephant Trophy Imports from Zimbabwe and Zambia/1.1 image001.jpg

Anthony Turiello <anthony@rescueair.com>

From:	Anthony Turiello <anthony@rescueair.com>
Sent:	Tue Nov 21 2017 11:45:10 GMT-0700 (MST)
To:	(b) (6) [redacted]@fws.gov>
Subject:	Support of Elephant Trophy Imports from Zimbabwe and Zambia
Attachments:	image001.jpg

Dear Deputy Director Greg Sheehan

ELEPHANT TROPHY IMPORTS HAVE NEVER BEEN "BANNED," AND THE POSITIVE ENHANCEMENT FINDINGS ARE BASED ON THE BEST AVAILABLE INFORMATION RECEIVED IN 2014-2016

- There has been no "ban" on elephant trophy imports. In April 2014, the U.S. Fish and Wildlife Service (FWS) "suspended" the import of elephant trophies from Zimbabwe due to a lack of information. Zimbabwe's Parks and Wildlife Management Authority (ZPWMA) responded to two questionnaires from the FWS in April 2014 and December 2014. However, in March 2015, the FWS extended the suspension, finding information was still lacking. The negative enhancement finding dated March 2015 repeatedly affirmed, "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA." In July 2015, May 2016, and November 2016, ZPWMA responded to additional FWS questions. The November 2017 positive enhancement finding is based on these later responses and thousands of pages of supporting documents, including Zimbabwe's National Elephant Management Action Plan, 2014 countrywide elephant population surveys, 2014-2016 actual and projected budget data, 2014 and 2015 offtakes and 2016 quota data, 2014-2016 CAMPFIRE data, and much more.
- Issuing import permits for elephant trophies from Zimbabwe was not a political decision by this Administration. In September 2016, before the election occurred, the FWS had already indicated to ZPWMA that the suspension would be lifted. ZPWMA was told by the Chief of Permits that the FWS needed "only one more piece of information," a prioritization of the new Elephant Management Plan, before the negative enhancement finding could be reversed. That prioritization was provided on November 8, 2016, before the election results were in. At the end of 2016, the FWS should have made the positive enhancement finding, but was admittedly sidetracked by an influx of thousands of new permit applications due to the listing of rosewood (used extensively in musical instruments and furniture) on the CITES Appendixes effective January 2017.
- Similarly, there has been no "ban" on the import of elephant trophies from Zambia. In October 2011, the FWS made a positive enhancement finding to authorize the import of regulated elephant hunting trophies from Zambia. However, 2013 and 2014, Zambia's wildlife authority suspended hunting to obtain more current wildlife population information. In 2015, Zambia's government lifted the hunting suspension, and set a conservative quota of 80 elephant. In August 2016, the Chief of Permits sent an email indicating that the FWS was trying to issue import permits for elephant trophies from Zambia before the CITES Conference of the Parties in September 2016, based on an April 2015 Non-Detriment and Enhancement Finding the FWS received from Zambia's wildlife authority. However, the FWS ran out of time. At the Conference of the Parties, the Chief of Permits indicated that

elephant permits from Zambia would likely issue before the end of the year. Again, because of the new rosewood permits, that enhancement finding was put on a back burner.

ZIMBABWE'S ELEPHANT POPULATION IS THE SECOND-LARGEST IN AFRICA

- In 1900, it was estimated that Zimbabwe had a national population of 4,000 elephant. Since then, the population has grown to over 82,000 (a twenty-fold increase). The current population is double the target national population established in the 1980s, almost 40% larger than in 1992, when the FWS determined to maintain the Endangered Species Act (ESA) "threatened" listing, and almost 20% larger than in 1997, when the last positive enhancement finding was made (before November 2017). Elephant sub-populations in Zimbabwe are generally considered stable or increasing.
    - North-West Matabeleland: This population is estimated at 54,000, and is most densely located in Hwange National Park (45,000 elephant). In 1928, the estimated elephant population in Hwange was 2,000.
    - Sebungwe: This population is estimated at 3,500 and has declined since 2001 due to human population expansion into a previously unsettled area. The human population exploded from 45,000 in 1950 to over 700,000 in 2013, which explains the decline in the elephant population. Due to the expansion of human settlement and unlike other major elephant ranges in Zimbabwe, the habitat in this area is fragmented.
    - Mid-Zambezi Valley: This area has an estimated elephant population of about 12,000. That population declined since the 2001 countrywide survey, and it is believed the decline is due to cross-border poaching and perhaps, the cross-border movement of elephants during the survey. Anti-poaching is a major component of the Zambezi Valley/Mana Pools Regional Elephant Management Action Plan, and recently the area has been chosen as a CITES MIKES site with an ongoing project.
    - South-East Lowveld: Most of this population inhabits Gonarezhou National Park, whose population has been growing consistently at 5% per annum over 20 years. This region's sub-population is estimated at 13,000 elephant between the Park, surrounding communal areas, and nearby private conservancies.

ZAMBIA'S ELEPHANT POPULATION IS STABLE

- Zambia's elephant population inhabits seven sub-regions covering National Parks and Game Management Areas. According to the 2016 African Elephant Status Report, Zambia's elephant population is estimated at over 21,000. This is generally considered stable over the past 25 years, and is stable compared to Zambia's population in 1992, when the FWS determined to maintain elephant as "threatened" listed. However, several population surveys indicating an estimate closer to 30,000 were not included in the 2016 African Elephant Status Report, and Zambia's wildlife authority estimates the country's population at more than 30,000.

ELEPHANT HUNTING OFFTAKES IN ZIMBABWE ARE SUSTAINABLE

- Zimbabwe maintains a CITES export quota of 1,000 tusks from 500 bull elephants. A national quota of 500 elephants represents only 0.6% of a population of 82,630 elephant. Actual hunting offtakes are considerably lower, have a negligible impact on the overall population rate, and have declined in the past three years due to the import suspension.

    Average Hunting Offtakes 2010-2013 (% of Total Elephant Population): 228 (0.276%)
    2013 Hunting Offtakes (% of Total Elephant Population): 258 (0.312%)
    2014 Hunting Offtakes (% of Total Elephant Population): 162 (0.196%)
    2015 Hunting Offtakes (% of Total Elephant Population): 075 (0.091%)

ELEPHANT HUNTING OFFTAKES IN ZAMBIA ARE NEGLIGIBLE

- In 2013 and 2014, Zambia suspended regulated tourist hunting to obtain a better sense of national wildlife population trends. In 2015, Zambia set a conservative export quota of 160 tusks from 80 bull elephants. Zambia maintained the quota of 80 elephants in 2016 and 2017. A national quota of 80 elephants represents less than 0.4% of a population of 21,967 elephant. Actual hunting offtakes are negligible and have no impact on the national population rate.

    2015 Hunting Offtakes (% of Total Elephant Population): 03 (0.014%)
    2016 Hunting Offtakes (% of Total Elephant Population): 12 (0.055%)

ELEPHANT MANAGEMENT IN ZIMBABWE IS GUIDED BY APPROPRIATE LEGISLATION AND A STATE-OF-THE-ART MANAGEMENT PLAN

- Governing Law: The Zimbabwe Parks and Wild Life Act provides the regulatory mechanism for ZPWMA and its programs. The Act created ZPWMA as a parastatal authority apart from the central government and established a separate fund, apart from the Central Treasury, to sustain ZPWMA's operations. The Act sets harsh penalties for elephant-related offenses, and was amended in 2010 to impose a nine-year minimum sentence for the first offense of elephant poaching. Under the Parks and Wild Life Act, Rural District Councils and other land holders are granted "appropriate authority" to benefit directly from wildlife. Under this legislation, land holders are encouraged to maintain and increase wildlife populations because they retain the benefits of sustainable use of that wildlife.
- Elephant Management Plan: Elephant are managed according to the Zimbabwe National Elephant Management Plan (2015-2020). The plan incorporates specific action items, deliverables, deadlines, and responsible parties. It is an adaptive management plan utilizing prioritization of targets measured by key components, strategic objectives, and outputs. The plan focuses on five major components: Protection and Law Enforcement; Biological Monitoring and Management; Social, Economic, and Cultural Framework; Building Conservation Capacity; and Program Management. The National management plan is supplemented by four regional plans that utilize the same framework to address the unique challenges for each major elephant range in Zimbabwe. Zimbabwe's elephant management planning process was kicked off by the FWS' elephant trophy import suspension. ZPWMA held a year of stakeholder planning workshops, including a preparatory meeting of representatives from CAMPFIRE in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley range) in March-April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld range in September 2015.

ELEPHANT HUNTING IN ZIMBABWE GENERATES CONSERVATION BENEFITS THAT SATISFY THE "ENHANCEMENT" STANDARD: Although hunting offtakes are negligible, elephant hunting fees create extensive conservation incentives in Zimbabwe.

- Habitat: Hunting areas in Zimbabwe represent ~130,000 km^2 of protected habitat. This represents over four times the size of Zimbabwe's National Parks (~28,000 km^2). Healthy elephant populations require large tracts of habitat; the areas set aside for regulated hunting are therefore essential to the elephant's continued survival.
- Management and Enforcement Revenues: Revenues generated from tourist hunting conducted on state lands comprised approximately 20% of ZPWMA's revenue stream in 2014. Over $6.2 million in trophy fees came from elephant hunts, with $5 million accruing to ZPWMA to reinvest in elephant protection and species management. Over 50% of that revenue came from U.S. clients. Almost 80% of ZPWMA's operating budget is allocated towards law enforcement in the form of staff costs and patrol provisions. ZPWMA employs 1,500 active field rangers. Put simply, hunting revenues support anti-poaching efforts across Zimbabwe's elephant range—and this is largely paid for by American elephant hunters.
- Operator Anti-Poaching: In addition to supporting ZPWMA's enforcement capacity, hunting operators deploy their own anti-poaching units to police the Safari Areas and fund community game scouts in CAMPFIRE Areas. For example, a small sample of 14 individual operators surveyed by the Safari Operator Association of Zimbabwe spend $957,843 on anti-poaching in 2013 and deployed 245 anti-poaching scouts. One specific operator, Charlton McCullum Safaris (CMS) in the Dande Safari Area and Mbire Communal Area, spends on average $80,000-$90,000 in patrol and equipment costs and anti-poaching rewards. From 2010 to 2016, CMS' efforts led to an 82% decline in elephant poaching in an import border region. As another example, the Save Valley and Bubye Valley Conservancies together spend over $1 million on anti-poaching each year. These anti-poaching efforts are funded predominately by hunting revenue, and protect stable populations of elephant and the third-largest black rhino population in the world.
- Regional Anti-Poaching: According to the CITES "Monitoring the Illegal Killing of Elephants" (MIKE) program, poaching in the Southern African countries that allow regulated tourist hunting, including Zimbabwe, is lower than anywhere else on the continent and has never reached an unsustainable level. This stands in stark contrast to the West and Central African countries that do not rely upon tourist hunting as a conservation tool.
- Community Benefits: Zimbabwe's CAMPFIRE program is the pioneering community-based natural resource management program in Africa. The program allows rural communities to financially benefit from wildlife, thereby incentivizing the use of communal land as wildlife habitat, and the protection of wildlife in the form of increased tolerance of destructive wildlife. An estimated 77,000 households rely on CAMPFIRE benefit from CAMPFIRE. 90% of CAMPFIRE revenue is generated from regulated hunting, and 70% of this comes from elephant hunting. Thus, prior to the import suspension, elephant hunting generated over $1.6 million per year for CAMPFIRE communities and

was reinvested in the construction of classrooms and clinics, the installation of water infrastructure and solar powered facilities, the purchase of vehicles for anti-poaching support, compensation for destruction of crops or livestock by dangerous game, and other benefits that improve the livelihoods of the rural communities living in CAMPFIRE Areas. These benefits offset the damage caused by game species: from 2010 to 2015, elephant destroyed 7,495 hectares of crop fields in CAMPFIRE communities and claimed the lives of approximately 40 people.

ELEPHANT MANAGEMENT IN ZAMBIA IS UP-TO-DATE AND GENERATES SUBSTANTIAL BENEFITS TO ENCOURAGE RECOVERY OF THE SPECIES

- Governing Law: The Zambian Wildlife Act No. 14 of 2015 is the guiding legislation for elephant protection and management. This cutting-edge law consolidated the prior wildlife authority into a government Department of National Parks and Wildlife (DNPW), to address the funding concerns and shortfalls experienced by the prior authority. DNPW is made up of a Wildlife Law Enforcement Unit with over 1,250 rangers; a Conservation Unit; an Infrastructure Development Unit; and a Community-Based Natural Resource Management Unit to oversee the development of conservation planning in Game Management Areas.
- Management and Enforcement Revenues: Between 2010 and 2012, regulated hunting revenues accounted for approximately 32% of the operating budget funding for Zambia's wildlife authority. With a potential to generate nearly $1 million in elephant hunting fees, in 2015 and 2016, these fees totaled only $150,000, due mainly to import restrictions. This amount was divided between DNPW and the Community Resource Boards in Game Management Areas (GMA). DNPW uses this revenue for range salaries and resource protection, as well as management surveys, staff training, and other activities. Approximately 75% of DNPW's expenditures are for anti-poaching, and Zambia's Wildlife Law Enforcement Unit conducted over 10,500 anti-poaching patrols in 2015, involving an average of 5,878 staff per quarter and 237,028 patrol days.
- Habitat: Hunting areas in Zambia (~180,000 km²) provide almost three times the amount of protected habitat compared to the country's National Parks (~64,000 km²).
- Community Benefits: In GMAs, elephant license fees are divided equally between the DNPW and the GMA's Community Resource Board, and 20% of concession fees also accrue to the Board. In 2015 and 2016, approximately $1.36 million in hunting fees was distributed to the Boards, as well as $10,000 per concession paid by the hunting operator. Under the new Wildlife Law, Boards must invest those funds as follows: 45% towards wildlife protection and patrols, 35% towards community improvement projects such as construction of schools, clinics, and water infrastructure, and 20% towards administrative costs. Written concession agreements between the operators, DNPW, and the community Boards usually obligate the concessionaire to make further communities investments, such as constructing a classroom and paying a teacher's salary. Operators in 13 blocks were obligated to spend over $1.1 million in community infrastructure development and 3.4 million in community lease and other payments for the duration of their leases.
- Game Meat Distributions: Moreover, under Zambian law, at least 50% of harvested game meat must be donated and distributed to local communities. A 2015 study found that operators in three GMAs contributed an average of 6,000 kilograms of harvested meat per season, and estimated that operators across all GMAs could provide ~130 tons of much-needed protein annually. This reduces the incentive for bush meat poaching in these areas bordering and buffering Zambia's National Parks.
- Operator Anti-Poaching: Hunting operators' concession agreements with DNPW and the Community Resource Board identify mandatory anti-poaching obligations and expenditures. At present, 75 Boards employ over 750 wildlife scouts and 79 support personnel, at a monthly cost of over $38,800. Those scouts are paid for by revenues from tourist hunting. A small sample of four operators spent over $201,000 on anti-poaching in 2015, to fund community scouts and fund and equip their own operator anti-poaching teams. This anti-poaching support is largely paid for by U.S. hunters, as over half of all hunting clients in Zambia are from the U.S.

[Note: Supporting documents for each of these points is available by contacting Conservation Force, cf@conservationforce.org. These Talking Points largely rely on the responses of ZPWMA and DNPW to FWS information requests and supporting documents provided as part of those responses as well as individual hunting operator enhancement reports, reports of the CAMPFIRE Association, and publicly available IUCN documents.]

MINI-ARGUMENTS REFUTING FALSE FACTS

- There has never been a "ban" on elephant trophy imports from Zimbabwe. A negative enhancement finding was made in April 2014 that "suspended" the import of elephant trophies. The FWS' negative 2015 enhancement finding stated repeatedly that once additional information was received, the negative finding would be reviewed and reversed (e.g., "The suspension … could be lifted if additional information on the status and management of elephants in Zimbabwe becomes available, including utilization of revenue generated through sport-hunting by U.S. hunters, which satisfies the conditions of the 4(d) special rule under the ESA.") A "ban" suggests a permanent prohibition; a "suspension" is a "temporary abrogation or withholding." Zimbabwe's elephant trophy imports were suspended.
- Lifting of the suspension was not a political decision. The decision should have been made in July 2015, when ZPWMA provided extensive additional documentation in response to a FWS questionnaire. The FWS requested "one more piece of information" at the CITES Conference of the Parties in September 2016. That information was provided in November 2016. No further information was needed, or requested. If the FWS had properly prioritized the issuance of elephant import permits—as they told ZPWMA they would at the CITES Conference of the Parties—the positive enhancement finding would have been made and these permits would have issued before the current Administration was in office.
- The import of elephant trophies from Zimbabwe should not have been suspended in the first place. In April 2014, the FWS announced the suspension based on an asserted "lack of information." In contradiction to CITES Res. Conf. 6.7's recommendation of notifying and consulting with range states before imposing stricter domestic measures, and the Endangered Species Act's requirement of "encouraging foreign conservation programs," 16 U.S.C. § 1537(b), the FWS shut down imports under an April 2014 negative enhancement finding that the FWS later admitted was wrong with respect to Zimbabwe's elephant population and level of poaching. In fact, the correct estimate for Zimbabwe's elephant population—almost 83,000—is 16,000 elephant higher than when the last, positive enhancement finding was made in 1997. That estimate is double the size of the elephant populations of Namibia and South Africa put together, yet the FWS maintains positive enhancement findings for the import of elephant trophies from Namibia and South Africa. The trophy import suspension was based on a mistaken concern that Zimbabwe's elephant population had declined, and the FWS should have admitted the mistake and reversed the suspension immediately. The failure to do so suggests a political motivation, not a scientific one.
- Zimbabwe's elephant population is not "the worst managed," but is among the best. That Zimbabwe maintains a stable elephant population of over 83,000, despite a despotic government, poor economy, and exploding human population growth rate, is a testament to the country's strong management. That number is almost 40% higher than in 1992, when the FWS confirmed the "threatened" listing of elephant, and almost 20% higher than in 1997, when the FWS made a positive enhancement finding authorizing the import of elephant trophies. This is due in part to ZPWMA being a parastatal separate and separately funded from the central government. It is also due to the commitment of Zimbabwe's citizens to maintaining their elephant, notwithstanding the costs—over 40 rural Zimbabweans were killed by elephant from 2010 to 2015. Zimbabwe's strong wildlife management is also demonstrated by recent IUCN Red List assessments of lion and giraffe, which indicated increasing populations of these species in Zimbabwe. The evidence demonstrates that Zimbabwe's wildlife management, not only its elephant management, is succeeding.]
- Zimbabwe's elephant management is not "poor"; it is state-of-the-art and written by one of the world's foremost elephant experts. In response to the April 2014 suspension of elephant trophy imports, ZPWMA took to heart the FWS' criticism that Zimbabwe's then-current elephant management plan dated to 1997. Although that plan was adaptively implemented and monitored, it was admittedly dated. Zimbabwe immediately began the process of adopting a brand-new, state-of-the-art elephant management plan—basically, to satisfy the FWS. This included a year of stakeholder planning workshops: a preparatory meeting of representatives from Zimbabwe's community-based natural resources management program, CAMPFIRE, in November 2014; a national elephant management planning workshop in December 2014; an elephant management planning and anti-poaching workshop in Mana Pools (Zambezi Valley) in early April 2015; an elephant management planning workshop in the Sebungwe range in May 2015; and an elephant management planning workshop in the South East Lowveld region in September 2015. Zimbabwe focused on regional planning because the four regions face different management challenges. Each planning workshop produced a regional elephant management plan that was incorporated into the final. The final document was drafted by a leading elephant scientist, and the process was monitored throughout by the IUCN's African Elephant Specialist Group.
- Regulated hunting is not poaching. By definition, "regulated" hunting is regulated and lawful. It is carefully monitored by ZPWMA, and offtakes are recorded in a national database. Lawfully hunted ivory tusks are marked to show that they are lawful and note the year of harvest. Moreover, regulated hunting revenues underwrite most anti-poaching expenses in Zimbabwe and the rest of Southern

Africa, either by fees paid to government wildlife authorities that are used for law enforcement, or by operator-funded teams that patrol concessions and keep poachers out. Finally, revenue-sharing and contributions by hunting operators creates conservation incentives for rural communities most affected by wildlife, which disincentivizes poaching. For example, Zimbabwe's CAMPFIRE communities were receiving over $1.6 million per year in revenues from elephant hunting prior to the import suspension. These funds allow for clinics and schools to be built, teachers' salaries to be paid, boreholes to be drilled, and so on. Hunting operators in Zambia are required to share at least 50% of harvested meat with rural communities. Many tons of meat can come from elephant hunts, to reduce the need and tolerance for bushmeat poaching and protect species in addition to elephant.

- Allowing imports of elephant trophies will not damage the government's efforts to control ivory trafficking. Elephant trophy imports have been authorized for Namibia and South Africa for the past three years, which demonstrates that a country may maintain lawful hunting and low poaching at the same time. In fact, according to the CITES MIKE data, the Southern African countries that depend upon regulated hunting as a conservation tool have the lowest Proportion of Illegally Killed Elephant (PIKE) rates in the world. PIKE, which is used to assess whether poaching levels are unsustainable, has never risen above the sustainability threshold in Southern Africa. PIKE at Zimbabwe's MIKE sites is well below that level. Moreover, national and international law requires the marking of ivory tusks taken as lawful hunting trophies, which clearly and visibly separates these lawful tusks from illegal ones.
- Photographic tourism is not a substitute in most hunting areas. Opponents argue that photographic tourism would be a better option than hunting. It is true that photo-tourism is available in some places; for example, some conservancies in Namibia benefit from photographic tourism revenues alone or a mixture of photo- and hunting tourism. But photo-tourism requires decent infrastructure and scenery, and dense enough wildlife populations to draw tourists. These may not be available in remote areas of a country without access to airports or other activities, and where the wildlife populations are not yet dense enough to ensure a sighting on a two-hour game drive. This is the situation in many CAMPFIRE Areas, where photographic tourism was tried … and failed. In these areas, without the benefits of hunting, the habitat would be converted to agriculture and livestock. Benefits to the rural community stakeholders are less from photographic tourism than from tourist hunting.

Sincerely

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