

U.S. Fish and Wildlife Service
Division of Scientific Authority
Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 27057D

Date Received by DSA: April 23, 2019

DMA Contact: Miguel Richardson

Applicant: Gene C. McQuown
Dallas, Texas

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zimbabwe)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and occurs from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zimbabwe Parks and Wildlife Management Authority (ZPWMA), leopards are present in protected areas including National Parks and Safari Areas, as well as private conservancies such as Bulyebe and Save Valley Conservancies (CITES 2018a:5). Protected areas with persisting leopard populations include Hwange, Zambezi, Matusadona, and Mana Pools

National Parks as well as Matetsi, Chirisa, Chete, Charara, Hurungwe, Chewore, Doma and Umfurundzi Safari Areas (Jacobson *et al.* 2016: Supp. Doc. 1). Though leopards reportedly occur outside of protected areas, they have much lower densities in areas that have been subject to human disturbance and may be extinct in the majority of unprotected areas (CITES 2018a:5; Jacobson *et al.* 2016: Fig. 1). Jacobson *et al.* estimate the extant range of leopards in Zimbabwe to be 160,000 km² (2016: Supp. Table 5), which is similar to ZPWMA's estimate of 145,000 km² (CITES 2018a:12).

No countrywide estimate of the leopard population in Zimbabwe has been made (CITES 2018a:4). Several projects are currently underway to establish population estimates, including a study by ZPWMA, Zimbabwe Professional Hunting Guides Association (ZPHGA), and Safari Operators Association of Zimbabwe (SOAZ). With guidance from an independent researcher, the team aims to use spoor transects, camera trap data, and offtake trends to estimate the leopard population and use this information to manage the population (CITES 2018a:6). Several population estimates from specific regions within Zimbabwe have been made using a combination of spoor surveys and camera traps: 193 leopards in Save Valley Conservancy in 2008, 54 leopards in the Northern Tuli Game Reserve in 2010, 315 leopards in Gonarezhou National Park in 2009, and 19 leopards in the Mangwe District in 2010 (Jacobson *et al.* 2016: Supp. Doc 1; IUCN/SSC Cat Specialist Group 2017:57). In 2012, landowners estimated a leopard population of 13,521 individuals on private lands (Lindsey & Chikerema-Mandisodze 2012, as cited in IUCN/SSC Cat Specialist Group 2017:58), however this estimate would mean that leopards on private lands would occur at 8.2 times the density as on Kruger National Park, South Africa, which is highly unlikely (Zimbabwe 2012:4).

In the 2016 IUCN Red List assessment, Stein *et al.* (2016:5) stated that it is generally thought that the Zimbabwe leopard population is healthy but declining outside of human dominated areas. The leopard population in Zimbabwe appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton *et al.* 2001, du Toit 2004, Fusari *et al.* 2006, Lindsay *et al.* 2014, as cited in Stein *et al.* 2016:9).

According to ZPWMA, threats to the persistence of the leopard population in Zimbabwe include habitat loss and fragmentation, decreased prey base, persecution from the growing human population, illegal wildlife trade, harvesting for ceremonial use of skins, and poorly managed hunting (CITES 2018a:4). Widespread habitat loss in combination with prey loss is estimated to have caused a 30% decline in sub-Saharan leopard populations over the last 3 generations; the projected increase in human population and their dependence on agriculture and livestock will likely contribute to the continued decline of leopards in Zimbabwe (Stein *et al.* 2016).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Gene C. McQuown; Dallas, Texas) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zimbabwe.

2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in Buby Valley Conservancy, Ripple Creek Camp, Bulawayo, Zimbabwe, during a hunt scheduled for May 8 – July 21, 2018; with Shaun Buffee Safaris, Shaun Buffee Professional Hunter. A copy of the hunting license was not submitted along with the application.

B. Zimbabwe Information:

3. Leopards in Zimbabwe are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Parks and Wildlife Act 22/2001 (Act) is the principal legislation guiding the management of wildlife in Zimbabwe, and the ZPWMA is the governmental authority responsible for the conservation of Zimbabwe's wildlife, including leopards (CITES 2018a:11, IUCN/SSC Cat Specialist Group 2017:159). According to the ZPWMA, Zimbabwe's wildlife policy seeks to maintain a network of protected areas to conserve the country's biodiversity and natural resources, including through rural economic development and encouraging the protection of wild animals and habitats outside of protected areas (CITES 2018a:11).

The Act was amended in 2011 to increase penalties for illegal hunting, sale of illegally hunted trophies or meat, and other wildlife-related crimes (IUCN/SSC Cat Specialist Group 2017:159). The Act prohibits the hunting of any animal on any land without a permit, the hunting of wildlife in protected areas, trade in trophies or animals without a permit, and the sale of animals or trophies that were hunted without a permit (Obank *et al.* 2015:458). Penalties for these crimes may include fines of up to \$500 and imprisonment up to 20 years for offenses involving specially protected animals (IUCN/SSC Cat Specialist Group 2017:159). The leopard is not listed as a specially protected animal under the Act, and illegal hunting of leopards therefore does not carry these increased penalties (Obank *et al.* 2015:464). Other legislation includes the Protection of Wildlife Indemnity Act 21/1989, the Trapping of Animals Control Act 34/1973, and the Environmental Management Act 13/2002, which give the government of Zimbabwe the authority to protect wildlife from poachers and from harmful and dangerous hunting methods (Obank *et al.* 2015:462-463).

4. Zimbabwe's legislative framework is comprehensive, though it is unclear whether the penalties create a meaningful deterrent as wildlife crime remains widespread in the country (Obank *et al.* 2015:464, 469). There is evidence that sentences for wildlife-related crimes are applied inconsistently as courts have a wide discretion when it comes to imposing penalties (Obank *et al.* 2015:469). Zimbabwe has passed regulatory measures over the last decade to address corruption, however these appear to have had little impact: there have been documented incidences of known poachers avoiding investigation and prosecution, as well as allegations of ministers and officials facilitating wildlife crime (Obank *et al.* 2015:456). Widespread corruption must be addressed in order for the regulatory framework to effectively protect the country's wildlife.

5. In a letter dated December 6, 2017, President of Zimbabwe E. D. Mnangagwa communicated to the United States Zimbabwe's political stability and commitment to conserving wildlife. Though the letter specifically discusses elephant conservation and trophy hunting programs,

President Mnangagwa makes assurances that after a smooth transition from the previous administration, all conservation initiatives being undertaken by Zimbabwe will not be reversed, but enhanced (Zimbabwe 2017).

6. According to ZPWMA, one of the most important aspects of the country's hunting program is the delegation of authority to private and communal landowners to manage and benefit from the wildlife on their land (CITES 2018a:11). Leopard hunting in Zimbabwe occurs on private land, state land, and areas managed under the Communal Areas Management Plan for Indigenous Resources (CAMPFIRE) (CITES 2018a:11; Zimbabwe 2012:17). CAMPFIRE aims to change rural communities' perceptions of wildlife resources from a threat to their livelihoods to a sustainable revenue stream (IUCN/SSC Cat Specialist Group 2017:97). Trophy hunting has become a main source of income for the CAMPFIRE program, and has shown beneficial effects for both wildlife conservation and rural community members (Loveridge *et al.* 2006:230). Rural district councils within the program area set aside an estimated 36,000 km² of land for wildlife in Zimbabwe (Loveridge *et al.* 2006:231).

7. National leopard quotas are set annually and issued to state and private landowners (CITES 2018a:7). Allocating quotas on an annual basis allows ZPWMA to use inputs from monitoring data and stakeholders in an adaptive process (CITES 2018a:7).

8. Zimbabwe has a participatory quota setting process that is based on population data, distribution patterns, trophy quality data, local and ranger monitoring, habitat quality, hunting success rates, poaching statistics, natural mortality, diseases, and other offtakes (CITES 2018a:7-8). The quota for leopards is determined with input from stakeholders including ZPWMA field and research staff, members of local communities, hunting operators, and non-governmental biologists and researchers (CITES 2018a:7). Almost all quotas are based on a 1988 survey and distribution model done by Martin and de Meulenaer that assumes that all suitable habitat is occupied, all habitat supports maximum leopard densities, and leopard numbers can be predicted by rainfall (Zimbabwe 2016:3). The model omits other threats such as human impact and habitat fragmentation (Zimbabwe 2016:3). As accurate and current population data is largely unavailable and effective trophy monitoring hasn't been established, in practice, quotas are set based primarily on opinions of stakeholders and final approval is given by ZPWMA or the Minister of Environment and Natural Resources (Zimbabwe 2012:10). Quotas and actual offtakes have been reduced in recent years as a precautionary measure (CITES 2018a:7). A new system developed at a participatory workshop in 2016 adjusts a hunting area's allocated quota based on the ages of leopards hunted, in which hunting young leopards results in a reduced quota (CITES 2018a:10). Hunting older leopards, or no leopards, results in a maintenance of the same quota, or in some cases an increase in the area's quota (CITES 2018a:10). ZPWMA is currently testing this system and monitoring compliance through the submission of photographs, hunt returns, and other data requested by ZPWMA (CITES 2018a:10).

9. There is currently no management plan for leopards in Zimbabwe (Zimbabwe 2012:16), nor does there appear to be any formal criteria for leopard trophies (CITES 2018a:9). In 2012, Zimbabwe reported that the hunting of female leopards was prohibited based on an agreement between ZPWMA and the Safari Operators Association of Zimbabwe (SOAZ), and that leopard trophies with a skull size smaller than 13.75 inches (width plus length) would not be allowed to

be exported (Zimbabwe 2012:11). However, in their 2018 review of the CITES leopard quota, Zimbabwe did not make it clear whether only males were taken as trophies; in fact, ZPWMA states that leopards taken are “usually males” (CITES 2018a:3). Leopard trophy monitoring began in the 2009 hunting season to assess catch per unit effort, hunting success, and trophy quality (Zimbabwe 2016:5). In 2013 the monitoring began to include photographs used to age hunted leopards and it was determined that between 2013 and 2015, 90% of the leopards taken were very young (between 2-3 years of age) (Zimbabwe 2016:5-8). Though Zimbabwe incentivizes hunters and hunting areas to take older males by setting quota allocations based on trophy quality, there is currently no indication of any formal mechanism requiring compliance.

10. The long term goal of ZPWMA is sustainable leopard hunting supported across a range of land uses that contributes to maintaining wildlife, biodiversity, rural livelihoods and the national economy (CITES 2018a:9). The country’s immediate objective is to achieve a well-regulated, viable and sustainable leopard hunting operation that complies with requirements of a rigorous formal non-detriment finding (CITES 2018a:9). Zimbabwe has identified five key components for a hunting program that meets their goals (CITES 2018a:9-10):

- I. Monitoring population status and trends of leopard populations
- II. Criteria for leopard trophies
- III. Evidence-based adaptive management of quotas for hunting leopards
- IV. Reviews of policy and legislation governing leopard hunting
- V. Coordination, collaboration and program management

11. Human-leopard conflict in response to perceived or actual livestock depredation is a major threat to leopard populations in Zimbabwe (IUCN/SSC Cat Specialist Group 2017:131). Many of Zimbabwe’s wildlife reserves border agro-pastoral lands, increasing the frequency of conflict incidents (Butler 2000 as cited in IUCN/SSC Cat Specialist Group 2017:131). The projected increase of the human population in sub-Saharan Africa from 1.2 billion to 2.5 billion over the next 50 years will likely lead to expansion of human land use and intensify human-wildlife conflict (Loveridge *et al.* 2017:2). Lethal problem animal control (PAC) is legal in Zimbabwe, though according to the Parks and Wildlife Act (123/1991), destruction of a leopard through PAC is only allowed if an incident threatens human life (Zimbabwe 2012:9, 11). Problem animals are reported to the nearest Rural District Council office if on communal land or to ZPWMA if on private land or near a national park (Zimbabwe 2012:11). The report must then be verified by the responsible agency to ensure that a leopard has been correctly identified as the cause of conflict (Zimbabwe 2012:11). ZPWMA considers three options when dealing with a problem animal: improving livestock husbandry to reduce losses, capturing and translocating the leopard, or hunting the problem leopard as a trophy (Zimbabwe 2012:11). In most cases, ZPWMA attempts to relocate the animal, though data on the success of reducing livestock losses within Zimbabwe is unavailable (Zimbabwe 2012:11). Elsewhere, translocation has been shown to be largely ineffective in mitigating human-leopard conflict (Athreya *et al.* 2011 and Weilenmann *et al.* 2011 as cited in Zimbabwe 2012). Hunting problem animals also raises concerns about false reporting in order to obtain additional hunting permits, and it is highly likely that some leopards are killed illegally under the name of PAC (Zimbabwe 2012:9, 11).

12. Significant demand for leopard skins drives illegal killing of leopards in southern Africa (Zimbabwe 2012:9, IUCN/SSC Cat Specialist Group 2017:131). ZPWMA stated in 2012 that

such killings appeared to be rare and few records of seizures occurred (Zimbabwe 2012:9), though there is now evidence for a rapid increase in wildlife crime including poaching in Zimbabwe (Obank *et al.* 2015). ZPWMA is lacking financial resources to effectively control protected areas within Zimbabwe, and there have been allegations that ZPWMA has been forced to allow hunting in national parks to raise funds (Obank *et al.* 2015:460).

13. Due to the cryptic nature and vast range of leopards in Zimbabwe, ZPWMA states that it is difficult to census the total leopard population, though many studies are currently being undertaken to get a better understanding of population (CITES 2018a:4). These studies involve academic researchers, non-profits, students, and Zimbabwe agencies and officials (CITES 2018a:6-7). They aim to measure the impacts of trophy hunting on behavioral ecology and population dynamics, train personnel in predator monitoring, estimate the national leopard population, and disseminate this information to the public (CITES 2018a:7). Zimbabwe is currently keeping quotas and actual offtake at conservative levels as a precautionary measure, demonstrating their commitment to sustainable hunting (CITES 2018a:7).

14. The CITES Scientific Authority of Zimbabwe has considered the country's leopard population and trend, the past and current levels of offtake, adaptive management of the leopard population and of leopard hunting, benefits derived from hunting, and other factors relevant to the sustainability of the export quota (CITES 2018a:12). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Scientific Authority of Zimbabwe concludes that the current level of offtake and the current export quota is set at a level that is not detrimental to the survival of the species in the wild (CITES 2018a:12). According to ZPWMA, the quota of 500 leopards per year is conservative and in the best interest of the conservation of the species. Zimbabwe will continue to monitor the leopard population and adaptively manage the hunting program, informing the CITES Secretariat if a significant management change occurs (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zimbabwe initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (IUCN/SSC Cat Specialist Group 2017:96). At CoP5 in 1985, Zimbabwe proposed to increase its CITES annual export quota to 350 leopard trophies and skins per year to prevent the species from being viewed as an agricultural pest (CITES 1985). The increase of the quota to 350 was adopted by the Conference of the Parties in Resolution 5.13 (IUCN/SSC Cat Specialist Group 2017:96). At CoP6 in 1987, Zimbabwe requested to increase its quota to 500; the increase of the quota was deemed sustainable, accepted, and has remained at that level ever since (CITES 1987, CITES 2018a).

Although the approved CITES export quota has been 500 leopard trophies and skins per year, the actual hunting trophy exports have been less. Between 2010 and 2017, actual annual offtake ranged from 133 leopards in 2017 to 186 leopards in 2014 (averaging about 33% of the quota across this period) (CITES 2018a:9). Zimbabwe establishes national leopard quotas annually in an adaptive process that relies on monitoring data and stakeholder input. National hunting quotas may be set higher than CITES export quotas to mitigate human-animal conflict, but hunting offtakes have been lower than both national and CITES quotas (CITES 2018a:7). Zimbabwe

issued between 578 and 882 leopard hunting permits annually between 2004 and 2012, but actual hunting offtakes during this period were between 160 and 302 (Zimbabwe 2012:7-8).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 207 trophies annually and 43 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zimbabwe:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zimbabwe, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zimbabwe in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties.

Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana,

the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Humane Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019a). The working group prepared document CoP18 Com. I. 10 on the basis of document CoP18 Doc. 46 after discussion in the second session of Committee I (CITES 2019b). At the conclusion of CoP18 (i.e., plenary), the amendments to Resolution Conf. 9.21 (Rev. CoP17) on *Interpretation and application of quotas for species included in Appendix I* contained in the in-session document CoP18 Com. I. 10 had been accepted in Committee I and were adopted. The eight draft decisions in Annex 3 to document CoP18 Doc. 46 had also been accepted in Committee I and were adopted. Decisions 17.114 to 17.117 were deleted (CITES 2019c).

20. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 27057D

Date Received by DSA: April 23, 2019

DMA Contact: Miguel Richardson

Applicant: Gene C. McQuown
Dallas, Texas

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zimbabwe)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and occurs from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zimbabwe Parks and Wildlife Management Authority (ZPWMA), leopards are present in protected areas including National Parks and Safari Areas, as well as private conservancies such as Bulyebe and Save Valley Conservancies (CITES 2018a:5). Protected areas with persisting leopard populations include Hwange, Zambezi, Matusadona, and Mana Pools

National Parks as well as Matetsi, Chirisa, Chete, Charara, Hurungwe, Chewore, Doma and Umfurundzi Safari Areas (Jacobson *et al.* 2016: Supp. Doc. 1). Though leopards reportedly occur outside of protected areas, they have much lower densities in areas that have been subject to human disturbance and may be extinct in the majority of unprotected areas (CITES 2018a:5; Jacobson *et al.* 2016: Fig. 1). Jacobson *et al.* estimate the extant range of leopards in Zimbabwe to be 160,000 km² (2016: Supp. Table 5), which is similar to ZPWMA's estimate of 145,000 km² (CITES 2018a:12).

No countrywide estimate of the leopard population in Zimbabwe has been made (CITES 2018a:4). Several projects are currently underway to establish population estimates, including a study by ZPWMA, Zimbabwe Professional Hunting Guides Association (ZPHGA), and Safari Operators Association of Zimbabwe (SOAZ). With guidance from an independent researcher, the team aims to use spoor transects, camera trap data, and offtake trends to estimate the leopard population and use this information to manage the population (CITES 2018a:6). Several population estimates from specific regions within Zimbabwe have been made using a combination of spoor surveys and camera traps: 193 leopards in Save Valley Conservancy in 2008, 54 leopards in the Northern Tuli Game Reserve in 2010, 315 leopards in Gonarezhou National Park in 2009, and 19 leopards in the Mangwe District in 2010 (Jacobson *et al.* 2016: Supp. Doc 1; IUCN/SSC Cat Specialist Group 2017:57). In 2012, landowners estimated a leopard population of 13,521 individuals on private lands (Lindsey & Chikerema-Mandisodze 2012, as cited in IUCN/SSC Cat Specialist Group 2017:58), however this estimate would mean that leopards on private lands would occur at 8.2 times the density as on Kruger National Park, South Africa, which is highly unlikely (Zimbabwe 2012:4).

In the 2016 IUCN Red List assessment, Stein *et al.* (2016:5) stated that it is generally thought that the Zimbabwe leopard population is healthy but declining outside of human dominated areas. The leopard population in Zimbabwe appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton *et al.* 2001, du Toit 2004, Fusari *et al.* 2006, Lindsay *et al.* 2014, as cited in Stein *et al.* 2016:9).

According to ZPWMA, threats to the persistence of the leopard population in Zimbabwe include habitat loss and fragmentation, decreased prey base, persecution from the growing human population, illegal wildlife trade, harvesting for ceremonial use of skins, and poorly managed hunting (CITES 2018a:4). Widespread habitat loss in combination with prey loss is estimated to have caused a 30% decline in sub-Saharan leopard populations over the last 3 generations; the projected increase in human population and their dependence on agriculture and livestock will likely contribute to the continued decline of leopards in Zimbabwe (Stein *et al.* 2016).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Gene C. McQuown; Dallas, Texas) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zimbabwe.

2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in Buby Valley Conservancy, Ripple Creek Camp, Bulawayo, Zimbabwe, during a hunt scheduled for May 8 – July 21, 2018; with Shaun Buffee Safaris, Shaun Buffee Professional Hunter. A copy of the hunting license was not submitted along with the application.

B. Zimbabwe Information:

3. Leopards in Zimbabwe are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Parks and Wildlife Act 22/2001 (Act) is the principal legislation guiding the management of wildlife in Zimbabwe, and the ZPWMA is the governmental authority responsible for the conservation of Zimbabwe's wildlife, including leopards (CITES 2018a:11, IUCN/SSC Cat Specialist Group 2017:159). According to the ZPWMA, Zimbabwe's wildlife policy seeks to maintain a network of protected areas to conserve the country's biodiversity and natural resources, including through rural economic development and encouraging the protection of wild animals and habitats outside of protected areas (CITES 2018a:11).

The Act was amended in 2011 to increase penalties for illegal hunting, sale of illegally hunted trophies or meat, and other wildlife-related crimes (IUCN/SSC Cat Specialist Group 2017:159). The Act prohibits the hunting of any animal on any land without a permit, the hunting of wildlife in protected areas, trade in trophies or animals without a permit, and the sale of animals or trophies that were hunted without a permit (Obank *et al.* 2015:458). Penalties for these crimes may include fines of up to \$500 and imprisonment up to 20 years for offenses involving specially protected animals (IUCN/SSC Cat Specialist Group 2017:159). The leopard is not listed as a specially protected animal under the Act, and illegal hunting of leopards therefore does not carry these increased penalties (Obank *et al.* 2015:464). Other legislation includes the Protection of Wildlife Indemnity Act 21/1989, the Trapping of Animals Control Act 34/1973, and the Environmental Management Act 13/2002, which give the government of Zimbabwe the authority to protect wildlife from poachers and from harmful and dangerous hunting methods (Obank *et al.* 2015:462-463).

4. Zimbabwe's legislative framework is comprehensive, though it is unclear whether the penalties create a meaningful deterrent as wildlife crime remains widespread in the country (Obank *et al.* 2015:464, 469). There is evidence that sentences for wildlife-related crimes are applied inconsistently as courts have a wide discretion when it comes to imposing penalties (Obank *et al.* 2015:469). Zimbabwe has passed regulatory measures over the last decade to address corruption, however these appear to have had little impact: there have been documented incidences of known poachers avoiding investigation and prosecution, as well as allegations of ministers and officials facilitating wildlife crime (Obank *et al.* 2015:456). Widespread corruption must be addressed in order for the regulatory framework to effectively protect the country's wildlife.

5. In a letter dated December 6, 2017, President of Zimbabwe E. D. Mnangagwa communicated to the United States Zimbabwe's political stability and commitment to conserving wildlife. Though the letter specifically discusses elephant conservation and trophy hunting programs,

President Mnangagwa makes assurances that after a smooth transition from the previous administration, all conservation initiatives being undertaken by Zimbabwe will not be reversed, but enhanced (Zimbabwe 2017).

6. According to ZPWMA, one of the most important aspects of the country's hunting program is the delegation of authority to private and communal landowners to manage and benefit from the wildlife on their land (CITES 2018a:11). Leopard hunting in Zimbabwe occurs on private land, state land, and areas managed under the Communal Areas Management Plan for Indigenous Resources (CAMPFIRE) (CITES 2018a:11; Zimbabwe 2012:17). CAMPFIRE aims to change rural communities' perceptions of wildlife resources from a threat to their livelihoods to a sustainable revenue stream (IUCN/SSC Cat Specialist Group 2017:97). Trophy hunting has become a main source of income for the CAMPFIRE program, and has shown beneficial effects for both wildlife conservation and rural community members (Loveridge *et al.* 2006:230). Rural district councils within the program area set aside an estimated 36,000 km² of land for wildlife in Zimbabwe (Loveridge *et al.* 2006:231).

7. National leopard quotas are set annually and issued to state and private landowners (CITES 2018a:7). Allocating quotas on an annual basis allows ZPWMA to use inputs from monitoring data and stakeholders in an adaptive process (CITES 2018a:7).

8. Zimbabwe has a participatory quota setting process that is based on population data, distribution patterns, trophy quality data, local and ranger monitoring, habitat quality, hunting success rates, poaching statistics, natural mortality, diseases, and other offtakes (CITES 2018a:7-8). The quota for leopards is determined with input from stakeholders including ZPWMA field and research staff, members of local communities, hunting operators, and non-governmental biologists and researchers (CITES 2018a:7). Almost all quotas are based on a 1988 survey and distribution model done by Martin and de Meulenaer that assumes that all suitable habitat is occupied, all habitat supports maximum leopard densities, and leopard numbers can be predicted by rainfall (Zimbabwe 2016:3). The model omits other threats such as human impact and habitat fragmentation (Zimbabwe 2016:3). As accurate and current population data is largely unavailable and effective trophy monitoring hasn't been established, in practice, quotas are set based primarily on opinions of stakeholders and final approval is given by ZPWMA or the Minister of Environment and Natural Resources (Zimbabwe 2012:10). Quotas and actual offtakes have been reduced in recent years as a precautionary measure (CITES 2018a:7). A new system developed at a participatory workshop in 2016 adjusts a hunting area's allocated quota based on the ages of leopards hunted, in which hunting young leopards results in a reduced quota (CITES 2018a:10). Hunting older leopards, or no leopards, results in a maintenance of the same quota, or in some cases an increase in the area's quota (CITES 2018a:10). ZPWMA is currently testing this system and monitoring compliance through the submission of photographs, hunt returns, and other data requested by ZPWMA (CITES 2018a:10).

9. There is currently no management plan for leopards in Zimbabwe (Zimbabwe 2012:16), nor does there appear to be any formal criteria for leopard trophies (CITES 2018a:9). In 2012, Zimbabwe reported that the hunting of female leopards was prohibited based on an agreement between ZPWMA and the Safari Operators Association of Zimbabwe (SOAZ), and that leopard trophies with a skull size smaller than 13.75 inches (width plus length) would not be allowed to

be exported (Zimbabwe 2012:11). However, in their 2018 review of the CITES leopard quota, Zimbabwe did not make it clear whether only males were taken as trophies; in fact, ZPWMA states that leopards taken are “usually males” (CITES 2018a:3). Leopard trophy monitoring began in the 2009 hunting season to assess catch per unit effort, hunting success, and trophy quality (Zimbabwe 2016:5). In 2013 the monitoring began to include photographs used to age hunted leopards and it was determined that between 2013 and 2015, 90% of the leopards taken were very young (between 2-3 years of age) (Zimbabwe 2016:5-8). Though Zimbabwe incentivizes hunters and hunting areas to take older males by setting quota allocations based on trophy quality, there is currently no indication of any formal mechanism requiring compliance.

10. The long term goal of ZPWMA is sustainable leopard hunting supported across a range of land uses that contributes to maintaining wildlife, biodiversity, rural livelihoods and the national economy (CITES 2018a:9). The country’s immediate objective is to achieve a well-regulated, viable and sustainable leopard hunting operation that complies with requirements of a rigorous formal non-detriment finding (CITES 2018a:9). Zimbabwe has identified five key components for a hunting program that meets their goals (CITES 2018a:9-10):

- I. Monitoring population status and trends of leopard populations
- II. Criteria for leopard trophies
- III. Evidence-based adaptive management of quotas for hunting leopards
- IV. Reviews of policy and legislation governing leopard hunting
- V. Coordination, collaboration and program management

11. Human-leopard conflict in response to perceived or actual livestock depredation is a major threat to leopard populations in Zimbabwe (IUCN/SSC Cat Specialist Group 2017:131). Many of Zimbabwe’s wildlife reserves border agro-pastoral lands, increasing the frequency of conflict incidents (Butler 2000 as cited in IUCN/SSC Cat Specialist Group 2017:131). The projected increase of the human population in sub-Saharan Africa from 1.2 billion to 2.5 billion over the next 50 years will likely lead to expansion of human land use and intensify human-wildlife conflict (Loveridge *et al.* 2017:2). Lethal problem animal control (PAC) is legal in Zimbabwe, though according to the Parks and Wildlife Act (123/1991), destruction of a leopard through PAC is only allowed if an incident threatens human life (Zimbabwe 2012:9, 11). Problem animals are reported to the nearest Rural District Council office if on communal land or to ZPWMA if on private land or near a national park (Zimbabwe 2012:11). The report must then be verified by the responsible agency to ensure that a leopard has been correctly identified as the cause of conflict (Zimbabwe 2012:11). ZPWMA considers three options when dealing with a problem animal: improving livestock husbandry to reduce losses, capturing and translocating the leopard, or hunting the problem leopard as a trophy (Zimbabwe 2012:11). In most cases, ZPWMA attempts to relocate the animal, though data on the success of reducing livestock losses within Zimbabwe is unavailable (Zimbabwe 2012:11). Elsewhere, translocation has been shown to be largely ineffective in mitigating human-leopard conflict (Athreya *et al.* 2011 and Weilenmann *et al.* 2011 as cited in Zimbabwe 2012). Hunting problem animals also raises concerns about false reporting in order to obtain additional hunting permits, and it is highly likely that some leopards are killed illegally under the name of PAC (Zimbabwe 2012:9, 11).

12. Significant demand for leopard skins drives illegal killing of leopards in southern Africa (Zimbabwe 2012:9, IUCN/SSC Cat Specialist Group 2017:131). ZPWMA stated in 2012 that

such killings appeared to be rare and few records of seizures occurred (Zimbabwe 2012:9), though there is now evidence for a rapid increase in wildlife crime including poaching in Zimbabwe (Obank *et al.* 2015). ZPWMA is lacking financial resources to effectively control protected areas within Zimbabwe, and there have been allegations that ZPWMA has been forced to allow hunting in national parks to raise funds (Obank *et al.* 2015:460).

13. Due to the cryptic nature and vast range of leopards in Zimbabwe, ZPWMA states that it is difficult to census the total leopard population, though many studies are currently being undertaken to get a better understanding of population (CITES 2018a:4). These studies involve academic researchers, non-profits, students, and Zimbabwe agencies and officials (CITES 2018a:6-7). They aim to measure the impacts of trophy hunting on behavioral ecology and population dynamics, train personnel in predator monitoring, estimate the national leopard population, and disseminate this information to the public (CITES 2018a:7). Zimbabwe is currently keeping quotas and actual offtake at conservative levels as a precautionary measure, demonstrating their commitment to sustainable hunting (CITES 2018a:7).

14. The CITES Scientific Authority of Zimbabwe has considered the country's leopard population and trend, the past and current levels of offtake, adaptive management of the leopard population and of leopard hunting, benefits derived from hunting, and other factors relevant to the sustainability of the export quota (CITES 2018a:12). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Scientific Authority of Zimbabwe concludes that the current level of offtake and the current export quota is set at a level that is not detrimental to the survival of the species in the wild (CITES 2018a:12). According to ZPWMA, the quota of 500 leopards per year is conservative and in the best interest of the conservation of the species. Zimbabwe will continue to monitor the leopard population and adaptively manage the hunting program, informing the CITES Secretariat if a significant management change occurs (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zimbabwe initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (IUCN/SSC Cat Specialist Group 2017:96). At CoP5 in 1985, Zimbabwe proposed to increase its CITES annual export quota to 350 leopard trophies and skins per year to prevent the species from being viewed as an agricultural pest (CITES 1985). The increase of the quota to 350 was adopted by the Conference of the Parties in Resolution 5.13 (IUCN/SSC Cat Specialist Group 2017:96). At CoP6 in 1987, Zimbabwe requested to increase its quota to 500; the increase of the quota was deemed sustainable, accepted, and has remained at that level ever since (CITES 1987, CITES 2018a).

Although the approved CITES export quota has been 500 leopard trophies and skins per year, the actual hunting trophy exports have been less. Between 2010 and 2017, actual annual offtake ranged from 133 leopards in 2017 to 186 leopards in 2014 (averaging about 33% of the quota across this period) (CITES 2018a:9). Zimbabwe establishes national leopard quotas annually in an adaptive process that relies on monitoring data and stakeholder input. National hunting quotas may be set higher than CITES export quotas to mitigate human-animal conflict, but hunting offtakes have been lower than both national and CITES quotas (CITES 2018a:7). Zimbabwe

issued between 578 and 882 leopard hunting permits annually between 2004 and 2012, but actual hunting offtakes during this period were between 160 and 302 (Zimbabwe 2012:7-8).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 207 trophies annually and 43 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zimbabwe:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zimbabwe, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zimbabwe in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties.

Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana,

the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Humane Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019a). The working group prepared document CoP18 Com. I. 10 on the basis of document CoP18 Doc. 46 after discussion in the second session of Committee I (CITES 2019b). At the conclusion of CoP18 (i.e., plenary), the amendments to Resolution Conf. 9.21 (Rev. CoP17) on *Interpretation and application of quotas for species included in Appendix I* contained in the in-session document CoP18 Com. I. 10 had been accepted in Committee I and were adopted. The eight draft decisions in Annex 3 to document CoP18 Doc. 46 had also been accepted in Committee I and were adopted. Decisions 17.114 to 17.117 were deleted (CITES 2019c).

20. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 43688D

Date Received by DSA: June 18, 2019

DMA Contact: Stephanie Whitley

Applicant: Douglas Benton
Reno, Nevada

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zambia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein et al. 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson et al. 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen et al. 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein et al. 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein et al. 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski et al. 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein et al. 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein et al. 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein et al. 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zambia's Department of National Parks and Wildlife (DNPW), there are two main leopard populations in Zambia which are centered in the Kafue and Luangwa Ecosystems and are comprised of several national parks (NP) and game management areas (GMA) (CITES 2018a:3). Five smaller populations occur in northwest Zambia in the Lunga NP area, Liuwa NP area in the west, Sioma-Ngwezi NP area in the southwest, and in the NPs and GMAs in the

Bangweulu area and Lake Mweru-Wantipa area in the north (CITES 2018a:3). DNPW reports that the current total leopard range in Zambia is at least 220,000 km² (CITES 2018a:3), which is similar to the extant range of 218,000 km² determined by Jacobson et al. (2016:Supp. Table 5).

No countrywide estimate of the leopard population in Zambia has been made (CITES 2018a:5). Previous research conducted in 2011, 2016 and 2017, on leopard densities in some NPs and GMAs within Zambia found densities between 1.88 leopards/100 km² and 8.2 leopards/100 km² (CITES 2018a:5). Therefore, given the extent of leopard range in the country and assuming a conservatively low overall density of between one and two leopards per 100 km², DNPW reports that the overall leopard population in Zambia is likely to be 2,000 – 4,000 individuals (CITES 2018a:5).

In the 2016 IUCN Red List assessment, Stein et al. (2016) stated that it is generally thought that the Zambia leopard population is healthy but declining outside of human dominated areas. The leopard population in Zambia appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton et al. 2001, du Toit 2004, Fusari et al. 2006, Lindsay et al. 2014, as cited in Stein et al. 2016.)

According to DNPW, threats to the persistence of the leopard population in Zambia include habitat encroachment and fragmentation, bush meat poaching/snaring, human leopard conflict and prey depletion (CITES 2018a:36). In addition, illegal harvest is a potential threat to the species in Zambia as DNPW confiscated 110 illegal leopard skins between 2013 and 2017 (CITES 2018a:12).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Douglas Benton; Reno, Nevada) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zambia.
2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in Mukungule Game Management Area (GMA), Zambia, on September 2019. The 2019 leopard hunting quota allocated for Mukungule GMA has not yet been posted.

B. Zambia Information:

3. Leopards in Zambia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Wildlife Act of 2015 (Act) is the principal legislation guiding the management of wildlife in Zambia, and the DNPW is the only government department responsible for the management of wildlife, including leopards, in Zambia (CITES 2018a:7). The Act also provides for the promotion of opportunities for the equitable and sustainable use of public wildlife estates; provides for the establishment, control and co-management of Community Partnership Parks for the conservation and restoration of

ecological structures for non-consumptive forms of recreation and environmental education; provides for the sustainable use of wildlife and the effective management of the wildlife habitat in Game Management Areas; enhances the benefits of Game Management Areas to local communities and wildlife; involves local communities in the management of Game Management Areas; and provides for the development and implementation of management plans (CITES 2018a:7).

The Act also provides for stiffer penalties related to poaching and enforcing all wildlife related violations in Zambia (CITES 2018a:7). Hunting of all wild animals without a permit in Zambia is illegal (CITES 2018a:7). Further, it is a criminal offense to hunt, kill, capture or be in possession of a leopard specimen without a license (CITES 2018a:7). The leopard is considered a protected species under the Act and therefore attracts stiffer penalties without option of a fine (CITES 2018a:7). Other legislation includes regulations (Private Wildlife Estates) and Statutory Instruments already in force such as CITES, Hunting, and Elephant Hunting (CITES 2018a:7). According to DNPW, other Statutory Instruments are in preparation for the implementation of the Wildlife Act of 2015 and are currently under review, including (CITES 2018a:1,7-8):

- formulating specific regulations which place certain conditions on the hunting of leopards (and lions) in GMAs, including but not limited to: age-based regulations, banning the hunting of females, and setting a minimum number of days to hunt; and
- formulating regulations regarding off-take quota management that will regulate how quotas are set, approved and utilized, and will be based on the precautionary principle that requires the most up-to-date information be used on setting quotas.

4. Leopard hunting in Zambia is carried out in hunting blocks located in Game Management Areas surrounding National Parks in the Luangwa, Kafue and Lower Zambezi ecosystem and in Open Game Ranches/Conservancies (CITES 2018a:16). Game Management Areas (GMA) are a category of protected areas in Zambia designed to form buffer zones between National Parks and Open Areas (CITES 2018a:16). The main land use form in GMAs has been safari and resident hunting; however, a few GMAs have included photographic tourism (CITES 2018a:16). There are 36 Game Management Areas in Zambia covering 177,404 km². Open Game Ranches are unfenced private wildlife estates outside public protected areas that are reserved by a person or local community for wildlife conservation and management (CITES 2018a:16). The private sector and the community agree to protect wildlife on these privately owned or communal lands and in exchange for protecting the wildlife, DNPW issues the Open Game Ranches annual non-resident hunting quotas (CITES 2018a:16). Zambia currently has 17 registered Open Game Ranches covering over 2,500 km², of which 8 have a quota for leopards (CITES 2018a:16-17).

5. Quotas are set annually and are issued to hunting blocks in GMAs and Open Game Ranches (CITES 2018a:18). With quotas allocated on an annual basis, DNPW can react quickly to any difficulties in specific areas, whenever necessary to adjust or even suspend quotas (CITES 2018a:52).

6. Zambia has a participatory quota setting process that is based on scientific information derived from aerial surveys, ground counts, patrol sightings, local and expert opinion, and hunting monitoring, as well as information provided by Community Resource Boards (CRBs), DNPW, lease holders/operators/professional hunters, and other organizations (CITES 2018a:18).

The quota for leopards is set using information from hunting records and field observations derived from professional hunters, operators, and field officers (CITES 2018a:18). According to DNPW, this allows CRBs and DNPW to review the previous hunting season's offtake before setting the quota for the upcoming year (CITES 2018a:18). In approving the quota, management developed the sustainable maximum harvest rates which it uses to allocate and approve the leopard quota as follows (CITES 2018a:18):

- Prime hunting blocks = 3 leopard per 1,000 km²
- Secondary hunting blocks and open game ranches = 1 leopard per 1,000 km²
- Under stocked hunting blocks = 0 leopard per 1,000 km²

DNPW states that in using these rates, the total number of leopards on quota that can possibly be issued in the entire country in any hunting season is 162 (CITES 2018a:18), which is 54 percent of the CITES approved export quota for Zambian leopard trophies and skins.

7. The Zambian government suspended leopard trophy hunting from 2013 to 2015 due to concerns and uncertainty about the conservation status of the population (Stein et al. 2016). According to DNPW, the suspension was lifted in 2016 when rural communities requested that the suspension be lifted due to the detrimental impact on their livelihoods of increased human-livestock-carnivore conflict with offsets from hunting revenues (CITES 2018a:1). In view of this, Zambia established a limited offtake that was within the CITES approved quota and that they believed was sustainable (CITES 2018a:1).

8. In reopening leopard hunting in 2016, DNPW consulted with independent leopard experts to get advice and held a workshop with stakeholders in April 2016, which resulted in the formulation of guidelines on leopard (and lion) hunting in Zambia (CITES 2018a:23). According to DNPW, the guidelines have since been re-drafted for gazetting as a Statutory Instrument and are considered as part of an adaptive process to manage leopard hunting in the country (CITES 2018a:23). In addition, DNPW states that the guidelines will be further reviewed at the end of the 2018 hunting season taking into account the experiences from the first two years of implementation since the suspension was lifted (CITES 2018a:23). The guidelines include (CITES 2018a:23):

1. Utilization must be based on scientific principles: use area size and leopard density, population status trends and prey availability;
2. Hunted leopards must be an adult; and
3. Use adaptive approaches in managing leopards. This may include varying quotas according to population status in a hunting area. Therefore, it is important to establish a monitoring mechanism that provides information on:
 - A. Indicators that show the leopard trends in an area, such as:
 - Hunting effort - time spent to find the desirable trophy;
 - Hunting success – was the hunted leopard of desired and acceptable trophy size;
 - Trophy size - Size of skull, tooth measurements, body length, shoulder height, etc.; and
 - Age – the average age of lawful trophies.
 - B. The status of habitat and prey in an area, including:
 - Satellite images of the area;
 - Encroachment levels; and

- Quantitative and qualitative indication of prey.
- C. Regular collection of data on the hunted leopard with prompt checking on the accuracy of information provided, with:
 - Skull, teeth, and hide to be examined, sampled and permanently tagged; and
 - Certificates provided for proof of sampling and rating of trophy.

The guidelines also recommend (CITES 2018a:23-24): no hunting of female leopards, no hunting of any leopard born or held in captivity, no use of pre-recorded sounds in the hunting of leopards, no leopard hunting on fenced game ranches, leopard hunting only in Prime and Secondary areas and Open Game Ranches known to be rich in leopards and prey, and establishing a central place for trophy measurements and ageing of hunted leopards for export. According to DNPW, the long-term implementation and monitoring of the effectiveness of these guidelines and indicators allow for adaptive adjustment of leopard quotas (CITES 2018a:24).

Primary?

9. As a result, Zambia's new management approach to leopard hunting is based on three pillars (CITES 2018a:24):

- I. A conservative, precautionary quota, well below the recommended thresholds for sustainability;
- II. An age-based harvest limit and strong monitoring of leopard offtakes; and
- III. Significant and direct community benefits. This will ensure that leopard hunting in Zambia is sustainable and does not negatively affect the population. In addition, in the hunting concession agreements signed in 2015, no hunting outfitter has been guaranteed a leopard on quota. It is made clear that the quota for any species shall be based on scientific methods including the latest available survey and aging techniques.

10. To monitor quotas and trophy hunting in Zambia, wildlife officers accompany hunters on all hunts during the hunting season (CITES 2018a:28). The officer records activities related to the hunt on specified forms (i.e., Safari Hunting monitoring forms, trophy measurement forms, and a client questionnaire) (CITES 2018a:28). The officer endorses used licenses ensuring that they cannot be used again (CITES 2018a:28). In addition, the law requires that all harvested trophies be registered (CITES 2018a:28).

DNPW is also introducing a monitoring system specific for leopards (and lions). This monitoring system will be based on a Statutory Instrument which is in preparation, which will introduce a mandatory sampling system that requires trophy leopards meet or exceed a minimum size (or possibly age) as one measure for harvesting trophy leopards (CITES 2018a:29). The monitoring system will be based on specific forms that will help ensure proper compliance with the provisions of the law, including confirmation of legal licenses and collection of data associated with the hunt (including but not limited to: location, date, participants, and photos) (CITES 2018a:29). The monitoring system will be complemented by regular surveys for leopards throughout the GMAs using camera trap and other indirect monitoring techniques (CITES 2018a:29).

11. Leopard-human conflicts occur on the interface between communities and leopard range, often resulting in "problem animals" being removed through lethal means (CITES 2018a:35). Fortunately, DNPW reports that the number of incidents of leopard-human conflict (HLC) is low

in Zambia and retaliatory killings by livestock owners are not as prevalent as in other areas of Africa, however with increasing human populations, this may become an issue as human settlements expand (CITES 2018a:35,38). DNPW states that they apply an adaptive system that includes a procedure whereby reported cases of leopard damage are investigated by field officers and complete reports are reviewed by the most senior officer for immediate feedback (CITES 2018a:38). Interventions include: scaring leopards through blasting or killing the animals suspected to be responsible for the attack on livestock and humans (CITES 2018a:38). DNPW admits that this approach is considered incompatible with sustainable conservation of wildlife and may contribute to the decline in the leopard population; however, they state that they are committed to implement the best practices on HLC (for example, the HLC toolkit developed by the Niassa Carnivore Project) (CITES 2018a:38). According to DNPW, this will be done through the development of a specific policy on Human Wildlife Conflict that the department, pending the availability of funding, would like to devise as soon as possible (CITES 2018a:38).

12. According to DNPW, direct poaching of leopards is not believed to be significant (CITES 2018a:38). Between 2013 and 2017, DNPW confiscated 110 illegal leopard skins (CITES 2018a:12). As a result, DNPW is establishing an investigation into current levels of illegal trade and use of leopard skins (CITES 2018a:33). DNPW states that identifying levels and source routes will be a first step in controlling this potential threat to Zambia's wild leopard population (CITES 2018a:33).

13. Given the elusive nature of leopards, the vast areas where they occur in Zambia and its wide-ranging biology, DNPW states that it is almost impossible to obtain reliable population estimates that can be used with confidence for management purposes (CITES 2018a:14). Moreover, DNPW states that the cost of undertaking long-term intensive surveys across the many habitats where leopards occur in Zambia is beyond the financial capacity of the DNPW (CITES 2018a:14). For these reasons, DNPW is adopting an adaptive management framework approach to determine reliable estimates of population trends to assess how leopard populations are changing over time and at a scale relevant to management (CITES 2018a:14). Going forward, DNPW will adopt "best practices" that use a combination of intensive monitoring (i.e. systematic camera trap surveys at 20 strategic sites across the country), extensive monitoring that captures relative abundance indices, and information captured from leopards that are harvested by the hunting industry (CITES 2018a:14). DNPW acknowledges that these relative abundance indices are generally less accurate and precise, but they can be collected rapidly at a landscape scale and within the capacity of the DNPW and its stakeholders (CITES 2018a:14). DNPW also recognizes that more reliable and robust monitoring techniques are required to better assess and measure the population trend and therefore, they state that they are committed to developing long-term rigorous monitoring programs that can be used to monitor the status of leopard populations across its range in Zambia (CITES 2018a:14).

14. The CITES Scientific Authority of Zambia has considered the country's population of leopards, the quota-setting system and current precautionary quota, the newly implemented age-based harvest policy, the limited offtake, the adaptive management of leopards, and the current threats to leopards in Zambia, including loss of habitat, human-leopard conflicts, and levels of illegal trade (CITES 2018a:51). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Zambian

Scientific Authority concludes that the low level of offtake generated by trophy hunting is not detrimental to the survival of the leopard in Zambia (CITES 2018a:51). According to DNPW, the newly developed leopard management systems, Statutory Instruments and hunting reforms employ an adaptive management approach thereby ensuring long-term sustainability, health and enjoyment of Zambia's wild leopard populations (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zambia initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (CITES 2018a:3). At CoP5 in 1985, Zambia proposed to increase its CITES export quota to 300 leopard trophies and skins per year in order to maintain and encourage sport hunting which had been a source of employment for local people (IUCN/SSC Cat Specialist Group 2017:94). The increase of the quota to 300 was adopted by the Conference of the Parties and has remained at that level ever since.

Although the approved CITES export quota has been 300 leopard trophies and skins per year, the annual leopard quotas established by Zambia and the actual hunting trophy exports have been less. Between 2005 and 2017, the DNPW issued a total of 1,177 leopards on quota of which 687 were utilized (58% of the annual quota) (CITES 2018a:23). During this period, the highest number of leopards issued on quota was 126 individuals in 2011 and the lowest was 37 individuals in 2015 (CITES 2018a:23). Before the hunting ban was implemented in 2013 – 2014, the average annual leopard quota was 120 individuals per year (CITES 2018a:23). Since the ban was lifted, the annual leopard quotas have increased from 37 individuals per year in 2015 to 105 individuals per year in 2017 (CITES 2018a:23). The annual leopard quota for 2018 was set at 102 individuals (CITES 2018a:20-21).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 66 trophies annually and 4 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zambia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zambia, as

mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

20. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

21. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Division of Scientific Authority
Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 50067D

Date Received by DSA: August 14, 2019

DMA Contact: Rogelio Hubbard

Applicant: Kevin Smythe Rugroden
Park Rapids, Minnesota

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zimbabwe)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and occurs from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zimbabwe Parks and Wildlife Management Authority (ZPWMA), leopards are present in protected areas including National Parks and Safari Areas, as well as private conservancies such as Bulye and Save Valley Conservancies (CITES 2018a:5). Protected areas with persisting leopard populations include Hwange, Zambezi, Matusadona, and Mana Pools

National Parks as well as Matetsi, Chirisa, Chete, Charara, Hurungwe, Chewore, Doma and Umfurundzi Safari Areas (Jacobson *et al.* 2016: Supp. Doc. 1). Though leopards reportedly occur outside of protected areas, they have much lower densities in areas that have been subject to human disturbance and may be extinct in the majority of unprotected areas (CITES 2018a:5; Jacobson *et al.* 2016: Fig. 1). Jacobson *et al.* estimate the extant range of leopards in Zimbabwe to be 160,000 km² (2016: Supp. Table 5), which is similar to ZPWMA's estimate of 145,000 km² (CITES 2018a:12).

No countrywide estimate of the leopard population in Zimbabwe has been made (CITES 2018a:4). Several projects are currently underway to establish population estimates, including a study by ZPWMA, Zimbabwe Professional Hunting Guides Association (ZPHGA), and Safari Operators Association of Zimbabwe (SOAZ). With guidance from an independent researcher, the team aims to use spoor transects, camera trap data, and offtake trends to estimate the leopard population and use this information to manage the population (CITES 2018a:6). Several population estimates from specific regions within Zimbabwe have been made using a combination of spoor surveys and camera traps: 193 leopards in Save Valley Conservancy in 2008, 54 leopards in the Northern Tuli Game Reserve in 2010, 315 leopards in Gonarezhou National Park in 2009, and 19 leopards in the Mangwe District in 2010 (Jacobson *et al.* 2016: Supp. Doc 1; IUCN/SSC Cat Specialist Group 2017:57). In 2012, landowners estimated a leopard population of 13,521 individuals on private lands (Lindsey & Chikerema-Mandisodze 2012, as cited in IUCN/SSC Cat Specialist Group 2017:58), however this estimate would mean that leopards on private lands would occur at 8.2 times the density as on Kruger National Park, South Africa, which is highly unlikely (Zimbabwe 2012:4).

In the 2016 IUCN Red List assessment, Stein *et al.* (2016:5) stated that it is generally thought that the Zimbabwe leopard population is healthy but declining outside of human dominated areas. The leopard population in Zimbabwe appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton *et al.* 2001, du Toit 2004, Fusari *et al.* 2006, Lindsay *et al.* 2014, as cited in Stein *et al.* 2016:9).

According to ZPWMA, threats to the persistence of the leopard population in Zimbabwe include habitat loss and fragmentation, decreased prey base, persecution from the growing human population, illegal wildlife trade, harvesting for ceremonial use of skins, and poorly managed hunting (CITES 2018a:4). Widespread habitat loss in combination with prey loss is estimated to have caused a 30% decline in sub-Saharan leopard populations over the last 3 generations; the projected increase in human population and their dependence on agriculture and livestock will likely contribute to the continued decline of leopards in Zimbabwe (Stein *et al.* 2016).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Kevin Smythe Rugroden; Park Rapids, Minnesota) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zimbabwe.

2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in Riverside Ranch, Hwange, Matabeleland North, Zimbabwe, during a hunt scheduled for July 17, 2019; with Professional Hunter Mr. Wayne Bartlett. A copy of the hunting license was not submitted along with the application.

B. Zimbabwe Information:

3. Leopards in Zimbabwe are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Parks and Wildlife Act 22/2001 (Act) is the principal legislation guiding the management of wildlife in Zimbabwe, and the ZPWMA is the governmental authority responsible for the conservation of Zimbabwe's wildlife, including leopards (CITES 2018a:11, IUCN/SSC Cat Specialist Group 2017:159). According to the ZPWMA, Zimbabwe's wildlife policy seeks to maintain a network of protected areas to conserve the country's biodiversity and natural resources, including through rural economic development and encouraging the protection of wild animals and habitats outside of protected areas (CITES 2018a:11).

The Act was amended in 2011 to increase penalties for illegal hunting, sale of illegally hunted trophies or meat, and other wildlife-related crimes (IUCN/SSC Cat Specialist Group 2017:159). The Act prohibits the hunting of any animal on any land without a permit, the hunting of wildlife in protected areas, trade in trophies or animals without a permit, and the sale of animals or trophies that were hunted without a permit (Obank *et al.* 2015:458). Penalties for these crimes may include fines of up to \$500 and imprisonment up to 20 years for offenses involving specially protected animals (IUCN/SSC Cat Specialist Group 2017:159). The leopard is not listed as a specially protected animal under the Act, and illegal hunting of leopards therefore does not carry these increased penalties (Obank *et al.* 2015:464). Other legislation includes the Protection of Wildlife Indemnity Act 21/1989, the Trapping of Animals Control Act 34/1973, and the Environmental Management Act 13/2002, which give the government of Zimbabwe the authority to protect wildlife from poachers and from harmful and dangerous hunting methods (Obank *et al.* 2015:462-463).

4. Zimbabwe's legislative framework is comprehensive, though it is unclear whether the penalties create a meaningful deterrent as wildlife crime remains widespread in the country (Obank *et al.* 2015:464, 469). There is evidence that sentences for wildlife-related crimes are applied inconsistently as courts have a wide discretion when it comes to imposing penalties (Obank *et al.* 2015:469). Zimbabwe has passed regulatory measures over the last decade to address corruption, however these appear to have had little impact: there have been documented incidences of known poachers avoiding investigation and prosecution, as well as allegations of ministers and officials facilitating wildlife crime (Obank *et al.* 2015:456). Widespread corruption must be addressed in order for the regulatory framework to effectively protect the country's wildlife.

5. In a letter dated December 6, 2017, President of Zimbabwe E. D. Mnangagwa communicated to the United States Zimbabwe's political stability and commitment to conserving wildlife. Though the letter specifically discusses elephant conservation and trophy hunting programs,

President Mnangagwa makes assurances that after a smooth transition from the previous administration, all conservation initiatives being undertaken by Zimbabwe will not be reversed, but enhanced (Zimbabwe 2017).

6. According to ZPWMA, one of the most important aspects of the country's hunting program is the delegation of authority to private and communal landowners to manage and benefit from the wildlife on their land (CITES 2018a:11). Leopard hunting in Zimbabwe occurs on private land, state land, and areas managed under the Communal Areas Management Plan for Indigenous Resources (CAMPFIRE) (CITES 2018a:11; Zimbabwe 2012:17). CAMPFIRE aims to change rural communities' perceptions of wildlife resources from a threat to their livelihoods to a sustainable revenue stream (IUCN/SSC Cat Specialist Group 2017:97). Trophy hunting has become a main source of income for the CAMPFIRE program, and has shown beneficial effects for both wildlife conservation and rural community members (Loveridge *et al.* 2006:230). Rural district councils within the program area set aside an estimated 36,000 km² of land for wildlife in Zimbabwe (Loveridge *et al.* 2006:231).

7. National leopard quotas are set annually and issued to state and private landowners (CITES 2018a:7). Allocating quotas on an annual basis allows ZPWMA to use inputs from monitoring data and stakeholders in an adaptive process (CITES 2018a:7).

8. Zimbabwe has a participatory quota setting process that is based on population data, distribution patterns, trophy quality data, local and ranger monitoring, habitat quality, hunting success rates, poaching statistics, natural mortality, diseases, and other offtakes (CITES 2018a:7-8). The quota for leopards is determined with input from stakeholders including ZPWMA field and research staff, members of local communities, hunting operators, and non-governmental biologists and researchers (CITES 2018a:7). Almost all quotas are based on a 1988 survey and distribution model done by Martin and de Meulenaer that assumes that all suitable habitat is occupied, all habitat supports maximum leopard densities, and leopard numbers can be predicted by rainfall (Zimbabwe 2016:3). The model omits other threats such as human impact and habitat fragmentation (Zimbabwe 2016:3). As accurate and current population data is largely unavailable and effective trophy monitoring hasn't been established, in practice, quotas are set based primarily on opinions of stakeholders and final approval is given by ZPWMA or the Minister of Environment and Natural Resources (Zimbabwe 2012:10). Quotas and actual offtakes have been reduced in recent years as a precautionary measure (CITES 2018a:7). A new system developed at a participatory workshop in 2016 adjusts a hunting area's allocated quota based on the ages of leopards hunted, in which hunting young leopards results in a reduced quota (CITES 2018a:10). Hunting older leopards, or no leopards, results in a maintenance of the same quota, or in some cases an increase in the area's quota (CITES 2018a:10). ZPWMA is currently testing this system and monitoring compliance through the submission of photographs, hunt returns, and other data requested by ZPWMA (CITES 2018a:10).

9. There is currently no management plan for leopards in Zimbabwe (Zimbabwe 2012:16), nor does there appear to be any formal criteria for leopard trophies (CITES 2018a:9). In 2012, Zimbabwe reported that the hunting of female leopards was prohibited based on an agreement between ZPWMA and the Safari Operators Association of Zimbabwe (SOAZ), and that leopard trophies with a skull size smaller than 13.75 inches (width plus length) would not be allowed to

be exported (Zimbabwe 2012:11). However, in their 2018 review of the CITES leopard quota, Zimbabwe did not make it clear whether only males were taken as trophies; in fact, ZPWMA states that leopards taken are “usually males” (CITES 2018a:3). Leopard trophy monitoring began in the 2009 hunting season to assess catch per unit effort, hunting success, and trophy quality (Zimbabwe 2016:5). In 2013 the monitoring began to include photographs used to age hunted leopards and it was determined that between 2013 and 2015, 90% of the leopards taken were very young (between 2-3 years of age) (Zimbabwe 2016:5-8). Though Zimbabwe incentivizes hunters and hunting areas to take older males by setting quota allocations based on trophy quality, there is currently no indication of any formal mechanism requiring compliance.

10. The long term goal of ZPWMA is sustainable leopard hunting supported across a range of land uses that contributes to maintaining wildlife, biodiversity, rural livelihoods and the national economy (CITES 2018a:9). The country’s immediate objective is to achieve a well-regulated, viable and sustainable leopard hunting operation that complies with requirements of a rigorous formal non-detriment finding (CITES 2018a:9). Zimbabwe has identified five key components for a hunting program that meets their goals (CITES 2018a:9-10):

- I. Monitoring population status and trends of leopard populations
- II. Criteria for leopard trophies
- III. Evidence-based adaptive management of quotas for hunting leopards
- IV. Reviews of policy and legislation governing leopard hunting
- V. Coordination, collaboration and program management

11. Human-leopard conflict in response to perceived or actual livestock depredation is a major threat to leopard populations in Zimbabwe (IUCN/SSC Cat Specialist Group 2017:131). Many of Zimbabwe’s wildlife reserves border agro-pastoral lands, increasing the frequency of conflict incidents (Butler 2000 as cited in IUCN/SSC Cat Specialist Group 2017:131). The projected increase of the human population in sub-Saharan Africa from 1.2 billion to 2.5 billion over the next 50 years will likely lead to expansion of human land use and intensify human-wildlife conflict (Loveridge *et al.* 2017:2). Lethal problem animal control (PAC) is legal in Zimbabwe, though according to the Parks and Wildlife Act (123/1991), destruction of a leopard through PAC is only allowed if an incident threatens human life (Zimbabwe 2012:9, 11). Problem animals are reported to the nearest Rural District Council office if on communal land or to ZPWMA if on private land or near a national park (Zimbabwe 2012:11). The report must then be verified by the responsible agency to ensure that a leopard has been correctly identified as the cause of conflict (Zimbabwe 2012:11). ZPWMA considers three options when dealing with a problem animal: improving livestock husbandry to reduce losses, capturing and translocating the leopard, or hunting the problem leopard as a trophy (Zimbabwe 2012:11). In most cases, ZPWMA attempts to relocate the animal, though data on the success of reducing livestock losses within Zimbabwe is unavailable (Zimbabwe 2012:11). Elsewhere, translocation has been shown to be largely ineffective in mitigating human-leopard conflict (Athreya *et al.* 2011 and Weilenmann *et al.* 2011 as cited in Zimbabwe 2012). Hunting problem animals also raises concerns about false reporting in order to obtain additional hunting permits, and it is highly likely that some leopards are killed illegally under the name of PAC (Zimbabwe 2012:9, 11).

12. Significant demand for leopard skins drives illegal killing of leopards in southern Africa (Zimbabwe 2012:9, IUCN/SSC Cat Specialist Group 2017:131). ZPWMA stated in 2012 that

such killings appeared to be rare and few records of seizures occurred (Zimbabwe 2012:9), though there is now evidence for a rapid increase in wildlife crime including poaching in Zimbabwe (Obank *et al.* 2015). ZPWMA is lacking financial resources to effectively control protected areas within Zimbabwe, and there have been allegations that ZPWMA has been forced to allow hunting in national parks to raise funds (Obank *et al.* 2015:460).

13. Due to the cryptic nature and vast range of leopards in Zimbabwe, ZPWMA states that it is difficult to census the total leopard population, though many studies are currently being undertaken to get a better understanding of population (CITES 2018a:4). These studies involve academic researchers, non-profits, students, and Zimbabwe agencies and officials (CITES 2018a:6-7). They aim to measure the impacts of trophy hunting on behavioral ecology and population dynamics, train personnel in predator monitoring, estimate the national leopard population, and disseminate this information to the public (CITES 2018a:7). Zimbabwe is currently keeping quotas and actual offtake at conservative levels as a precautionary measure, demonstrating their commitment to sustainable hunting (CITES 2018a:7).

14. The CITES Scientific Authority of Zimbabwe has considered the country's leopard population and trend, the past and current levels of offtake, adaptive management of the leopard population and of leopard hunting, benefits derived from hunting, and other factors relevant to the sustainability of the export quota (CITES 2018a:12). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Scientific Authority of Zimbabwe concludes that the current level of offtake and the current export quota is set at a level that is not detrimental to the survival of the species in the wild (CITES 2018a:12). According to ZPWMA, the quota of 500 leopards per year is conservative and in the best interest of the conservation of the species. Zimbabwe will continue to monitor the leopard population and adaptively manage the hunting program, informing the CITES Secretariat if a significant management change occurs (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zimbabwe initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (IUCN/SSC Cat Specialist Group 2017:96). At CoP5 in 1985, Zimbabwe proposed to increase its CITES annual export quota to 350 leopard trophies and skins per year to prevent the species from being viewed as an agricultural pest (CITES 1985). The increase of the quota to 350 was adopted by the Conference of the Parties in Resolution 5.13 (IUCN/SSC Cat Specialist Group 2017:96). At CoP6 in 1987, Zimbabwe requested to increase its quota to 500; the increase of the quota was deemed sustainable, accepted, and has remained at that level ever since (CITES 1987, CITES 2018a).

Although the approved CITES export quota has been 500 leopard trophies and skins per year, the actual hunting trophy exports have been less. Between 2010 and 2017, actual annual offtake ranged from 133 leopards in 2017 to 186 leopards in 2014 (averaging about 33% of the quota across this period) (CITES 2018a:9). Zimbabwe establishes national leopard quotas annually in an adaptive process that relies on monitoring data and stakeholder input. National hunting quotas may be set higher than CITES export quotas to mitigate human-animal conflict, but hunting offtakes have been lower than both national and CITES quotas (CITES 2018a:7). Zimbabwe

issued between 578 and 882 leopard hunting permits annually between 2004 and 2012, but actual hunting offtakes during this period were between 160 and 302 (Zimbabwe 2012:7-8).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 207 trophies annually and 43 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zimbabwe:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zimbabwe, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zimbabwe in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties.

Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana,

the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Humane Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019a). The working group prepared document CoP18 Com. I. 10 on the basis of document CoP18 Doc. 46 after discussion in the second session of Committee I (CITES 2019b). At the conclusion of CoP18 (i.e., plenary), the amendments to Resolution Conf. 9.21 (Rev. CoP17) on *Interpretation and application of quotas for species included in Appendix I* contained in the in-session document CoP18 Com. I. 10 had been accepted in Committee I and were adopted. The eight draft decisions in Annex 3 to document CoP18 Doc. 46 had also been accepted in Committee I and were adopted. Decisions 17.114 to 17.117 were deleted (CITES 2019c).

20. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 50067D

Date Received by DSA: August 14, 2019

DMA Contact: Rogelio Hubbard

Applicant: Kevin Smythe Rugroden
Park Rapids, Minnesota

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zimbabwe)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and occurs from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zimbabwe Parks and Wildlife Management Authority (ZPWMA), leopards are present in protected areas including National Parks and Safari Areas, as well as private conservancies such as Bulye and Save Valley Conservancies (CITES 2018a:5). Protected areas with persisting leopard populations include Hwange, Zambezi, Matusadona, and Mana Pools

National Parks as well as Matetsi, Chirisa, Chete, Charara, Hurungwe, Chewore, Doma and Umfurundzi Safari Areas (Jacobson *et al.* 2016: Supp. Doc. 1). Though leopards reportedly occur outside of protected areas, they have much lower densities in areas that have been subject to human disturbance and may be extinct in the majority of unprotected areas (CITES 2018a:5; Jacobson *et al.* 2016: Fig. 1). Jacobson *et al.* estimate the extant range of leopards in Zimbabwe to be 160,000 km² (2016: Supp. Table 5), which is similar to ZPWMA's estimate of 145,000 km² (CITES 2018a:12).

No countrywide estimate of the leopard population in Zimbabwe has been made (CITES 2018a:4). Several projects are currently underway to establish population estimates, including a study by ZPWMA, Zimbabwe Professional Hunting Guides Association (ZPHGA), and Safari Operators Association of Zimbabwe (SOAZ). With guidance from an independent researcher, the team aims to use spoor transects, camera trap data, and offtake trends to estimate the leopard population and use this information to manage the population (CITES 2018a:6). Several population estimates from specific regions within Zimbabwe have been made using a combination of spoor surveys and camera traps: 193 leopards in Save Valley Conservancy in 2008, 54 leopards in the Northern Tuli Game Reserve in 2010, 315 leopards in Gonarezhou National Park in 2009, and 19 leopards in the Mangwe District in 2010 (Jacobson *et al.* 2016: Supp. Doc 1; IUCN/SSC Cat Specialist Group 2017:57). In 2012, landowners estimated a leopard population of 13,521 individuals on private lands (Lindsey & Chikerema-Mandisodze 2012, as cited in IUCN/SSC Cat Specialist Group 2017:58), however this estimate would mean that leopards on private lands would occur at 8.2 times the density as on Kruger National Park, South Africa, which is highly unlikely (Zimbabwe 2012:4).

In the 2016 IUCN Red List assessment, Stein *et al.* (2016:5) stated that it is generally thought that the Zimbabwe leopard population is healthy but declining outside of human dominated areas. The leopard population in Zimbabwe appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton *et al.* 2001, du Toit 2004, Fusari *et al.* 2006, Lindsay *et al.* 2014, as cited in Stein *et al.* 2016:9).

According to ZPWMA, threats to the persistence of the leopard population in Zimbabwe include habitat loss and fragmentation, decreased prey base, persecution from the growing human population, illegal wildlife trade, harvesting for ceremonial use of skins, and poorly managed hunting (CITES 2018a:4). Widespread habitat loss in combination with prey loss is estimated to have caused a 30% decline in sub-Saharan leopard populations over the last 3 generations; the projected increase in human population and their dependence on agriculture and livestock will likely contribute to the continued decline of leopards in Zimbabwe (Stein *et al.* 2016).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Kevin Smythe Rugroden; Park Rapids, Minnesota) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zimbabwe.

2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in Riverside Ranch, Hwange, Matabeleland North, Zimbabwe, during a hunt scheduled for July 17, 2019; with Professional Hunter Mr. Wayne Bartlett. A copy of the hunting license was not submitted along with the application.

B. Zimbabwe Information:

3. Leopards in Zimbabwe are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Parks and Wildlife Act 22/2001 (Act) is the principal legislation guiding the management of wildlife in Zimbabwe, and the ZPWMA is the governmental authority responsible for the conservation of Zimbabwe's wildlife, including leopards (CITES 2018a:11, IUCN/SSC Cat Specialist Group 2017:159). According to the ZPWMA, Zimbabwe's wildlife policy seeks to maintain a network of protected areas to conserve the country's biodiversity and natural resources, including through rural economic development and encouraging the protection of wild animals and habitats outside of protected areas (CITES 2018a:11).

The Act was amended in 2011 to increase penalties for illegal hunting, sale of illegally hunted trophies or meat, and other wildlife-related crimes (IUCN/SSC Cat Specialist Group 2017:159). The Act prohibits the hunting of any animal on any land without a permit, the hunting of wildlife in protected areas, trade in trophies or animals without a permit, and the sale of animals or trophies that were hunted without a permit (Obank *et al.* 2015:458). Penalties for these crimes may include fines of up to \$500 and imprisonment up to 20 years for offenses involving specially protected animals (IUCN/SSC Cat Specialist Group 2017:159). The leopard is not listed as a specially protected animal under the Act, and illegal hunting of leopards therefore does not carry these increased penalties (Obank *et al.* 2015:464). Other legislation includes the Protection of Wildlife Indemnity Act 21/1989, the Trapping of Animals Control Act 34/1973, and the Environmental Management Act 13/2002, which give the government of Zimbabwe the authority to protect wildlife from poachers and from harmful and dangerous hunting methods (Obank *et al.* 2015:462-463).

4. Zimbabwe's legislative framework is comprehensive, though it is unclear whether the penalties create a meaningful deterrent as wildlife crime remains widespread in the country (Obank *et al.* 2015:464, 469). There is evidence that sentences for wildlife-related crimes are applied inconsistently as courts have a wide discretion when it comes to imposing penalties (Obank *et al.* 2015:469). Zimbabwe has passed regulatory measures over the last decade to address corruption, however these appear to have had little impact: there have been documented incidences of known poachers avoiding investigation and prosecution, as well as allegations of ministers and officials facilitating wildlife crime (Obank *et al.* 2015:456). Widespread corruption must be addressed in order for the regulatory framework to effectively protect the country's wildlife.

5. In a letter dated December 6, 2017, President of Zimbabwe E. D. Mnangagwa communicated to the United States Zimbabwe's political stability and commitment to conserving wildlife. Though the letter specifically discusses elephant conservation and trophy hunting programs,

President Mnangagwa makes assurances that after a smooth transition from the previous administration, all conservation initiatives being undertaken by Zimbabwe will not be reversed, but enhanced (Zimbabwe 2017).

6. According to ZPWMA, one of the most important aspects of the country's hunting program is the delegation of authority to private and communal landowners to manage and benefit from the wildlife on their land (CITES 2018a:11). Leopard hunting in Zimbabwe occurs on private land, state land, and areas managed under the Communal Areas Management Plan for Indigenous Resources (CAMPFIRE) (CITES 2018a:11; Zimbabwe 2012:17). CAMPFIRE aims to change rural communities' perceptions of wildlife resources from a threat to their livelihoods to a sustainable revenue stream (IUCN/SSC Cat Specialist Group 2017:97). Trophy hunting has become a main source of income for the CAMPFIRE program, and has shown beneficial effects for both wildlife conservation and rural community members (Loveridge *et al.* 2006:230). Rural district councils within the program area set aside an estimated 36,000 km² of land for wildlife in Zimbabwe (Loveridge *et al.* 2006:231).

7. National leopard quotas are set annually and issued to state and private landowners (CITES 2018a:7). Allocating quotas on an annual basis allows ZPWMA to use inputs from monitoring data and stakeholders in an adaptive process (CITES 2018a:7).

8. Zimbabwe has a participatory quota setting process that is based on population data, distribution patterns, trophy quality data, local and ranger monitoring, habitat quality, hunting success rates, poaching statistics, natural mortality, diseases, and other offtakes (CITES 2018a:7-8). The quota for leopards is determined with input from stakeholders including ZPWMA field and research staff, members of local communities, hunting operators, and non-governmental biologists and researchers (CITES 2018a:7). Almost all quotas are based on a 1988 survey and distribution model done by Martin and de Meulenaer that assumes that all suitable habitat is occupied, all habitat supports maximum leopard densities, and leopard numbers can be predicted by rainfall (Zimbabwe 2016:3). The model omits other threats such as human impact and habitat fragmentation (Zimbabwe 2016:3). As accurate and current population data is largely unavailable and effective trophy monitoring hasn't been established, in practice, quotas are set based primarily on opinions of stakeholders and final approval is given by ZPWMA or the Minister of Environment and Natural Resources (Zimbabwe 2012:10). Quotas and actual offtakes have been reduced in recent years as a precautionary measure (CITES 2018a:7). A new system developed at a participatory workshop in 2016 adjusts a hunting area's allocated quota based on the ages of leopards hunted, in which hunting young leopards results in a reduced quota (CITES 2018a:10). Hunting older leopards, or no leopards, results in a maintenance of the same quota, or in some cases an increase in the area's quota (CITES 2018a:10). ZPWMA is currently testing this system and monitoring compliance through the submission of photographs, hunt returns, and other data requested by ZPWMA (CITES 2018a:10).

9. There is currently no management plan for leopards in Zimbabwe (Zimbabwe 2012:16), nor does there appear to be any formal criteria for leopard trophies (CITES 2018a:9). In 2012, Zimbabwe reported that the hunting of female leopards was prohibited based on an agreement between ZPWMA and the Safari Operators Association of Zimbabwe (SOAZ), and that leopard trophies with a skull size smaller than 13.75 inches (width plus length) would not be allowed to

be exported (Zimbabwe 2012:11). However, in their 2018 review of the CITES leopard quota, Zimbabwe did not make it clear whether only males were taken as trophies; in fact, ZPWMA states that leopards taken are “usually males” (CITES 2018a:3). Leopard trophy monitoring began in the 2009 hunting season to assess catch per unit effort, hunting success, and trophy quality (Zimbabwe 2016:5). In 2013 the monitoring began to include photographs used to age hunted leopards and it was determined that between 2013 and 2015, 90% of the leopards taken were very young (between 2-3 years of age) (Zimbabwe 2016:5-8). Though Zimbabwe incentivizes hunters and hunting areas to take older males by setting quota allocations based on trophy quality, there is currently no indication of any formal mechanism requiring compliance.

10. The long term goal of ZPWMA is sustainable leopard hunting supported across a range of land uses that contributes to maintaining wildlife, biodiversity, rural livelihoods and the national economy (CITES 2018a:9). The country’s immediate objective is to achieve a well-regulated, viable and sustainable leopard hunting operation that complies with requirements of a rigorous formal non-detriment finding (CITES 2018a:9). Zimbabwe has identified five key components for a hunting program that meets their goals (CITES 2018a:9-10):

- I. Monitoring population status and trends of leopard populations
- II. Criteria for leopard trophies
- III. Evidence-based adaptive management of quotas for hunting leopards
- IV. Reviews of policy and legislation governing leopard hunting
- V. Coordination, collaboration and program management

11. Human-leopard conflict in response to perceived or actual livestock depredation is a major threat to leopard populations in Zimbabwe (IUCN/SSC Cat Specialist Group 2017:131). Many of Zimbabwe’s wildlife reserves border agro-pastoral lands, increasing the frequency of conflict incidents (Butler 2000 as cited in IUCN/SSC Cat Specialist Group 2017:131). The projected increase of the human population in sub-Saharan Africa from 1.2 billion to 2.5 billion over the next 50 years will likely lead to expansion of human land use and intensify human-wildlife conflict (Loveridge *et al.* 2017:2). Lethal problem animal control (PAC) is legal in Zimbabwe, though according to the Parks and Wildlife Act (123/1991), destruction of a leopard through PAC is only allowed if an incident threatens human life (Zimbabwe 2012:9, 11). Problem animals are reported to the nearest Rural District Council office if on communal land or to ZPWMA if on private land or near a national park (Zimbabwe 2012:11). The report must then be verified by the responsible agency to ensure that a leopard has been correctly identified as the cause of conflict (Zimbabwe 2012:11). ZPWMA considers three options when dealing with a problem animal: improving livestock husbandry to reduce losses, capturing and translocating the leopard, or hunting the problem leopard as a trophy (Zimbabwe 2012:11). In most cases, ZPWMA attempts to relocate the animal, though data on the success of reducing livestock losses within Zimbabwe is unavailable (Zimbabwe 2012:11). Elsewhere, translocation has been shown to be largely ineffective in mitigating human-leopard conflict (Athreya *et al.* 2011 and Weilenmann *et al.* 2011 as cited in Zimbabwe 2012). Hunting problem animals also raises concerns about false reporting in order to obtain additional hunting permits, and it is highly likely that some leopards are killed illegally under the name of PAC (Zimbabwe 2012:9, 11).

12. Significant demand for leopard skins drives illegal killing of leopards in southern Africa (Zimbabwe 2012:9, IUCN/SSC Cat Specialist Group 2017:131). ZPWMA stated in 2012 that

such killings appeared to be rare and few records of seizures occurred (Zimbabwe 2012:9), though there is now evidence for a rapid increase in wildlife crime including poaching in Zimbabwe (Obank *et al.* 2015). ZPWMA is lacking financial resources to effectively control protected areas within Zimbabwe, and there have been allegations that ZPWMA has been forced to allow hunting in national parks to raise funds (Obank *et al.* 2015:460).

13. Due to the cryptic nature and vast range of leopards in Zimbabwe, ZPWMA states that it is difficult to census the total leopard population, though many studies are currently being undertaken to get a better understanding of population (CITES 2018a:4). These studies involve academic researchers, non-profits, students, and Zimbabwe agencies and officials (CITES 2018a:6-7). They aim to measure the impacts of trophy hunting on behavioral ecology and population dynamics, train personnel in predator monitoring, estimate the national leopard population, and disseminate this information to the public (CITES 2018a:7). Zimbabwe is currently keeping quotas and actual offtake at conservative levels as a precautionary measure, demonstrating their commitment to sustainable hunting (CITES 2018a:7).

14. The CITES Scientific Authority of Zimbabwe has considered the country's leopard population and trend, the past and current levels of offtake, adaptive management of the leopard population and of leopard hunting, benefits derived from hunting, and other factors relevant to the sustainability of the export quota (CITES 2018a:12). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Scientific Authority of Zimbabwe concludes that the current level of offtake and the current export quota is set at a level that is not detrimental to the survival of the species in the wild (CITES 2018a:12). According to ZPWMA, the quota of 500 leopards per year is conservative and in the best interest of the conservation of the species. Zimbabwe will continue to monitor the leopard population and adaptively manage the hunting program, informing the CITES Secretariat if a significant management change occurs (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zimbabwe initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (IUCN/SSC Cat Specialist Group 2017:96). At CoP5 in 1985, Zimbabwe proposed to increase its CITES annual export quota to 350 leopard trophies and skins per year to prevent the species from being viewed as an agricultural pest (CITES 1985). The increase of the quota to 350 was adopted by the Conference of the Parties in Resolution 5.13 (IUCN/SSC Cat Specialist Group 2017:96). At CoP6 in 1987, Zimbabwe requested to increase its quota to 500; the increase of the quota was deemed sustainable, accepted, and has remained at that level ever since (CITES 1987, CITES 2018a).

Although the approved CITES export quota has been 500 leopard trophies and skins per year, the actual hunting trophy exports have been less. Between 2010 and 2017, actual annual offtake ranged from 133 leopards in 2017 to 186 leopards in 2014 (averaging about 33% of the quota across this period) (CITES 2018a:9). Zimbabwe establishes national leopard quotas annually in an adaptive process that relies on monitoring data and stakeholder input. National hunting quotas may be set higher than CITES export quotas to mitigate human-animal conflict, but hunting offtakes have been lower than both national and CITES quotas (CITES 2018a:7). Zimbabwe

issued between 578 and 882 leopard hunting permits annually between 2004 and 2012, but actual hunting offtakes during this period were between 160 and 302 (Zimbabwe 2012:7-8).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 207 trophies annually and 43 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zimbabwe:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zimbabwe, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zimbabwe in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties.

Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana,

the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Humane Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019a). The working group prepared document CoP18 Com. I. 10 on the basis of document CoP18 Doc. 46 after discussion in the second session of Committee I (CITES 2019b). At the conclusion of CoP18 (i.e., plenary), the amendments to Resolution Conf. 9.21 (Rev. CoP17) on *Interpretation and application of quotas for species included in Appendix I* contained in the in-session document CoP18 Com. I. 10 had been accepted in Committee I and were adopted. The eight draft decisions in Annex 3 to document CoP18 Doc. 46 had also been accepted in Committee I and were adopted. Decisions 17.114 to 17.117 were deleted (CITES 2019c).

20. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 52896D

Date Received by DSA: August 29, 2019

DMA Contact: Robert Williams

Applicant: Robert Burl Andersen
Horace, North Dakota

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zimbabwe)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and occurs from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Braczkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zimbabwe Parks and Wildlife Management Authority (ZPWMA), leopards are present in protected areas including National Parks and Safari Areas, as well as private conservancies such as Bulyebe and Save Valley Conservancies (CITES 2018a:5). Protected areas with persisting leopard populations include Hwange, Zambezi, Matusadona, and Mana Pools

National Parks as well as Matetsi, Chirisa, Chete, Charara, Hurungwe, Chewore, Doma and Umfurundzi Safari Areas (Jacobson *et al.* 2016: Supp. Doc. 1). Though leopards reportedly occur outside of protected areas, they have much lower densities in areas that have been subject to human disturbance and may be extinct in the majority of unprotected areas (CITES 2018a:5; Jacobson *et al.* 2016: Fig. 1). Jacobson *et al.* estimate the extant range of leopards in Zimbabwe to be 160,000 km² (2016: Supp. Table 5), which is similar to ZPWMA's estimate of 145,000 km² (CITES 2018a:12).

No countrywide estimate of the leopard population in Zimbabwe has been made (CITES 2018a:4). Several projects are currently underway to establish population estimates, including a study by ZPWMA, Zimbabwe Professional Hunting Guides Association (ZPHGA), and Safari Operators Association of Zimbabwe (SOAZ). With guidance from an independent researcher, the team aims to use spoor transects, camera trap data, and offtake trends to estimate the leopard population and use this information to manage the population (CITES 2018a:6). Several population estimates from specific regions within Zimbabwe have been made using a combination of spoor surveys and camera traps: 193 leopards in Save Valley Conservancy in 2008, 54 leopards in the Northern Tuli Game Reserve in 2010, 315 leopards in Gonarezhou National Park in 2009, and 19 leopards in the Mangwe District in 2010 (Jacobson *et al.* 2016: Supp. Doc 1; IUCN/SSC Cat Specialist Group 2017:57). In 2012, landowners estimated a leopard population of 13,521 individuals on private lands (Lindsey & Chikerema-Mandisodze 2012, as cited in IUCN/SSC Cat Specialist Group 2017:58), however this estimate would mean that leopards on private lands would occur at 8.2 times the density as on Kruger National Park, South Africa, which is highly unlikely (Zimbabwe 2012:4).

In the 2016 IUCN Red List assessment, Stein *et al.* (2016:5) stated that it is generally thought that the Zimbabwe leopard population is healthy but declining outside of human dominated areas. The leopard population in Zimbabwe appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton *et al.* 2001, du Toit 2004, Fusari *et al.* 2006, Lindsay *et al.* 2014, as cited in Stein *et al.* 2016:9).

According to ZPWMA, threats to the persistence of the leopard population in Zimbabwe include habitat loss and fragmentation, decreased prey base, persecution from the growing human population, illegal wildlife trade, harvesting for ceremonial use of skins, and poorly managed hunting (CITES 2018a:4). Widespread habitat loss in combination with prey loss is estimated to have caused a 30% decline in sub-Saharan leopard populations over the last 3 generations; the projected increase in human population and their dependence on agriculture and livestock will likely contribute to the continued decline of leopards in Zimbabwe (Stein *et al.* 2016).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Robert Burl Andersen; Horace, North Dakota) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zimbabwe.

2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in Bubi Valley Conservancy, Bubi District, Matebeleland South Province, Zimbabwe, during a hunt scheduled for July 19–24, 2019 (taken on July 24, 2019); with Lemco Mazunga Safaris and Professional Hunter J. Collett (#527). A copy of the Zimbabwe Parks and Wildlife Management Authority Hunting Permit # 950-002109 was submitted along with the application.

B. Zimbabwe Information:

3. Leopards in Zimbabwe are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Parks and Wildlife Act 22/2001 (Act) is the principal legislation guiding the management of wildlife in Zimbabwe, and the ZPWMA is the governmental authority responsible for the conservation of Zimbabwe's wildlife, including leopards (CITES 2018a:11, IUCN/SSC Cat Specialist Group 2017:159). According to the ZPWMA, Zimbabwe's wildlife policy seeks to maintain a network of protected areas to conserve the country's biodiversity and natural resources, including through rural economic development and encouraging the protection of wild animals and habitats outside of protected areas (CITES 2018a:11).

The Act was amended in 2011 to increase penalties for illegal hunting, sale of illegally hunted trophies or meat, and other wildlife-related crimes (IUCN/SSC Cat Specialist Group 2017:159). The Act prohibits the hunting of any animal on any land without a permit, the hunting of wildlife in protected areas, trade in trophies or animals without a permit, and the sale of animals or trophies that were hunted without a permit (Obank *et al.* 2015:458). Penalties for these crimes may include fines of up to \$500 and imprisonment up to 20 years for offenses involving specially protected animals (IUCN/SSC Cat Specialist Group 2017:159). The leopard is not listed as a specially protected animal under the Act, and illegal hunting of leopards therefore does not carry these increased penalties (Obank *et al.* 2015:464). Other legislation includes the Protection of Wildlife Indemnity Act 21/1989, the Trapping of Animals Control Act 34/1973, and the Environmental Management Act 13/2002, which give the government of Zimbabwe the authority to protect wildlife from poachers and from harmful and dangerous hunting methods (Obank *et al.* 2015:462-463).

4. Zimbabwe's legislative framework is comprehensive, though it is unclear whether the penalties create a meaningful deterrent as wildlife crime remains widespread in the country (Obank *et al.* 2015:464, 469). There is evidence that sentences for wildlife-related crimes are applied inconsistently as courts have a wide discretion when it comes to imposing penalties (Obank *et al.* 2015:469). Zimbabwe has passed regulatory measures over the last decade to address corruption, however these appear to have had little impact: there have been documented incidences of known poachers avoiding investigation and prosecution, as well as allegations of ministers and officials facilitating wildlife crime (Obank *et al.* 2015:456). Widespread corruption must be addressed in order for the regulatory framework to effectively protect the country's wildlife.

5. In a letter dated December 6, 2017, President of Zimbabwe E. D. Mnangagwa communicated to the United States Zimbabwe's political stability and commitment to conserving wildlife.

Though the letter specifically discusses elephant conservation and trophy hunting programs, President Mnangagwa makes assurances that after a smooth transition from the previous administration, all conservation initiatives being undertaken by Zimbabwe will not be reversed, but enhanced (Zimbabwe 2017).

6. According to ZPWMA, one of the most important aspects of the country's hunting program is the delegation of authority to private and communal landowners to manage and benefit from the wildlife on their land (CITES 2018a:11). Leopard hunting in Zimbabwe occurs on private land, state land, and areas managed under the Communal Areas Management Plan for Indigenous Resources (CAMPFIRE) (CITES 2018a:11; Zimbabwe 2012:17). CAMPFIRE aims to change rural communities' perceptions of wildlife resources from a threat to their livelihoods to a sustainable revenue stream (IUCN/SSC Cat Specialist Group 2017:97). Trophy hunting has become a main source of income for the CAMPFIRE program, and has shown beneficial effects for both wildlife conservation and rural community members (Loveridge *et al.* 2006:230). Rural district councils within the program area set aside an estimated 36,000 km² of land for wildlife in Zimbabwe (Loveridge *et al.* 2006:231).

7. National leopard quotas are set annually and issued to state and private landowners (CITES 2018a:7). Allocating quotas on an annual basis allows ZPWMA to use inputs from monitoring data and stakeholders in an adaptive process (CITES 2018a:7).

8. Zimbabwe has a participatory quota setting process that is based on population data, distribution patterns, trophy quality data, local and ranger monitoring, habitat quality, hunting success rates, poaching statistics, natural mortality, diseases, and other offtakes (CITES 2018a:7-8). The quota for leopards is determined with input from stakeholders including ZPWMA field and research staff, members of local communities, hunting operators, and non-governmental biologists and researchers (CITES 2018a:7). Almost all quotas are based on a 1988 survey and distribution model done by Martin and de Meulenaer that assumes that all suitable habitat is occupied, all habitat supports maximum leopard densities, and leopard numbers can be predicted by rainfall (Zimbabwe 2016:3). The model omits other threats such as human impact and habitat fragmentation (Zimbabwe 2016:3). As accurate and current population data is largely unavailable and effective trophy monitoring hasn't been established, in practice, quotas are set based primarily on opinions of stakeholders and final approval is given by ZPWMA or the Minister of Environment and Natural Resources (Zimbabwe 2012:10). Quotas and actual offtakes have been reduced in recent years as a precautionary measure (CITES 2018a:7). A new system developed at a participatory workshop in 2016 adjusts a hunting area's allocated quota based on the ages of leopards hunted, in which hunting young leopards results in a reduced quota (CITES 2018a:10). Hunting older leopards, or no leopards, results in a maintenance of the same quota, or in some cases an increase in the area's quota (CITES 2018a:10). ZPWMA is currently testing this system and monitoring compliance through the submission of photographs, hunt returns, and other data requested by ZPWMA (CITES 2018a:10).

9. There is currently no management plan for leopards in Zimbabwe (Zimbabwe 2012:16), nor does there appear to be any formal criteria for leopard trophies (CITES 2018a:9). In 2012, Zimbabwe reported that the hunting of female leopards was prohibited based on an agreement between ZPWMA and the Safari Operators Association of Zimbabwe (SOAZ), and that leopard

trophies with a skull size smaller than 13.75 inches (width plus length) would not be allowed to be exported (Zimbabwe 2012:11). However, in their 2018 review of the CITES leopard quota, Zimbabwe did not make it clear whether only males were taken as trophies; in fact, ZPWMA states that leopards taken are “usually males” (CITES 2018a:3). Leopard trophy monitoring began in the 2009 hunting season to assess catch per unit effort, hunting success, and trophy quality (Zimbabwe 2016:5). In 2013 the monitoring began to include photographs used to age hunted leopards and it was determined that between 2013 and 2015, 90% of the leopards taken were very young (between 2-3 years of age) (Zimbabwe 2016:5-8). Though Zimbabwe incentivizes hunters and hunting areas to take older males by setting quota allocations based on trophy quality, there is currently no indication of any formal mechanism requiring compliance.

10. The long term goal of ZPWMA is sustainable leopard hunting supported across a range of land uses that contributes to maintaining wildlife, biodiversity, rural livelihoods and the national economy (CITES 2018a:9). The country’s immediate objective is to achieve a well-regulated, viable and sustainable leopard hunting operation that complies with requirements of a rigorous formal non-detriment finding (CITES 2018a:9). Zimbabwe has identified five key components for a hunting program that meets their goals (CITES 2018a:9-10):

- I. Monitoring population status and trends of leopard populations
- II. Criteria for leopard trophies
- III. Evidence-based adaptive management of quotas for hunting leopards
- IV. Reviews of policy and legislation governing leopard hunting
- V. Coordination, collaboration and program management

11. Human-leopard conflict in response to perceived or actual livestock depredation is a major threat to leopard populations in Zimbabwe (IUCN/SSC Cat Specialist Group 2017:131). Many of Zimbabwe’s wildlife reserves border agro-pastoral lands, increasing the frequency of conflict incidents (Butler 2000 as cited in IUCN/SSC Cat Specialist Group 2017:131). The projected increase of the human population in sub-Saharan Africa from 1.2 billion to 2.5 billion over the next 50 years will likely lead to expansion of human land use and intensify human-wildlife conflict (Loveridge *et al.* 2017:2). Lethal problem animal control (PAC) is legal in Zimbabwe, though according to the Parks and Wildlife Act (123/1991), destruction of a leopard through PAC is only allowed if an incident threatens human life (Zimbabwe 2012:9, 11). Problem animals are reported to the nearest Rural District Council office if on communal land or to ZPWMA if on private land or near a national park (Zimbabwe 2012:11). The report must then be verified by the responsible agency to ensure that a leopard has been correctly identified as the cause of conflict (Zimbabwe 2012:11). ZPWMA considers three options when dealing with a problem animal: improving livestock husbandry to reduce losses, capturing and translocating the leopard, or hunting the problem leopard as a trophy (Zimbabwe 2012:11). In most cases, ZPWMA attempts to relocate the animal, though data on the success of reducing livestock losses within Zimbabwe is unavailable (Zimbabwe 2012:11). Elsewhere, translocation has been shown to be largely ineffective in mitigating human-leopard conflict (Athreya *et al.* 2011 and Weilenmann *et al.* 2011 as cited in Zimbabwe 2012). Hunting problem animals also raises concerns about false reporting in order to obtain additional hunting permits, and it is highly likely that some leopards are killed illegally under the name of PAC (Zimbabwe 2012:9, 11).

12. Significant demand for leopard skins drives illegal killing of leopards in southern Africa

(Zimbabwe 2012:9, IUCN/SSC Cat Specialist Group 2017:131). ZPWMA stated in 2012 that such killings appeared to be rare and few records of seizures occurred (Zimbabwe 2012:9), though there is now evidence for a rapid increase in wildlife crime including poaching in Zimbabwe (Obank *et al.* 2015). ZPWMA is lacking financial resources to effectively control protected areas within Zimbabwe, and there have been allegations that ZPWMA has been forced to allow hunting in national parks to raise funds (Obank *et al.* 2015:460).

13. Due to the cryptic nature and vast range of leopards in Zimbabwe, ZPWMA states that it is difficult to census the total leopard population, though many studies are currently being undertaken to get a better understanding of population (CITES 2018a:4). These studies involve academic researchers, non-profits, students, and Zimbabwe agencies and officials (CITES 2018a:6-7). They aim to measure the impacts of trophy hunting on behavioral ecology and population dynamics, train personnel in predator monitoring, estimate the national leopard population, and disseminate this information to the public (CITES 2018a:7). Zimbabwe is currently keeping quotas and actual offtake at conservative levels as a precautionary measure, demonstrating their commitment to sustainable hunting (CITES 2018a:7).

14. The CITES Scientific Authority of Zimbabwe has considered the country's leopard population and trend, the past and current levels of offtake, adaptive management of the leopard population and of leopard hunting, benefits derived from hunting, and other factors relevant to the sustainability of the export quota (CITES 2018a:12). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Scientific Authority of Zimbabwe concludes that the current level of offtake and the current export quota is set at a level that is not detrimental to the survival of the species in the wild (CITES 2018a:12). According to ZPWMA, the quota of 500 leopards per year is conservative and in the best interest of the conservation of the species. Zimbabwe will continue to monitor the leopard population and adaptively manage the hunting program, informing the CITES Secretariat if a significant management change occurs (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zimbabwe initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (IUCN/SSC Cat Specialist Group 2017:96). At CoP5 in 1985, Zimbabwe proposed to increase its CITES annual export quota to 350 leopard trophies and skins per year to prevent the species from being viewed as an agricultural pest (CITES 1985). The increase of the quota to 350 was adopted by the Conference of the Parties in Resolution 5.13 (IUCN/SSC Cat Specialist Group 2017:96). At CoP6 in 1987, Zimbabwe requested to increase its quota to 500; the increase of the quota was deemed sustainable, accepted, and has remained at that level ever since (CITES 1987, CITES 2018a).

Although the approved CITES export quota has been 500 leopard trophies and skins per year, the actual hunting trophy exports have been less. Between 2010 and 2017, actual annual offtake ranged from 133 leopards in 2010 to 186 leopards in 2014 (averaging about 33% of the quota across this period) (CITES 2018a:9). Zimbabwe establishes national leopard quotas annually in an adaptive process that relies on monitoring data and stakeholder input. National hunting quotas may be set higher than CITES export quotas to mitigate human-animal conflict, but hunting

offtakes have been lower than both national and CITES quotas (CITES 2018a:7). Zimbabwe issued between 578 and 882 leopard hunting permits annually between 2004 and 2012, but actual hunting offtakes during this period were between 160 and 302 (Zimbabwe 2012:7-8).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 207 trophies annually and 43 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zimbabwe:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zimbabwe, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zimbabwe in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties.

Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group,

chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Humane Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019a). The working group prepared document CoP18 Com. I. 10 on the basis of document CoP18 Doc. 46 after discussion in the second session of Committee I (CITES 2019b). At the conclusion of CoP18 (i.e., plenary), the amendments to Resolution Conf. 9.21 (Rev. CoP17) on *Interpretation and application of quotas for species included in Appendix I* contained in the in-session document CoP18 Com. I. 10 had been accepted in Committee I and were adopted. The eight draft decisions in Annex 3 to document CoP18 Doc. 46 had also been accepted in Committee I and were adopted. Decisions 17.114 to 17.117 were deleted (CITES 2019c).

20. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Eleanora Babij 11/20/19

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U.S. Fish and Wildlife Service
Division of Scientific Authority
Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 52903D

Date Received by DSA: October 21, 2019

DMA Contact: Brenda Tapia

Applicant: Lyle Kresge
Falls, Pennsylvania

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zambia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein et al. 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson et al. 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen et al. 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein et al. 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is **unknown**. In southern Africa, a regional range loss of approximately 21% has been reported (Stein et al. 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski et al. 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein et al. 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein et al. 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein et al. 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zambia's Department of National Parks and Wildlife (DNPW), there are two main leopard populations in Zambia which are centered in the Kafue and Luangwa Ecosystems and are comprised of several national parks (NP) and game management areas (GMA) (CITES 2018a:3). Five smaller populations occur in northwest Zambia in the Lunga NP area, Liuwa NP area in the west, Sioma-Ngwezi NP area in the southwest, and in the NPs and GMAs in the

Bangweulu area and Lake Mweru-Wantipa area in the north (CITES 2018a:3). DNPW reports that the current total leopard range in Zambia is at least 220,000 km² (CITES 2018a:3), which is similar to the extant range of 218,000 km² determined by Jacobson et al. (2016:Supp. Table 5).

No countrywide estimate of the leopard population in Zambia has been made (CITES 2018a:5). Previous research conducted in 2011, 2016 and 2017, on leopard densities in some NPs and GMAs within Zambia found densities between 1.88 leopards/100 km² and 8.2 leopards/100 km² (CITES 2018a:5). Therefore, given the extent of leopard range in the country and assuming a conservatively low overall density of between one and two leopards per 100 km², DNPW reports that the overall leopard population in Zambia is likely to be 2,000 – 4,000 individuals (CITES 2018a:5).

In the 2016 IUCN Red List assessment, Stein et al. (2016) stated that it is generally thought that the Zambia leopard population is healthy but declining outside of human dominated areas. The leopard population in Zambia appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton et al. 2001, du Toit 2004, Fusari et al. 2006, Lindsay et al. 2014, as cited in Stein et al. 2016.)

According to DNPW, threats to the persistence of the leopard population in Zambia include habitat encroachment and fragmentation, bush meat poaching/snaring, human leopard conflict and prey depletion (CITES 2018a:36). In addition, illegal harvest is a potential threat to the species in Zambia as DNPW confiscated 110 illegal leopard skins between 2013 and 2017 (CITES 2018a:12).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Lyle Kresge; Falls, Pennsylvania) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zambia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild in the Namwala Game Management Area (GMA), Zambia, on July 7, 2019. The 2019 leopard hunting quota allocated for the Namwala GMA has not yet been posted. A copy of the applicant's non-resident hunting license (S/No. 0003017) and permit to hunt in this Game Management Area (S/No. 0006096) were included in the application.

B. Zambia Information:

3. Leopards in Zambia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Wildlife Act of 2015 (Act) is the principal legislation guiding the management of wildlife in Zambia, and the DNPW is the only government department responsible for the management of wildlife, including leopards, in

Zambia (CITES 2018a:7). The Act also provides for the promotion of opportunities for the equitable and sustainable use of public wildlife estates; provides for the establishment, control and co-management of Community Partnership Parks for the conservation and restoration of ecological structures for non-consumptive forms of recreation and environmental education; provides for the sustainable use of wildlife and the effective management of the wildlife habitat in Game Management Areas; enhances the benefits of Game Management Areas to local communities and wildlife; involves local communities in the management of Game Management Areas; and provides for the development and implementation of management plans (CITES 2018a:7).

The Act also provides for stiffer penalties related to poaching and enforcing all wildlife related violations in Zambia (CITES 2018a:7). Hunting of all wild animals without a permit in Zambia is illegal (CITES 2018a:7). Further, it is a criminal offense to hunt, kill, capture or be in possession of a leopard specimen without a license (CITES 2018a:7). The leopard is considered a protected species under the Act and therefore attracts stiffer penalties without option of a fine (CITES 2018a:7). Other legislation includes regulations (Private Wildlife Estates) and Statutory Instruments already in force such as CITES, Hunting, and Elephant Hunting (CITES 2018a:7). According to DNPW, other Statutory Instruments are in preparation for the implementation of the Wildlife Act of 2015 and are currently under review, including (CITES 2018a:1,7-8):

- formulating specific regulations which place certain conditions on the hunting of leopards (and lions) in GMAs, including but not limited to: age-based regulations, banning the hunting of females, and setting a minimum number of days to hunt; and
- formulating regulations regarding off-take quota management that will regulate how quotas are set, approved and utilized, and will be based on the precautionary principle that requires the most up-to-date information be used on setting quotas.

4. Leopard hunting in Zambia is carried out in hunting blocks located in Game Management Areas surrounding National Parks in the Luangwa, Kafue and Lower Zambezi ecosystem and in Open Game Ranches/Conservancies (CITES 2018a:16). Game Management Areas (GMA) are a category of protected areas in Zambia designed to form buffer zones between National Parks and Open Areas (CITES 2018a:16). The main land use form in GMAs has been safari and resident hunting; however, a few GMAs have included photographic tourism (CITES 2018a:16). There are 36 Game Management Areas in Zambia covering 177,404 km². Open Game Ranches are unfenced private wildlife estates outside public protected areas that are reserved by a person or local community for wildlife conservation and management (CITES 2018a:16). The private sector and the community agree to protect wildlife on these privately owned or communal lands and in exchange for protecting the wildlife, DNPW issues the Open Game Ranches annual non-resident hunting quotas (CITES 2018a:16). Zambia currently has 17 registered Open Game Ranches covering over 2,500 km², of which 8 have a quota for leopards (CITES 2018a:16-17).

5. Quotas are set annually and are issued to hunting blocks in GMAs and Open Game Ranches (CITES 2018a:18). With quotas allocated on an annual basis, DNPW can react quickly to any difficulties in specific areas, whenever necessary to adjust or even suspend quotas (CITES 2018a:52).

6. Zambia has a participatory quota setting process that is based on scientific information

derived from aerial surveys, ground counts, patrol sightings, local and expert opinion, and hunting monitoring, as well as information provided by Community Resource Boards (CRBs), DNPW, lease holders/operators/professional hunters, and other organizations (CITES 2018a:18). The quota for leopards is set using information from hunting records and field observations derived from professional hunters, operators, and field officers (CITES 2018a:18). According to DNPW, this allows CRBs and DNPW to review the previous hunting season's offtake before setting the quota for the upcoming year (CITES 2018a:18). In approving the quota, management developed the sustainable maximum harvest rates which it uses to allocate and approve the leopard quota as follows (CITES 2018a:18):

- Prime hunting blocks = 3 leopard per 1,000 km²
- Secondary hunting blocks and open game ranches = 1 leopard per 1,000 km²
- Under stocked hunting blocks = 0 leopard per 1,000 km²

DNPW states that in using these rates, the total number of leopards on quota that can possibly be issued in the entire country in any hunting season is 162 (CITES 2018a:18), which is 54 percent of the CITES approved export quota for Zambian leopard trophies and skins.

7. The Zambian government suspended leopard trophy hunting from 2013 to 2015 due to concerns and uncertainty about the conservation status of the population (Stein et al. 2016). According to DNPW, the suspension was lifted in 2016 when rural communities requested that the suspension be lifted due to the detrimental impact on their livelihoods of increased human-livestock-carnivore conflict with offsets from hunting revenues (CITES 2018a:1). In view of this, Zambia established a limited offtake that was within the CITES approved quota and that they believed was sustainable (CITES 2018a:1).

8. In reopening leopard hunting in 2016, DNPW consulted with independent leopard experts to get advice and held a workshop with stakeholders in April 2016, which resulted in the formulation of guidelines on leopard (and lion) hunting in Zambia (CITES 2018a:23). According to DNPW, the guidelines have since been re-drafted for gazetting as a Statutory Instrument and are considered as part of an adaptive process to manage leopard hunting in the country (CITES 2018a:23). In addition, DNPW states that the guidelines will be further reviewed at the end of the 2018 hunting season taking into account the experiences from the first two years of implementation since the suspension was lifted (CITES 2018a:23). The guidelines include (CITES 2018a:23):

1. Utilization must be based on scientific principles: use area size and leopard density, population status trends and prey availability;
2. Hunted leopards must be an adult; and
3. Use adaptive approaches in managing leopards. This may include varying quotas according to population status in a hunting area. Therefore, it is important to establish a monitoring mechanism that provides information on:
 - A. Indicators that show the leopard trends in an area, such as:
 - Hunting effort - time spent to find the desirable trophy;
 - Hunting success – was the hunted leopard of desired and acceptable trophy size;
 - Trophy size - Size of skull, tooth measurements, body length, shoulder height, etc.; and
 - Age – the average age of lawful trophies.

- B. The status of habitat and prey in an area, including:
 - Satellite images of the area;
 - Encroachment levels; and
 - Quantitative and qualitative indication of prey.
- C. Regular collection of data on the hunted leopard with prompt checking on the accuracy of information provided, with:
 - Skull, teeth, and hide to be examined, sampled and permanently tagged; and
 - Certificates provided for proof of sampling and rating of trophy.

The guidelines also recommend (CITES 2018a:23-24): no hunting of female leopards, no hunting of any leopard born or held in captivity, no use of pre-recorded sounds in the hunting of leopards, no leopard hunting on fenced game ranches, leopard hunting only in Prime and Secondary areas and Open Game Ranches known to be rich in leopards and prey, and establishing a central place for trophy measurements and ageing of hunted leopards for export. According to DNPW, the long-term implementation and monitoring of the effectiveness of these guidelines and indicators allow for adaptive adjustment of leopard quotas (CITES 2018a:24).

9. As a result, Zambia's new management approach to leopard hunting is based on three pillars (CITES 2018a:24):

- I. A conservative, precautionary quota, well below the recommended thresholds for sustainability;
- II. An age-based harvest limit and strong monitoring of leopard offtakes; and
- III. Significant and direct community benefits. This will ensure that leopard hunting in Zambia is sustainable and does not negatively affect the population. In addition, in the hunting concession agreements signed in 2015, no hunting outfitter has been guaranteed a leopard on quota. It is made clear that the quota for any species shall be based on scientific methods including the latest available survey and aging techniques.

10. To monitor quotas and trophy hunting in Zambia, wildlife officers accompany hunters on all hunts during the hunting season (CITES 2018a:28). The officer records activities related to the hunt on specified forms (i.e., Safari Hunting monitoring forms, trophy measurement forms, and a client questionnaire) (CITES 2018a:28). The officer endorses used licenses ensuring that they cannot be used again (CITES 2018a:28). In addition, the law requires that all harvested trophies be registered (CITES 2018a:28).

DNPW is also introducing a monitoring system specific for leopards (and lions). This monitoring system will be based on a Statutory Instrument which is in preparation, which will introduce a mandatory sampling system that requires trophy leopards meet or exceed a minimum size (or possibly age) as one measure for harvesting trophy leopards (CITES 2018a:29). The monitoring system will be based on specific forms that will help ensure proper compliance with the provisions of the law, including confirmation of legal licenses and collection of data associated with the hunt (including but not limited to: location, date, participants, and photos) (CITES 2018a:29). The monitoring system will be complemented by regular surveys for leopards throughout the GMAs using camera trap and other indirect monitoring techniques (CITES 2018a:29).

11. Leopard–human conflicts occur on the interface between communities and leopard range, often resulting in “problem animals” being removed through lethal means (CITES 2018a:35). Fortunately, DNPW reports that the number of incidents of leopard–human conflict (HLC) is low in Zambia and retaliatory killings by livestock owners are not as prevalent as in other areas of Africa, however with increasing human populations, this may become an issue as human settlements expand (CITES 2018a:35,38). DNPW states that they apply an adaptive system that includes a procedure whereby reported cases of leopard damage are investigated by field officers and complete reports are reviewed by the most senior officer for immediate feedback (CITES 2018a:38). Interventions include: scaring leopards through blasting or killing the animals suspected to be responsible for the attack on livestock and humans (CITES 2018a:38). DNPW admits that this approach is considered incompatible with sustainable conservation of wildlife and may contribute to the decline in the leopard population; however, they state that they are committed to implement the best practices on HLC (for example, the HLC toolkit developed by the Niassa Carnivore Project) (CITES 2018a:38). According to DNPW, this will be done through the development of a specific policy on Human Wildlife Conflict that the department, pending the availability of funding, would like to devise as soon as possible (CITES 2018a:38).

12. According to DNPW, direct poaching of leopards is not believed to be significant (CITES 2018a:38). Between 2013 and 2017, DNPW confiscated 110 illegal leopard skins (CITES 2018a:12). As a result, DNPW is establishing an investigation into current levels of illegal trade and use of leopard skins (CITES 2018a:33). DNPW states that identifying levels and source routes will be a first step in controlling this potential threat to Zambia’s wild leopard population (CITES 2018a:33).

13. Given the elusive nature of leopards, the vast areas where they occur in Zambia and its wide-ranging biology, DNPW states that it is almost impossible to obtain reliable population estimates that can be used with confidence for management purposes (CITES 2018a:14). Moreover, DNPW states that the cost of undertaking long-term intensive surveys across the many habitats where leopards occur in Zambia is beyond the financial capacity of the DNPW (CITES 2018a:14). For these reasons, DNPW is adopting an adaptive management framework approach to determine reliable estimates of population trends to assess how leopard populations are changing over time and at a scale relevant to management (CITES 2018a:14). Going forward, DNPW will adopt “best practices” that use a combination of intensive monitoring (i.e. systematic camera trap surveys at 20 strategic sites across the country), extensive monitoring that captures relative abundance indices, and information captured from leopards that are harvested by the hunting industry (CITES 2018a:14). DNPW acknowledges that these relative abundance indices are generally less accurate and precise, but they can be collected rapidly at a landscape scale and within the capacity of the DNPW and its stakeholders (CITES 2018a:14). DNPW also recognizes that more reliable and robust monitoring techniques are required to better assess and measure the population trend and therefore, they state that they are committed to developing long-term rigorous monitoring programs that can be used to monitor the status of leopard populations across its range in Zambia (CITES 2018a:14).

14. The CITES Scientific Authority of Zambia has considered the country’s population of leopards, the quota-setting system and current precautionary quota, the newly implemented age-based harvest policy, the limited offtake, the adaptive management of leopards, and the current

threats to leopards in Zambia, including loss of habitat, human-leopard conflicts, and levels of illegal trade (CITES 2018a:51). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Zambian Scientific Authority concludes that the low level of offtake generated by trophy hunting is not detrimental to the survival of the leopard in Zambia (CITES 2018a:51). According to DNPW, the newly developed leopard management systems, Statutory Instruments and hunting reforms employ an adaptive management approach thereby ensuring long-term sustainability, health and enjoyment of Zambia's wild leopard populations (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zambia initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (CITES 2018a:3). At CoP5 in 1985, Zambia proposed to increase its CITES export quota to 300 leopard trophies and skins per year in order to maintain and encourage sport hunting which had been a source of employment for local people (IUCN/SSC Cat Specialist Group 2017:94). The increase of the quota to 300 was adopted by the Conference of the Parties and has remained at that level ever since.

Although the approved CITES export quota has been 300 leopard trophies and skins per year, the annual leopard quotas established by Zambia and the actual hunting trophy exports have been less. Between 2005 and 2017, the DNPW issued a total of 1,177 leopards on quota of which 687 were utilized (58% of the annual quota) (CITES 2018a:23). During this period, the highest number of leopards issued on quota was 126 individuals in 2011 and the lowest was 37 individuals in 2015 (CITES 2018a:23). Before the hunting ban was implemented in 2013 – 2014, the average annual leopard quota was 120 individuals per year (CITES 2018a:23). Since the ban was lifted, the annual leopard quotas have increased from 37 individuals per year in 2015 to 105 individuals per year in 2017 (CITES 2018a:23). The annual leopard quota for 2018 was set at 102 individuals (CITES 2018a:20-21).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 66 trophies annually and 4 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals

Committee. For Zambia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zambia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

20. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

21. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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U.S. Fish and Wildlife Service
Division of Scientific Authority
Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 52954D

Date Received by DSA: September 4, 2019

DMA Contact: Rogelio Hubbard

Applicant: Earl Ray Harrison Jr.
Havre, Montana

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zimbabwe)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and occurs from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zimbabwe Parks and Wildlife Management Authority (ZPWMA), leopards are present in protected areas including National Parks and Safari Areas, as well as private conservancies such as Bulyebe and Save Valley Conservancies (CITES 2018a:5). Protected areas with persisting leopard populations include Hwange, Zambezi, Matusadona, and Mana Pools

National Parks as well as Matetsi, Chirisa, Chete, Charara, Hurungwe, Chewore, Doma and Umfurundzi Safari Areas (Jacobson *et al.* 2016: Supp. Doc. 1). Though leopards reportedly occur outside of protected areas, they have much lower densities in areas that have been subject to human disturbance and may be extinct in the majority of unprotected areas (CITES 2018a:5; Jacobson *et al.* 2016: Fig. 1). Jacobson *et al.* estimate the extant range of leopards in Zimbabwe to be 160,000 km² (2016: Supp. Table 5), which is similar to ZPWMA's estimate of 145,000 km² (CITES 2018a:12).

No countrywide estimate of the leopard population in Zimbabwe has been made (CITES 2018a:4). Several projects are currently underway to establish population estimates, including a study by ZPWMA, Zimbabwe Professional Hunting Guides Association (ZPHGA), and Safari Operators Association of Zimbabwe (SOAZ). With guidance from an independent researcher, the team aims to use spoor transects, camera trap data, and offtake trends to estimate the leopard population and use this information to manage the population (CITES 2018a:6). Several population estimates from specific regions within Zimbabwe have been made using a combination of spoor surveys and camera traps: 193 leopards in Save Valley Conservancy in 2008, 54 leopards in the Northern Tuli Game Reserve in 2010, 315 leopards in Gonarezhou National Park in 2009, and 19 leopards in the Mangwe District in 2010 (Jacobson *et al.* 2016: Supp. Doc 1; IUCN/SSC Cat Specialist Group 2017:57). In 2012, landowners estimated a leopard population of 13,521 individuals on private lands (Lindsey & Chikerema-Mandisodze 2012, as cited in IUCN/SSC Cat Specialist Group 2017:58), however this estimate would mean that leopards on private lands would occur at 8.2 times the density as on Kruger National Park, South Africa, which is highly unlikely (Zimbabwe 2012:4).

In the 2016 IUCN Red List assessment, Stein *et al.* (2016:5) stated that it is generally thought that the Zimbabwe leopard population is healthy but declining outside of human dominated areas. The leopard population in Zimbabwe appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton *et al.* 2001, du Toit 2004, Fusari *et al.* 2006, Lindsay *et al.* 2014, as cited in Stein *et al.* 2016:9).

According to ZPWMA, threats to the persistence of the leopard population in Zimbabwe include habitat loss and fragmentation, decreased prey base, persecution from the growing human population, illegal wildlife trade, harvesting for ceremonial use of skins, and poorly managed hunting (CITES 2018a:4). Widespread habitat loss in combination with prey loss is estimated to have caused a 30% decline in sub-Saharan leopard populations over the last 3 generations; the projected increase in human population and their dependence on agriculture and livestock will likely contribute to the continued decline of leopards in Zimbabwe (Stein *et al.* 2016).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Earl Ray Harrison Jr.; Havre, Montana) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zimbabwe.

2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in Save Valley Conservancy, Mokore & Umkondo Ranches, Bikita District, Zimbabwe, during a hunt scheduled for July 21, 2019; with Mokore Safaris and Professional Hunter Gary Duckworth. A copy of the Zimbabwe Parks and Wildlife Management Authority Hunting Permit # 050-001966 was submitted along with the application.

B. Zimbabwe Information:

3. Leopards in Zimbabwe are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Parks and Wildlife Act 22/2001 (Act) is the principal legislation guiding the management of wildlife in Zimbabwe, and the ZPWMA is the governmental authority responsible for the conservation of Zimbabwe's wildlife, including leopards (CITES 2018a:11, IUCN/SSC Cat Specialist Group 2017:159). According to the ZPWMA, Zimbabwe's wildlife policy seeks to maintain a network of protected areas to conserve the country's biodiversity and natural resources, including through rural economic development and encouraging the protection of wild animals and habitats outside of protected areas (CITES 2018a:11).

The Act was amended in 2011 to increase penalties for illegal hunting, sale of illegally hunted trophies or meat, and other wildlife-related crimes (IUCN/SSC Cat Specialist Group 2017:159). The Act prohibits the hunting of any animal on any land without a permit, the hunting of wildlife in protected areas, trade in trophies or animals without a permit, and the sale of animals or trophies that were hunted without a permit (Obank *et al.* 2015:458). Penalties for these crimes may include fines of up to \$500 and imprisonment up to 20 years for offenses involving specially protected animals (IUCN/SSC Cat Specialist Group 2017:159). The leopard is not listed as a specially protected animal under the Act, and illegal hunting of leopards therefore does not carry these increased penalties (Obank *et al.* 2015:464). Other legislation includes the Protection of Wildlife Indemnity Act 21/1989, the Trapping of Animals Control Act 34/1973, and the Environmental Management Act 13/2002, which give the government of Zimbabwe the authority to protect wildlife from poachers and from harmful and dangerous hunting methods (Obank *et al.* 2015:462-463).

4. Zimbabwe's legislative framework is comprehensive, though it is unclear whether the penalties create a meaningful deterrent as wildlife crime remains widespread in the country (Obank *et al.* 2015:464, 469). There is evidence that sentences for wildlife-related crimes are applied inconsistently as courts have a wide discretion when it comes to imposing penalties (Obank *et al.* 2015:469). Zimbabwe has passed regulatory measures over the last decade to address corruption, however these appear to have had little impact: there have been documented incidences of known poachers avoiding investigation and prosecution, as well as allegations of ministers and officials facilitating wildlife crime (Obank *et al.* 2015:456). Widespread corruption must be addressed in order for the regulatory framework to effectively protect the country's wildlife.

5. In a letter dated December 6, 2017, President of Zimbabwe E. D. Mnangagwa communicated to the United States Zimbabwe's political stability and commitment to conserving wildlife.

Though the letter specifically discusses elephant conservation and trophy hunting programs, President Mnangagwa makes assurances that after a smooth transition from the previous administration, all conservation initiatives being undertaken by Zimbabwe will not be reversed, but enhanced (Zimbabwe 2017).

6. According to ZPWMA, one of the most important aspects of the country's hunting program is the delegation of authority to private and communal landowners to manage and benefit from the wildlife on their land (CITES 2018a:11). Leopard hunting in Zimbabwe occurs on private land, state land, and areas managed under the Communal Areas Management Plan for Indigenous Resources (CAMPFIRE) (CITES 2018a:11; Zimbabwe 2012:17). CAMPFIRE aims to change rural communities' perceptions of wildlife resources from a threat to their livelihoods to a sustainable revenue stream (IUCN/SSC Cat Specialist Group 2017:97). Trophy hunting has become a main source of income for the CAMPFIRE program, and has shown beneficial effects for both wildlife conservation and rural community members (Loveridge *et al.* 2006:230). Rural district councils within the program area set aside an estimated 36,000 km² of land for wildlife in Zimbabwe (Loveridge *et al.* 2006:231).

7. National leopard quotas are set annually and issued to state and private landowners (CITES 2018a:7). Allocating quotas on an annual basis allows ZPWMA to use inputs from monitoring data and stakeholders in an adaptive process (CITES 2018a:7).

8. Zimbabwe has a participatory quota setting process that is based on population data, distribution patterns, trophy quality data, local and ranger monitoring, habitat quality, hunting success rates, poaching statistics, natural mortality, diseases, and other offtakes (CITES 2018a:7-8). The quota for leopards is determined with input from stakeholders including ZPWMA field and research staff, members of local communities, hunting operators, and non-governmental biologists and researchers (CITES 2018a:7). Almost all quotas are based on a 1988 survey and distribution model done by Martin and de Meulenaer that assumes that all suitable habitat is occupied, all habitat supports maximum leopard densities, and leopard numbers can be predicted by rainfall (Zimbabwe 2016:3). The model omits other threats such as human impact and habitat fragmentation (Zimbabwe 2016:3). As accurate and current population data is largely unavailable and effective trophy monitoring hasn't been established, in practice, quotas are set based primarily on opinions of stakeholders and final approval is given by ZPWMA or the Minister of Environment and Natural Resources (Zimbabwe 2012:10). Quotas and actual offtakes have been reduced in recent years as a precautionary measure (CITES 2018a:7). A new system developed at a participatory workshop in 2016 adjusts a hunting area's allocated quota based on the ages of leopards hunted, in which hunting young leopards results in a reduced quota (CITES 2018a:10). Hunting older leopards, or no leopards, results in a maintenance of the same quota, or in some cases an increase in the area's quota (CITES 2018a:10). ZPWMA is currently testing this system and monitoring compliance through the submission of photographs, hunt returns, and other data requested by ZPWMA (CITES 2018a:10).

9. There is currently no management plan for leopards in Zimbabwe (Zimbabwe 2012:16), nor does there appear to be any formal criteria for leopard trophies (CITES 2018a:9). In 2012, Zimbabwe reported that the hunting of female leopards was prohibited based on an agreement between ZPWMA and the Safari Operators Association of Zimbabwe (SOAZ), and that leopard

trophies with a skull size smaller than 13.75 inches (width plus length) would not be allowed to be exported (Zimbabwe 2012:11). However, in their 2018 review of the CITES leopard quota, Zimbabwe did not make it clear whether only males were taken as trophies; in fact, ZPWMA states that leopards taken are “usually males” (CITES 2018a:3). Leopard trophy monitoring began in the 2009 hunting season to assess catch per unit effort, hunting success, and trophy quality (Zimbabwe 2016:5). In 2013 the monitoring began to include photographs used to age hunted leopards and it was determined that between 2013 and 2015, 90% of the leopards taken were very young (between 2-3 years of age) (Zimbabwe 2016:5-8). Though Zimbabwe incentivizes hunters and hunting areas to take older males by setting quota allocations based on trophy quality, there is currently no indication of any formal mechanism requiring compliance.

10. The long term goal of ZPWMA is sustainable leopard hunting supported across a range of land uses that contributes to maintaining wildlife, biodiversity, rural livelihoods and the national economy (CITES 2018a:9). The country’s immediate objective is to achieve a well-regulated, viable and sustainable leopard hunting operation that complies with requirements of a rigorous formal non-detriment finding (CITES 2018a:9). Zimbabwe has identified five key components for a hunting program that meets their goals (CITES 2018a:9-10):

- I. Monitoring population status and trends of leopard populations
- II. Criteria for leopard trophies
- III. Evidence-based adaptive management of quotas for hunting leopards
- IV. Reviews of policy and legislation governing leopard hunting
- V. Coordination, collaboration and program management

11. Human-leopard conflict in response to perceived or actual livestock depredation is a major threat to leopard populations in Zimbabwe (IUCN/SSC Cat Specialist Group 2017:131). Many of Zimbabwe’s wildlife reserves border agro-pastoral lands, increasing the frequency of conflict incidents (Butler 2000 as cited in IUCN/SSC Cat Specialist Group 2017:131). The projected increase of the human population in sub-Saharan Africa from 1.2 billion to 2.5 billion over the next 50 years will likely lead to expansion of human land use and intensify human-wildlife conflict (Loveridge *et al.* 2017:2). Lethal problem animal control (PAC) is legal in Zimbabwe, though according to the Parks and Wildlife Act (123/1991), destruction of a leopard through PAC is only allowed if an incident threatens human life (Zimbabwe 2012:9, 11). Problem animals are reported to the nearest Rural District Council office if on communal land or to ZPWMA if on private land or near a national park (Zimbabwe 2012:11). The report must then be verified by the responsible agency to ensure that a leopard has been correctly identified as the cause of conflict (Zimbabwe 2012:11). ZPWMA considers three options when dealing with a problem animal: improving livestock husbandry to reduce losses, capturing and translocating the leopard, or hunting the problem leopard as a trophy (Zimbabwe 2012:11). In most cases, ZPWMA attempts to relocate the animal, though data on the success of reducing livestock losses within Zimbabwe is unavailable (Zimbabwe 2012:11). Elsewhere, translocation has been shown to be largely ineffective in mitigating human-leopard conflict (Athreya *et al.* 2011 and Weilenmann *et al.* 2011 as cited in Zimbabwe 2012). Hunting problem animals also raises concerns about false reporting in order to obtain additional hunting permits, and it is highly likely that some leopards are killed illegally under the name of PAC (Zimbabwe 2012:9, 11).

12. Significant demand for leopard skins drives illegal killing of leopards in southern Africa

(Zimbabwe 2012:9, IUCN/SSC Cat Specialist Group 2017:131). ZPWMA stated in 2012 that such killings appeared to be rare and few records of seizures occurred (Zimbabwe 2012:9), though there is now evidence for a rapid increase in wildlife crime including poaching in Zimbabwe (Obank *et al.* 2015). ZPWMA is lacking financial resources to effectively control protected areas within Zimbabwe, and there have been allegations that ZPWMA has been forced to allow hunting in national parks to raise funds (Obank *et al.* 2015:460).

13. Due to the cryptic nature and vast range of leopards in Zimbabwe, ZPWMA states that it is difficult to census the total leopard population, though many studies are currently being undertaken to get a better understanding of population (CITES 2018a:4). These studies involve academic researchers, non-profits, students, and Zimbabwe agencies and officials (CITES 2018a:6-7). They aim to measure the impacts of trophy hunting on behavioral ecology and population dynamics, train personnel in predator monitoring, estimate the national leopard population, and disseminate this information to the public (CITES 2018a:7). Zimbabwe is currently keeping quotas and actual offtake at conservative levels as a precautionary measure, demonstrating their commitment to sustainable hunting (CITES 2018a:7).

14. The CITES Scientific Authority of Zimbabwe has considered the country's leopard population and trend, the past and current levels of offtake, adaptive management of the leopard population and of leopard hunting, benefits derived from hunting, and other factors relevant to the sustainability of the export quota (CITES 2018a:12). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Scientific Authority of Zimbabwe concludes that the current level of offtake and the current export quota is set at a level that is not detrimental to the survival of the species in the wild (CITES 2018a:12). According to ZPWMA, the quota of 500 leopards per year is conservative and in the best interest of the conservation of the species. Zimbabwe will continue to monitor the leopard population and adaptively manage the hunting program, informing the CITES Secretariat if a significant management change occurs (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zimbabwe initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (IUCN/SSC Cat Specialist Group 2017:96). At CoP5 in 1985, Zimbabwe proposed to increase its CITES annual export quota to 350 leopard trophies and skins per year to prevent the species from being viewed as an agricultural pest (CITES 1985). The increase of the quota to 350 was adopted by the Conference of the Parties in Resolution 5.13 (IUCN/SSC Cat Specialist Group 2017:96). At CoP6 in 1987, Zimbabwe requested to increase its quota to 500; the increase of the quota was deemed sustainable, accepted, and has remained at that level ever since (CITES 1987, CITES 2018a).

Although the approved CITES export quota has been 500 leopard trophies and skins per year, the actual hunting trophy exports have been less. Between 2010 and 2017, actual annual offtake ranged from 133 leopards in 2017 to 186 leopards in 2014 (averaging about 33% of the quota across this period) (CITES 2018a:9). Zimbabwe establishes national leopard quotas annually in an adaptive process that relies on monitoring data and stakeholder input. National hunting quotas may be set higher than CITES export quotas to mitigate human-animal conflict, but hunting

offtakes have been lower than both national and CITES quotas (CITES 2018a:7). Zimbabwe issued between 578 and 882 leopard hunting permits annually between 2004 and 2012, but actual hunting offtakes during this period were between 160 and 302 (Zimbabwe 2012:7-8).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 207 trophies annually and 43 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zimbabwe:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zimbabwe, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zimbabwe in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties.

Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group,

chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Humane Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019a). The working group prepared document CoP18 Com. I. 10 on the basis of document CoP18 Doc. 46 after discussion in the second session of Committee I (CITES 2019b). At the conclusion of CoP18 (i.e., plenary), the amendments to Resolution Conf. 9.21 (Rev. CoP17) on *Interpretation and application of quotas for species included in Appendix I* contained in the in-session document CoP18 Com. I. 10 had been accepted in Committee I and were adopted. The eight draft decisions in Annex 3 to document CoP18 Doc. 46 had also been accepted in Committee I and were adopted. Decisions 17.114 to 17.117 were deleted (CITES 2019c).

20. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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U.S. Fish and Wildlife Service
Division of Scientific Authority
Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 52964D

Date Received by DSA: September 3, 2019

DMA Contact: Miguel Richardson

Applicant: Benjamin H. Ralston
Wichita Falls, Texas

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zimbabwe)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and occurs from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Braczkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zimbabwe Parks and Wildlife Management Authority (ZPWMA), leopards are present in protected areas including National Parks and Safari Areas, as well as private conservancies such as Bulyebe and Save Valley Conservancies (CITES 2018a:5). Protected areas with persisting leopard populations include Hwange, Zambezi, Matusadona, and Mana Pools

National Parks as well as Matetsi, Chirisa, Chete, Charara, Hurungwe, Chewore, Doma and Umfurundzi Safari Areas (Jacobson *et al.* 2016: Supp. Doc. 1). Though leopards reportedly occur outside of protected areas, they have much lower densities in areas that have been subject to human disturbance and may be extinct in the majority of unprotected areas (CITES 2018a:5; Jacobson *et al.* 2016: Fig. 1). Jacobson *et al.* estimate the extant range of leopards in Zimbabwe to be 160,000 km² (2016: Supp. Table 5), which is similar to ZPWMA's estimate of 145,000 km² (CITES 2018a:12).

No countrywide estimate of the leopard population in Zimbabwe has been made (CITES 2018a:4). Several projects are currently underway to establish population estimates, including a study by ZPWMA, Zimbabwe Professional Hunting Guides Association (ZPHGA), and Safari Operators Association of Zimbabwe (SOAZ). With guidance from an independent researcher, the team aims to use spoor transects, camera trap data, and offtake trends to estimate the leopard population and use this information to manage the population (CITES 2018a:6). Several population estimates from specific regions within Zimbabwe have been made using a combination of spoor surveys and camera traps: 193 leopards in Save Valley Conservancy in 2008, 54 leopards in the Northern Tuli Game Reserve in 2010, 315 leopards in Gonarezhou National Park in 2009, and 19 leopards in the Mangwe District in 2010 (Jacobson *et al.* 2016: Supp. Doc 1; IUCN/SSC Cat Specialist Group 2017:57). In 2012, landowners estimated a leopard population of 13,521 individuals on private lands (Lindsey & Chikerema-Mandisodze 2012, as cited in IUCN/SSC Cat Specialist Group 2017:58), however this estimate would mean that leopards on private lands would occur at 8.2 times the density as on Kruger National Park, South Africa, which is highly unlikely (Zimbabwe 2012:4).

In the 2016 IUCN Red List assessment, Stein *et al.* (2016:5) stated that it is generally thought that the Zimbabwe leopard population is healthy but declining outside of human dominated areas. The leopard population in Zimbabwe appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton *et al.* 2001, du Toit 2004, Fusari *et al.* 2006, Lindsay *et al.* 2014, as cited in Stein *et al.* 2016:9).

According to ZPWMA, threats to the persistence of the leopard population in Zimbabwe include habitat loss and fragmentation, decreased prey base, persecution from the growing human population, illegal wildlife trade, harvesting for ceremonial use of skins, and poorly managed hunting (CITES 2018a:4). Widespread habitat loss in combination with prey loss is estimated to have caused a 30% decline in sub-Saharan leopard populations over the last 3 generations; the projected increase in human population and their dependence on agriculture and livestock will likely contribute to the continued decline of leopards in Zimbabwe (Stein *et al.* 2016).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Benjamin H. Ralston; Wichita Falls, Texas) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zimbabwe.

2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in Matetsi 2 Hunting Camp, Zimbabwe, during a hunt scheduled for July 21, 2019; with Classic African Hunting Safaris. A copy of the Zimbabwe Parks and Wildlife Management Authority Hunting Permit # --- was not submitted along with the application.

B. Zimbabwe Information:

3. Leopards in Zimbabwe are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Parks and Wildlife Act 22/2001 (Act) is the principal legislation guiding the management of wildlife in Zimbabwe, and the ZPWMA is the governmental authority responsible for the conservation of Zimbabwe's wildlife, including leopards (CITES 2018a:11, IUCN/SSC Cat Specialist Group 2017:159). According to the ZPWMA, Zimbabwe's wildlife policy seeks to maintain a network of protected areas to conserve the country's biodiversity and natural resources, including through rural economic development and encouraging the protection of wild animals and habitats outside of protected areas (CITES 2018a:11).

The Act was amended in 2011 to increase penalties for illegal hunting, sale of illegally hunted trophies or meat, and other wildlife-related crimes (IUCN/SSC Cat Specialist Group 2017:159). The Act prohibits the hunting of any animal on any land without a permit, the hunting of wildlife in protected areas, trade in trophies or animals without a permit, and the sale of animals or trophies that were hunted without a permit (Obank *et al.* 2015:458). Penalties for these crimes may include fines of up to \$500 and imprisonment up to 20 years for offenses involving specially protected animals (IUCN/SSC Cat Specialist Group 2017:159). The leopard is not listed as a specially protected animal under the Act, and illegal hunting of leopards therefore does not carry these increased penalties (Obank *et al.* 2015:464). Other legislation includes the Protection of Wildlife Indemnity Act 21/1989, the Trapping of Animals Control Act 34/1973, and the Environmental Management Act 13/2002, which give the government of Zimbabwe the authority to protect wildlife from poachers and from harmful and dangerous hunting methods (Obank *et al.* 2015:462-463).

4. Zimbabwe's legislative framework is comprehensive, though it is unclear whether the penalties create a meaningful deterrent as wildlife crime remains widespread in the country (Obank *et al.* 2015:464, 469). There is evidence that sentences for wildlife-related crimes are applied inconsistently as courts have a wide discretion when it comes to imposing penalties (Obank *et al.* 2015:469). Zimbabwe has passed regulatory measures over the last decade to address corruption, however these appear to have had little impact: there have been documented incidences of known poachers avoiding investigation and prosecution, as well as allegations of ministers and officials facilitating wildlife crime (Obank *et al.* 2015:456). Widespread corruption must be addressed in order for the regulatory framework to effectively protect the country's wildlife.

5. In a letter dated December 6, 2017, President of Zimbabwe E. D. Mnangagwa communicated to the United States Zimbabwe's political stability and commitment to conserving wildlife. Though the letter specifically discusses elephant conservation and trophy hunting programs,

President Mnangagwa makes assurances that after a smooth transition from the previous administration, all conservation initiatives being undertaken by Zimbabwe will not be reversed, but enhanced (Zimbabwe 2017).

6. According to ZPWMA, one of the most important aspects of the country's hunting program is the delegation of authority to private and communal landowners to manage and benefit from the wildlife on their land (CITES 2018a:11). Leopard hunting in Zimbabwe occurs on private land, state land, and areas managed under the Communal Areas Management Plan for Indigenous Resources (CAMPFIRE) (CITES 2018a:11; Zimbabwe 2012:17). CAMPFIRE aims to change rural communities' perceptions of wildlife resources from a threat to their livelihoods to a sustainable revenue stream (IUCN/SSC Cat Specialist Group 2017:97). Trophy hunting has become a main source of income for the CAMPFIRE program, and has shown beneficial effects for both wildlife conservation and rural community members (Loveridge *et al.* 2006:230). Rural district councils within the program area set aside an estimated 36,000 km² of land for wildlife in Zimbabwe (Loveridge *et al.* 2006:231).

7. National leopard quotas are set annually and issued to state and private landowners (CITES 2018a:7). Allocating quotas on an annual basis allows ZPWMA to use inputs from monitoring data and stakeholders in an adaptive process (CITES 2018a:7).

8. Zimbabwe has a participatory quota setting process that is based on population data, distribution patterns, trophy quality data, local and ranger monitoring, habitat quality, hunting success rates, poaching statistics, natural mortality, diseases, and other offtakes (CITES 2018a:7-8). The quota for leopards is determined with input from stakeholders including ZPWMA field and research staff, members of local communities, hunting operators, and non-governmental biologists and researchers (CITES 2018a:7). Almost all quotas are based on a 1988 survey and distribution model done by Martin and de Meulenaer that assumes that all suitable habitat is occupied, all habitat supports maximum leopard densities, and leopard numbers can be predicted by rainfall (Zimbabwe 2016:3). The model omits other threats such as human impact and habitat fragmentation (Zimbabwe 2016:3). As accurate and current population data is largely unavailable and effective trophy monitoring hasn't been established, in practice, quotas are set based primarily on opinions of stakeholders and final approval is given by ZPWMA or the Minister of Environment and Natural Resources (Zimbabwe 2012:10). Quotas and actual offtakes have been reduced in recent years as a precautionary measure (CITES 2018a:7). A new system developed at a participatory workshop in 2016 adjusts a hunting area's allocated quota based on the ages of leopards hunted, in which hunting young leopards results in a reduced quota (CITES 2018a:10). Hunting older leopards, or no leopards, results in a maintenance of the same quota, or in some cases an increase in the area's quota (CITES 2018a:10). ZPWMA is currently testing this system and monitoring compliance through the submission of photographs, hunt returns, and other data requested by ZPWMA (CITES 2018a:10).

9. There is currently no management plan for leopards in Zimbabwe (Zimbabwe 2012:16), nor does there appear to be any formal criteria for leopard trophies (CITES 2018a:9). In 2012, Zimbabwe reported that the hunting of female leopards was prohibited based on an agreement between ZPWMA and the Safari Operators Association of Zimbabwe (SOAZ), and that leopard trophies with a skull size smaller than 13.75 inches (width plus length) would not be allowed to

be exported (Zimbabwe 2012:11). However, in their 2018 review of the CITES leopard quota, Zimbabwe did not make it clear whether only males were taken as trophies; in fact, ZPWMA states that leopards taken are “usually males” (CITES 2018a:3). Leopard trophy monitoring began in the 2009 hunting season to assess catch per unit effort, hunting success, and trophy quality (Zimbabwe 2016:5). In 2013 the monitoring began to include photographs used to age hunted leopards and it was determined that between 2013 and 2015, 90% of the leopards taken were very young (between 2-3 years of age) (Zimbabwe 2016:5-8). Though Zimbabwe incentivizes hunters and hunting areas to take older males by setting quota allocations based on trophy quality, there is currently no indication of any formal mechanism requiring compliance.

10. The long term goal of ZPWMA is sustainable leopard hunting supported across a range of land uses that contributes to maintaining wildlife, biodiversity, rural livelihoods and the national economy (CITES 2018a:9). The country’s immediate objective is to achieve a well-regulated, viable and sustainable leopard hunting operation that complies with requirements of a rigorous formal non-detriment finding (CITES 2018a:9). Zimbabwe has identified five key components for a hunting program that meets their goals (CITES 2018a:9-10):

- I. Monitoring population status and trends of leopard populations
- II. Criteria for leopard trophies
- III. Evidence-based adaptive management of quotas for hunting leopards
- IV. Reviews of policy and legislation governing leopard hunting
- V. Coordination, collaboration and program management

11. Human-leopard conflict in response to perceived or actual livestock depredation is a major threat to leopard populations in Zimbabwe (IUCN/SSC Cat Specialist Group 2017:131). Many of Zimbabwe’s wildlife reserves border agro-pastoral lands, increasing the frequency of conflict incidents (Butler 2000 as cited in IUCN/SSC Cat Specialist Group 2017:131). The projected increase of the human population in sub-Saharan Africa from 1.2 billion to 2.5 billion over the next 50 years will likely lead to expansion of human land use and intensify human-wildlife conflict (Loveridge *et al.* 2017:2). Lethal problem animal control (PAC) is legal in Zimbabwe, though according to the Parks and Wildlife Act (123/1991), destruction of a leopard through PAC is only allowed if an incident threatens human life (Zimbabwe 2012:9, 11). Problem animals are reported to the nearest Rural District Council office if on communal land or to ZPWMA if on private land or near a national park (Zimbabwe 2012:11). The report must then be verified by the responsible agency to ensure that a leopard has been correctly identified as the cause of conflict (Zimbabwe 2012:11). ZPWMA considers three options when dealing with a problem animal: improving livestock husbandry to reduce losses, capturing and translocating the leopard, or hunting the problem leopard as a trophy (Zimbabwe 2012:11). In most cases, ZPWMA attempts to relocate the animal, though data on the success of reducing livestock losses within Zimbabwe is unavailable (Zimbabwe 2012:11). Elsewhere, translocation has been shown to be largely ineffective in mitigating human-leopard conflict (Athreya *et al.* 2011 and Weilenmann *et al.* 2011 as cited in Zimbabwe 2012). Hunting problem animals also raises concerns about false reporting in order to obtain additional hunting permits, and it is highly likely that some leopards are killed illegally under the name of PAC (Zimbabwe 2012:9, 11).

12. Significant demand for leopard skins drives illegal killing of leopards in southern Africa (Zimbabwe 2012:9, IUCN/SSC Cat Specialist Group 2017:131). ZPWMA stated in 2012 that

such killings appeared to be rare and few records of seizures occurred (Zimbabwe 2012:9), though there is now evidence for a rapid increase in wildlife crime including poaching in Zimbabwe (Obank *et al.* 2015). ZPWMA is lacking financial resources to effectively control protected areas within Zimbabwe, and there have been allegations that ZPWMA has been forced to allow hunting in national parks to raise funds (Obank *et al.* 2015:460).

13. Due to the cryptic nature and vast range of leopards in Zimbabwe, ZPWMA states that it is difficult to census the total leopard population, though many studies are currently being undertaken to get a better understanding of population (CITES 2018a:4). These studies involve academic researchers, non-profits, students, and Zimbabwe agencies and officials (CITES 2018a:6-7). They aim to measure the impacts of trophy hunting on behavioral ecology and population dynamics, train personnel in predator monitoring, estimate the national leopard population, and disseminate this information to the public (CITES 2018a:7). Zimbabwe is currently keeping quotas and actual offtake at conservative levels as a precautionary measure, demonstrating their commitment to sustainable hunting (CITES 2018a:7).

14. The CITES Scientific Authority of Zimbabwe has considered the country's leopard population and trend, the past and current levels of offtake, adaptive management of the leopard population and of leopard hunting, benefits derived from hunting, and other factors relevant to the sustainability of the export quota (CITES 2018a:12). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Scientific Authority of Zimbabwe concludes that the current level of offtake and the current export quota is set at a level that is not detrimental to the survival of the species in the wild (CITES 2018a:12). According to ZPWMA, the quota of 500 leopards per year is conservative and in the best interest of the conservation of the species. Zimbabwe will continue to monitor the leopard population and adaptively manage the hunting program, informing the CITES Secretariat if a significant management change occurs (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zimbabwe initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (IUCN/SSC Cat Specialist Group 2017:96). At CoP5 in 1985, Zimbabwe proposed to increase its CITES annual export quota to 350 leopard trophies and skins per year to prevent the species from being viewed as an agricultural pest (CITES 1985). The increase of the quota to 350 was adopted by the Conference of the Parties in Resolution 5.13 (IUCN/SSC Cat Specialist Group 2017:96). At CoP6 in 1987, Zimbabwe requested to increase its quota to 500; the increase of the quota was deemed sustainable, accepted, and has remained at that level ever since (CITES 1987, CITES 2018a).

Although the approved CITES export quota has been 500 leopard trophies and skins per year, the actual hunting trophy exports have been less. Between 2010 and 2017, actual annual offtake ranged from 133 leopards in 2017 to 186 leopards in 2014 (averaging about 33% of the quota across this period) (CITES 2018a:9). Zimbabwe establishes national leopard quotas annually in an adaptive process that relies on monitoring data and stakeholder input. National hunting quotas may be set higher than CITES export quotas to mitigate human-animal conflict, but hunting offtakes have been lower than both national and CITES quotas (CITES 2018a:7). Zimbabwe

issued between 578 and 882 leopard hunting permits annually between 2004 and 2012, but actual hunting offtakes during this period were between 160 and 302 (Zimbabwe 2012:7-8).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 207 trophies annually and 43 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zimbabwe:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zimbabwe, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zimbabwe in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties.

Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana,

the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Humane Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019a). The working group prepared document CoP18 Com. I. 10 on the basis of document CoP18 Doc. 46 after discussion in the second session of Committee I (CITES 2019b). At the conclusion of CoP18 (i.e., plenary), the amendments to Resolution Conf. 9.21 (Rev. CoP17) on *Interpretation and application of quotas for species included in Appendix I* contained in the in-session document CoP18 Com. I. 10 had been accepted in Committee I and were adopted. The eight draft decisions in Annex 3 to document CoP18 Doc. 46 had also been accepted in Committee I and were adopted. Decisions 17.114 to 17.117 were deleted (CITES 2019c).

20. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 53004D

Date Received by DSA: October 21, 2019

DMA Contact: Brenda Tapia

Applicant: Peter Strobe
McDonald, Pennsylvania

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zambia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein et al. 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson et al. 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen et al. 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein et al. 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein et al. 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski et al. 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein et al. 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein et al. 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein et al. 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zambia's Department of National Parks and Wildlife (DNPW), there are two main leopard populations in Zambia which are centered in the Kafue and Luangwa Ecosystems and are comprised of several national parks (NP) and game management areas (GMA) (CITES 2018a:3). Five smaller populations occur in northwest Zambia in the Lunga NP area, Liuwa NP area in the west, Sioma-Ngwezi NP area in the southwest, and in the NPs and GMAs in the

Bangweulu area and Lake Mweru-Wantipa area in the north (CITES 2018a:3). DNPW reports that the current total leopard range in Zambia is at least 220,000 km² (CITES 2018a:3), which is similar to the extant range of 218,000 km² determined by Jacobson et al. (2016:Supp. Table 5).

No countrywide estimate of the leopard population in Zambia has been made (CITES 2018a:5). Previous research conducted in 2011, 2016 and 2017, on leopard densities in some NPs and GMAs within Zambia found densities between 1.88 leopards/100 km² and 8.2 leopards/100 km² (CITES 2018a:5). Therefore, given the extent of leopard range in the country and assuming a conservatively low overall density of between one and two leopards per 100 km², DNPW reports that the overall leopard population in Zambia is likely to be 2,000 – 4,000 individuals (CITES 2018a:5).

In the 2016 IUCN Red List assessment, Stein et al. (2016) stated that it is generally thought that the Zambia leopard population is healthy but declining outside of human dominated areas. The leopard population in Zambia appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton et al. 2001, du Toit 2004, Fusari et al. 2006, Lindsay et al. 2014, as cited in Stein et al. 2016.)

According to DNPW, threats to the persistence of the leopard population in Zambia include habitat encroachment and fragmentation, bush meat poaching/snaring, human leopard conflict and prey depletion (CITES 2018a:36). In addition, illegal harvest is a potential threat to the species in Zambia as DNPW confiscated 110 illegal leopard skins between 2013 and 2017 (CITES 2018a:12).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Peter Strobe; McDonald, Pennsylvania) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zambia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild in the Lupande Game Management Area (GMA), Upper Lupande Hunting Block, Zambia, on May 2, 2019. The 2019 leopard hunting quota allocated for the Upper Lupande Hunting Block has not yet been posted. A copy of the applicant's non-resident hunting license (S/No. 0002479, permit to hunt in this Game Management Area (S/No. 0001482), and record of game and/or protected animals killed or wounded (S/No. 002851) were included in the application.

B. Zambia Information:

3. Leopards in Zambia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Wildlife Act of 2015 (Act) is the principal legislation guiding the management of wildlife in Zambia, and the DNPW is the

only government department responsible for the management of wildlife, including leopards, in Zambia (CITES 2018a:7). The Act also provides for the promotion of opportunities for the equitable and sustainable use of public wildlife estates; provides for the establishment, control and co-management of Community Partnership Parks for the conservation and restoration of ecological structures for non-consumptive forms of recreation and environmental education; provides for the sustainable use of wildlife and the effective management of the wildlife habitat in Game Management Areas; enhances the benefits of Game Management Areas to local communities and wildlife; involves local communities in the management of Game Management Areas; and provides for the development and implementation of management plans (CITES 2018a:7).

The Act also provides for stiffer penalties related to poaching and enforcing all wildlife related violations in Zambia (CITES 2018a:7). Hunting of all wild animals without a permit in Zambia is illegal (CITES 2018a:7). Further, it is a criminal offense to hunt, kill, capture or be in possession of a leopard specimen without a license (CITES 2018a:7). The leopard is considered a protected species under the Act and therefore attracts stiffer penalties without option of a fine (CITES 2018a:7). Other legislation includes regulations (Private Wildlife Estates) and Statutory Instruments already in force such as CITES, Hunting, and Elephant Hunting (CITES 2018a:7). According to DNPW, other Statutory Instruments are in preparation for the implementation of the Wildlife Act of 2015 and are currently under review, including (CITES 2018a:1,7-8):

- formulating specific regulations which place certain conditions on the hunting of leopards (and lions) in GMAs, including but not limited to: age-based regulations, banning the hunting of females, and setting a minimum number of days to hunt; and
- formulating regulations regarding off-take quota management that will regulate how quotas are set, approved and utilized, and will be based on the precautionary principle that requires the most up-to-date information be used on setting quotas.

4. Leopard hunting in Zambia is carried out in hunting blocks located in Game Management Areas surrounding National Parks in the Luangwa, Kafue and Lower Zambezi ecosystem and in Open Game Ranches/Conservancies (CITES 2018a:16). Game Management Areas (GMA) are a category of protected areas in Zambia designed to form buffer zones between National Parks and Open Areas (CITES 2018a:16). The main land use form in GMAs has been safari and resident hunting; however, a few GMAs have included photographic tourism (CITES 2018a:16). There are 36 Game Management Areas in Zambia covering 177,404 km². Open Game Ranches are unfenced private wildlife estates outside public protected areas that are reserved by a person or local community for wildlife conservation and management (CITES 2018a:16). The private sector and the community agree to protect wildlife on these privately owned or communal lands and in exchange for protecting the wildlife, DNPW issues the Open Game Ranches annual non-resident hunting quotas (CITES 2018a:16). Zambia currently has 17 registered Open Game Ranches covering over 2,500 km², of which 8 have a quota for leopards (CITES 2018a:16-17).

5. Quotas are set annually and are issued to hunting blocks in GMAs and Open Game Ranches (CITES 2018a:18). With quotas allocated on an annual basis, DNPW can react quickly to any difficulties in specific areas, whenever necessary to adjust or even suspend quotas (CITES 2018a:52).

6. Zambia has a participatory quota setting process that is based on scientific information derived from aerial surveys, ground counts, patrol sightings, local and expert opinion, and hunting monitoring, as well as information provided by Community Resource Boards (CRBs), DNPW, lease holders/operators/professional hunters, and other organizations (CITES 2018a:18). The quota for leopards is set using information from hunting records and field observations derived from professional hunters, operators, and field officers (CITES 2018a:18). According to DNPW, this allows CRBs and DNPW to review the previous hunting season's offtake before setting the quota for the upcoming year (CITES 2018a:18). In approving the quota, management developed the sustainable maximum harvest rates which it uses to allocate and approve the leopard quota as follows (CITES 2018a:18):

- Prime hunting blocks = 3 leopard per 1,000 km²
- Secondary hunting blocks and open game ranches = 1 leopard per 1,000 km²
- Under stocked hunting blocks = 0 leopard per 1,000 km²

DNPW states that in using these rates, the total number of leopards on quota that can possibly be issued in the entire country in any hunting season is 162 (CITES 2018a:18), which is 54 percent of the CITES approved export quota for Zambian leopard trophies and skins.

7. The Zambian government suspended leopard trophy hunting from 2013 to 2015 due to concerns and uncertainty about the conservation status of the population (Stein et al. 2016). According to DNPW, the suspension was lifted in 2016 when rural communities requested that the suspension be lifted due to the detrimental impact on their livelihoods of increased human-livestock-carnivore conflict with offsets from hunting revenues (CITES 2018a:1). In view of this, Zambia established a limited offtake that was within the CITES approved quota and that they believed was sustainable (CITES 2018a:1).

8. In reopening leopard hunting in 2016, DNPW consulted with independent leopard experts to get advice and held a workshop with stakeholders in April 2016, which resulted in the formulation of guidelines on leopard (and lion) hunting in Zambia (CITES 2018a:23). According to DNPW, the guidelines have since been re-drafted for gazetting as a Statutory Instrument and are considered as part of an adaptive process to manage leopard hunting in the country (CITES 2018a:23). In addition, DNPW states that the guidelines will be further reviewed at the end of the 2018 hunting season taking into account the experiences from the first two years of implementation since the suspension was lifted (CITES 2018a:23). The guidelines include (CITES 2018a:23):

1. Utilization must be based on scientific principles: use area size and leopard density, population status trends and prey availability;
2. Hunted leopards must be an adult; and
3. Use adaptive approaches in managing leopards. This may include varying quotas according to population status in a hunting area. Therefore, it is important to establish a monitoring mechanism that provides information on:
 - A. Indicators that show the leopard trends in an area, such as:
 - Hunting effort - time spent to find the desirable trophy;
 - Hunting success – was the hunted leopard of desired and acceptable trophy size;
 - Trophy size - Size of skull, tooth measurements, body length, shoulder height, etc.; and

- Age – the average age of lawful trophies.
- B. The status of habitat and prey in an area, including:
 - Satellite images of the area;
 - Encroachment levels; and
 - Quantitative and qualitative indication of prey.
- C. Regular collection of data on the hunted leopard with prompt checking on the accuracy of information provided, with:
 - Skull, teeth, and hide to be examined, sampled and permanently tagged; and
 - Certificates provided for proof of sampling and rating of trophy.

The guidelines also recommend (CITES 2018a:23-24): no hunting of female leopards, no hunting of any leopard born or held in captivity, no use of pre-recorded sounds in the hunting of leopards, no leopard hunting on fenced game ranches, leopard hunting only in Prime and Secondary areas and Open Game Ranches known to be rich in leopards and prey, and establishing a central place for trophy measurements and ageing of hunted leopards for export. According to DNPW, the long-term implementation and monitoring of the effectiveness of these guidelines and indicators allow for adaptive adjustment of leopard quotas (CITES 2018a:24).

9. As a result, Zambia's new management approach to leopard hunting is based on three pillars (CITES 2018a:24):

- I. A conservative, precautionary quota, well below the recommended thresholds for sustainability;
- II. An age-based harvest limit and strong monitoring of leopard offtakes; and
- III. Significant and direct community benefits. This will ensure that leopard hunting in Zambia is sustainable and does not negatively affect the population. In addition, in the hunting concession agreements signed in 2015, no hunting outfitter has been guaranteed a leopard on quota. It is made clear that the quota for any species shall be based on scientific methods including the latest available survey and aging techniques.

10. To monitor quotas and trophy hunting in Zambia, wildlife officers accompany hunters on all hunts during the hunting season (CITES 2018a:28). The officer records activities related to the hunt on specified forms (i.e., Safari Hunting monitoring forms, trophy measurement forms, and a client questionnaire) (CITES 2018a:28). The officer endorses used licenses ensuring that they cannot be used again (CITES 2018a:28). In addition, the law requires that all harvested trophies be registered (CITES 2018a:28).

DNPW is also introducing a monitoring system specific for leopards (and lions). This monitoring system will be based on a Statutory Instrument which is in preparation, which will introduce a mandatory sampling system that requires trophy leopards meet or exceed a minimum size (or possibly age) as one measure for harvesting trophy leopards (CITES 2018a:29). The monitoring system will be based on specific forms that will help ensure proper compliance with the provisions of the law, including confirmation of legal licenses and collection of data associated with the hunt (including but not limited to: location, date, participants, and photos) (CITES 2018a:29). The monitoring system will be complemented by regular surveys for leopards throughout the GMAs using camera trap and other indirect monitoring techniques (CITES 2018a:29).

11. Leopard–human conflicts occur on the interface between communities and leopard range, often resulting in “problem animals” being removed through lethal means (CITES 2018a:35). Fortunately, DNPW reports that the number of incidents of leopard–human conflict (HLC) is low in Zambia and retaliatory killings by livestock owners are not as prevalent as in other areas of Africa, however with increasing human populations, this may become an issue as human settlements expand (CITES 2018a:35,38). DNPW states that they apply an adaptive system that includes a procedure whereby reported cases of leopard damage are investigated by field officers and complete reports are reviewed by the most senior officer for immediate feedback (CITES 2018a:38). Interventions include: scaring leopards through blasting or killing the animals suspected to be responsible for the attack on livestock and humans (CITES 2018a:38). DNPW admits that this approach is considered incompatible with sustainable conservation of wildlife and may contribute to the decline in the leopard population; however, they state that they are committed to implement the best practices on HLC (for example, the HLC toolkit developed by the Niassa Carnivore Project) (CITES 2018a:38). According to DNPW, this will be done through the development of a specific policy on Human Wildlife Conflict that the department, pending the availability of funding, would like to devise as soon as possible (CITES 2018a:38).

12. According to DNPW, direct poaching of leopards is not believed to be significant (CITES 2018a:38). Between 2013 and 2017, DNPW confiscated 110 illegal leopard skins (CITES 2018a:12). As a result, DNPW is establishing an investigation into current levels of illegal trade and use of leopard skins (CITES 2018a:33). DNPW states that identifying levels and source routes will be a first step in controlling this potential threat to Zambia’s wild leopard population (CITES 2018a:33).

13. Given the elusive nature of leopards, the vast areas where they occur in Zambia and its wide-ranging biology, DNPW states that it is almost impossible to obtain reliable population estimates that can be used with confidence for management purposes (CITES 2018a:14). Moreover, DNPW states that the cost of undertaking long-term intensive surveys across the many habitats where leopards occur in Zambia is beyond the financial capacity of the DNPW (CITES 2018a:14). For these reasons, DNPW is adopting an adaptive management framework approach to determine reliable estimates of population trends to assess how leopard populations are changing over time and at a scale relevant to management (CITES 2018a:14). Going forward, DNPW will adopt “best practices” that use a combination of intensive monitoring (i.e. systematic camera trap surveys at 20 strategic sites across the country), extensive monitoring that captures relative abundance indices, and information captured from leopards that are harvested by the hunting industry (CITES 2018a:14). DNPW acknowledges that these relative abundance indices are generally less accurate and precise, but they can be collected rapidly at a landscape scale and within the capacity of the DNPW and its stakeholders (CITES 2018a:14). DNPW also recognizes that more reliable and robust monitoring techniques are required to better assess and measure the population trend and therefore, they state that they are committed to developing long-term rigorous monitoring programs that can be used to monitor the status of leopard populations across its range in Zambia (CITES 2018a:14).

14. The CITES Scientific Authority of Zambia has considered the country’s population of leopards, the quota-setting system and current precautionary quota, the newly implemented age-based harvest policy, the limited offtake, the adaptive management of leopards, and the current

threats to leopards in Zambia, including loss of habitat, human-leopard conflicts, and levels of illegal trade (CITES 2018a:51). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Zambian Scientific Authority concludes that the low level of offtake generated by trophy hunting is not detrimental to the survival of the leopard in Zambia (CITES 2018a:51). According to DNPW, the newly developed leopard management systems, Statutory Instruments and hunting reforms employ an adaptive management approach thereby ensuring long-term sustainability, health and enjoyment of Zambia's wild leopard populations (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zambia initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (CITES 2018a:3). At CoP5 in 1985, Zambia proposed to increase its CITES export quota to 300 leopard trophies and skins per year in order to maintain and encourage sport hunting which had been a source of employment for local people (IUCN/SSC Cat Specialist Group 2017:94). The increase of the quota to 300 was adopted by the Conference of the Parties and has remained at that level ever since.

Although the approved CITES export quota has been 300 leopard trophies and skins per year, the annual leopard quotas established by Zambia and the actual hunting trophy exports have been less. Between 2005 and 2017, the DNPW issued a total of 1,177 leopards on quota of which 687 were utilized (58% of the annual quota) (CITES 2018a:23). During this period, the highest number of leopards issued on quota was 126 individuals in 2011 and the lowest was 37 individuals in 2015 (CITES 2018a:23). Before the hunting ban was implemented in 2013 – 2014, the average annual leopard quota was 120 individuals per year (CITES 2018a:23). Since the ban was lifted, the annual leopard quotas have increased from 37 individuals per year in 2015 to 105 individuals per year in 2017 (CITES 2018a:23). The annual leopard quota for 2018 was set at 102 individuals (CITES 2018a:20-21).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 66 trophies annually and 4 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals

Committee. For Zambia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zambia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

20. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

21. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 53047D

Date Received by DSA: September 2, 2019

DMA Contact: Stephanie Whitley

Applicant: Patrick A. Canan
Wichita Falls, Texas

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zimbabwe)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and occurs from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zimbabwe Parks and Wildlife Management Authority (ZPWMA), leopards are present in protected areas including National Parks and Safari Areas, as well as private conservancies such as Bulyebe and Save Valley Conservancies (CITES 2018a:5). Protected areas with persisting leopard populations include Hwange, Zambezi, Matusadona, and Mana Pools

National Parks as well as Matetsi, Chirisa, Chete, Charara, Hurungwe, Chewore, Doma and Umfurundzi Safari Areas (Jacobson *et al.* 2016: Supp. Doc. 1). Though leopards reportedly occur outside of protected areas, they have much lower densities in areas that have been subject to human disturbance and may be extinct in the majority of unprotected areas (CITES 2018a:5; Jacobson *et al.* 2016: Fig. 1). Jacobson *et al.* estimate the extant range of leopards in Zimbabwe to be 160,000 km² (2016: Supp. Table 5), which is similar to ZPWMA's estimate of 145,000 km² (CITES 2018a:12).

No countrywide estimate of the leopard population in Zimbabwe has been made (CITES 2018a:4). Several projects are currently underway to establish population estimates, including a study by ZPWMA, Zimbabwe Professional Hunting Guides Association (ZPHGA), and Safari Operators Association of Zimbabwe (SOAZ). With guidance from an independent researcher, the team aims to use spoor transects, camera trap data, and offtake trends to estimate the leopard population and use this information to manage the population (CITES 2018a:6). Several population estimates from specific regions within Zimbabwe have been made using a combination of spoor surveys and camera traps: 193 leopards in Save Valley Conservancy in 2008, 54 leopards in the Northern Tuli Game Reserve in 2010, 315 leopards in Gonarezhou National Park in 2009, and 19 leopards in the Mangwe District in 2010 (Jacobson *et al.* 2016: Supp. Doc 1; IUCN/SSC Cat Specialist Group 2017:57). In 2012, landowners estimated a leopard population of 13,521 individuals on private lands (Lindsey & Chikerema-Mandisodze 2012, as cited in IUCN/SSC Cat Specialist Group 2017:58), however this estimate would mean that leopards on private lands would occur at 8.2 times the density as on Kruger National Park, South Africa, which is highly unlikely (Zimbabwe 2012:4).

In the 2016 IUCN Red List assessment, Stein *et al.* (2016:5) stated that it is generally thought that the Zimbabwe leopard population is healthy but declining outside of human dominated areas. The leopard population in Zimbabwe appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton *et al.* 2001, du Toit 2004, Fusari *et al.* 2006, Lindsay *et al.* 2014, as cited in Stein *et al.* 2016:9).

According to ZPWMA, threats to the persistence of the leopard population in Zimbabwe include habitat loss and fragmentation, decreased prey base, persecution from the growing human population, illegal wildlife trade, harvesting for ceremonial use of skins, and poorly managed hunting (CITES 2018a:4). Widespread habitat loss in combination with prey loss is estimated to have caused a 30% decline in sub-Saharan leopard populations over the last 3 generations; the projected increase in human population and their dependence on agriculture and livestock will likely contribute to the continued decline of leopards in Zimbabwe (Stein *et al.* 2016).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Patrick A. Canan; Wichita Falls, Texas) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zimbabwe.

2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in Kazuma Forestry Camp, Zimbabwe, during a hunt scheduled for July 14, 2019; with Classic African Hunting Safaris. A copy of the Zimbabwe Parks and Wildlife Management Authority Hunting Permit # --- was not submitted along with the application.

B. Zimbabwe Information:

3. Leopards in Zimbabwe are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Parks and Wildlife Act 22/2001 (Act) is the principal legislation guiding the management of wildlife in Zimbabwe, and the ZPWMA is the governmental authority responsible for the conservation of Zimbabwe's wildlife, including leopards (CITES 2018a:11, IUCN/SSC Cat Specialist Group 2017:159). According to the ZPWMA, Zimbabwe's wildlife policy seeks to maintain a network of protected areas to conserve the country's biodiversity and natural resources, including through rural economic development and encouraging the protection of wild animals and habitats outside of protected areas (CITES 2018a:11).

The Act was amended in 2011 to increase penalties for illegal hunting, sale of illegally hunted trophies or meat, and other wildlife-related crimes (IUCN/SSC Cat Specialist Group 2017:159). The Act prohibits the hunting of any animal on any land without a permit, the hunting of wildlife in protected areas, trade in trophies or animals without a permit, and the sale of animals or trophies that were hunted without a permit (Obank *et al.* 2015:458). Penalties for these crimes may include fines of up to \$500 and imprisonment up to 20 years for offenses involving specially protected animals (IUCN/SSC Cat Specialist Group 2017:159). The leopard is not listed as a specially protected animal under the Act, and illegal hunting of leopards therefore does not carry these increased penalties (Obank *et al.* 2015:464). Other legislation includes the Protection of Wildlife Indemnity Act 21/1989, the Trapping of Animals Control Act 34/1973, and the Environmental Management Act 13/2002, which give the government of Zimbabwe the authority to protect wildlife from poachers and from harmful and dangerous hunting methods (Obank *et al.* 2015:462-463).

4. Zimbabwe's legislative framework is comprehensive, though it is unclear whether the penalties create a meaningful deterrent as wildlife crime remains widespread in the country (Obank *et al.* 2015:464, 469). There is evidence that sentences for wildlife-related crimes are applied inconsistently as courts have a wide discretion when it comes to imposing penalties (Obank *et al.* 2015:469). Zimbabwe has passed regulatory measures over the last decade to address corruption, however these appear to have had little impact: there have been documented incidences of known poachers avoiding investigation and prosecution, as well as allegations of ministers and officials facilitating wildlife crime (Obank *et al.* 2015:456). Widespread corruption must be addressed in order for the regulatory framework to effectively protect the country's wildlife.

5. In a letter dated December 6, 2017, President of Zimbabwe E. D. Mnangagwa communicated to the United States Zimbabwe's political stability and commitment to conserving wildlife. Though the letter specifically discusses elephant conservation and trophy hunting programs,

President Mnangagwa makes assurances that after a smooth transition from the previous administration, all conservation initiatives being undertaken by Zimbabwe will not be reversed, but enhanced (Zimbabwe 2017).

6. According to ZPWMA, one of the most important aspects of the country's hunting program is the delegation of authority to private and communal landowners to manage and benefit from the wildlife on their land (CITES 2018a:11). Leopard hunting in Zimbabwe occurs on private land, state land, and areas managed under the Communal Areas Management Plan for Indigenous Resources (CAMPFIRE) (CITES 2018a:11; Zimbabwe 2012:17). CAMPFIRE aims to change rural communities' perceptions of wildlife resources from a threat to their livelihoods to a sustainable revenue stream (IUCN/SSC Cat Specialist Group 2017:97). Trophy hunting has become a main source of income for the CAMPFIRE program, and has shown beneficial effects for both wildlife conservation and rural community members (Loveridge *et al.* 2006:230). Rural district councils within the program area set aside an estimated 36,000 km² of land for wildlife in Zimbabwe (Loveridge *et al.* 2006:231).

7. National leopard quotas are set annually and issued to state and private landowners (CITES 2018a:7). Allocating quotas on an annual basis allows ZPWMA to use inputs from monitoring data and stakeholders in an adaptive process (CITES 2018a:7).

8. Zimbabwe has a participatory quota setting process that is based on population data, distribution patterns, trophy quality data, local and ranger monitoring, habitat quality, hunting success rates, poaching statistics, natural mortality, diseases, and other offtakes (CITES 2018a:7-8). The quota for leopards is determined with input from stakeholders including ZPWMA field and research staff, members of local communities, hunting operators, and non-governmental biologists and researchers (CITES 2018a:7). Almost all quotas are based on a 1988 survey and distribution model done by Martin and de Meulenaer that assumes that all suitable habitat is occupied, all habitat supports maximum leopard densities, and leopard numbers can be predicted by rainfall (Zimbabwe 2016:3). The model omits other threats such as human impact and habitat fragmentation (Zimbabwe 2016:3). As accurate and current population data is largely unavailable and effective trophy monitoring hasn't been established, in practice, quotas are set based primarily on opinions of stakeholders and final approval is given by ZPWMA or the Minister of Environment and Natural Resources (Zimbabwe 2012:10). Quotas and actual offtakes have been reduced in recent years as a precautionary measure (CITES 2018a:7). A new system developed at a participatory workshop in 2016 adjusts a hunting area's allocated quota based on the ages of leopards hunted, in which hunting young leopards results in a reduced quota (CITES 2018a:10). Hunting older leopards, or no leopards, results in a maintenance of the same quota, or in some cases an increase in the area's quota (CITES 2018a:10). ZPWMA is currently testing this system and monitoring compliance through the submission of photographs, hunt returns, and other data requested by ZPWMA (CITES 2018a:10).

9. There is currently no management plan for leopards in Zimbabwe (Zimbabwe 2012:16), nor does there appear to be any formal criteria for leopard trophies (CITES 2018a:9). In 2012, Zimbabwe reported that the hunting of female leopards was prohibited based on an agreement between ZPWMA and the Safari Operators Association of Zimbabwe (SOAZ), and that leopard trophies with a skull size smaller than 13.75 inches (width plus length) would not be allowed to

be exported (Zimbabwe 2012:11). However, in their 2018 review of the CITES leopard quota, Zimbabwe did not make it clear whether only males were taken as trophies; in fact, ZPWMA states that leopards taken are “usually males” (CITES 2018a:3). Leopard trophy monitoring began in the 2009 hunting season to assess catch per unit effort, hunting success, and trophy quality (Zimbabwe 2016:5). In 2013 the monitoring began to include photographs used to age hunted leopards and it was determined that between 2013 and 2015, 90% of the leopards taken were very young (between 2-3 years of age) (Zimbabwe 2016:5-8). Though Zimbabwe incentivizes hunters and hunting areas to take older males by setting quota allocations based on trophy quality, there is currently no indication of any formal mechanism requiring compliance.

10. The long term goal of ZPWMA is sustainable leopard hunting supported across a range of land uses that contributes to maintaining wildlife, biodiversity, rural livelihoods and the national economy (CITES 2018a:9). The country’s immediate objective is to achieve a well-regulated, viable and sustainable leopard hunting operation that complies with requirements of a rigorous formal non-detriment finding (CITES 2018a:9). Zimbabwe has identified five key components for a hunting program that meets their goals (CITES 2018a:9-10):

- I. Monitoring population status and trends of leopard populations
- II. Criteria for leopard trophies
- III. Evidence-based adaptive management of quotas for hunting leopards
- IV. Reviews of policy and legislation governing leopard hunting
- V. Coordination, collaboration and program management

11. Human-leopard conflict in response to perceived or actual livestock depredation is a major threat to leopard populations in Zimbabwe (IUCN/SSC Cat Specialist Group 2017:131). Many of Zimbabwe’s wildlife reserves border agro-pastoral lands, increasing the frequency of conflict incidents (Butler 2000 as cited in IUCN/SSC Cat Specialist Group 2017:131). The projected increase of the human population in sub-Saharan Africa from 1.2 billion to 2.5 billion over the next 50 years will likely lead to expansion of human land use and intensify human-wildlife conflict (Loveridge *et al.* 2017:2). Lethal problem animal control (PAC) is legal in Zimbabwe, though according to the Parks and Wildlife Act (123/1991), destruction of a leopard through PAC is only allowed if an incident threatens human life (Zimbabwe 2012:9, 11). Problem animals are reported to the nearest Rural District Council office if on communal land or to ZPWMA if on private land or near a national park (Zimbabwe 2012:11). The report must then be verified by the responsible agency to ensure that a leopard has been correctly identified as the cause of conflict (Zimbabwe 2012:11). ZPWMA considers three options when dealing with a problem animal: improving livestock husbandry to reduce losses, capturing and translocating the leopard, or hunting the problem leopard as a trophy (Zimbabwe 2012:11). In most cases, ZPWMA attempts to relocate the animal, though data on the success of reducing livestock losses within Zimbabwe is unavailable (Zimbabwe 2012:11). Elsewhere, translocation has been shown to be largely ineffective in mitigating human-leopard conflict (Athreya *et al.* 2011 and Weilenmann *et al.* 2011 as cited in Zimbabwe 2012). Hunting problem animals also raises concerns about false reporting in order to obtain additional hunting permits, and it is highly likely that some leopards are killed illegally under the name of PAC (Zimbabwe 2012:9, 11).

12. Significant demand for leopard skins drives illegal killing of leopards in southern Africa (Zimbabwe 2012:9, IUCN/SSC Cat Specialist Group 2017:131). ZPWMA stated in 2012 that

such killings appeared to be rare and few records of seizures occurred (Zimbabwe 2012:9), though there is now evidence for a rapid increase in wildlife crime including poaching in Zimbabwe (Obank *et al.* 2015). ZPWMA is lacking financial resources to effectively control protected areas within Zimbabwe, and there have been allegations that ZPWMA has been forced to allow hunting in national parks to raise funds (Obank *et al.* 2015:460).

13. Due to the cryptic nature and vast range of leopards in Zimbabwe, ZPWMA states that it is difficult to census the total leopard population, though many studies are currently being undertaken to get a better understanding of population (CITES 2018a:4). These studies involve academic researchers, non-profits, students, and Zimbabwe agencies and officials (CITES 2018a:6-7). They aim to measure the impacts of trophy hunting on behavioral ecology and population dynamics, train personnel in predator monitoring, estimate the national leopard population, and disseminate this information to the public (CITES 2018a:7). Zimbabwe is currently keeping quotas and actual offtake at conservative levels as a precautionary measure, demonstrating their commitment to sustainable hunting (CITES 2018a:7).

14. The CITES Scientific Authority of Zimbabwe has considered the country's leopard population and trend, the past and current levels of offtake, adaptive management of the leopard population and of leopard hunting, benefits derived from hunting, and other factors relevant to the sustainability of the export quota (CITES 2018a:12). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Scientific Authority of Zimbabwe concludes that the current level of offtake and the current export quota is set at a level that is not detrimental to the survival of the species in the wild (CITES 2018a:12). According to ZPWMA, the quota of 500 leopards per year is conservative and in the best interest of the conservation of the species. Zimbabwe will continue to monitor the leopard population and adaptively manage the hunting program, informing the CITES Secretariat if a significant management change occurs (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zimbabwe initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (IUCN/SSC Cat Specialist Group 2017:96). At CoP5 in 1985, Zimbabwe proposed to increase its CITES annual export quota to 350 leopard trophies and skins per year to prevent the species from being viewed as an agricultural pest (CITES 1985). The increase of the quota to 350 was adopted by the Conference of the Parties in Resolution 5.13 (IUCN/SSC Cat Specialist Group 2017:96). At CoP6 in 1987, Zimbabwe requested to increase its quota to 500; the increase of the quota was deemed sustainable, accepted, and has remained at that level ever since (CITES 1987, CITES 2018a).

Although the approved CITES export quota has been 500 leopard trophies and skins per year, the actual hunting trophy exports have been less. Between 2010 and 2017, actual annual offtake ranged from 133 leopards in 2017 to 186 leopards in 2014 (averaging about 33% of the quota across this period) (CITES 2018a:9). Zimbabwe establishes national leopard quotas annually in an adaptive process that relies on monitoring data and stakeholder input. National hunting quotas may be set higher than CITES export quotas to mitigate human-animal conflict, but hunting offtakes have been lower than both national and CITES quotas (CITES 2018a:7). Zimbabwe

issued between 578 and 882 leopard hunting permits annually between 2004 and 2012, but actual hunting offtakes during this period were between 160 and 302 (Zimbabwe 2012:7-8).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 207 trophies annually and 43 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zimbabwe:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zimbabwe, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zimbabwe in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties.

Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana,

the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Humane Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019a). The working group prepared document CoP18 Com. I. 10 on the basis of document CoP18 Doc. 46 after discussion in the second session of Committee I (CITES 2019b). At the conclusion of CoP18 (i.e., plenary), the amendments to Resolution Conf. 9.21 (Rev. CoP17) on *Interpretation and application of quotas for species included in Appendix I* contained in the in-session document CoP18 Com. I. 10 had been accepted in Committee I and were adopted. The eight draft decisions in Annex 3 to document CoP18 Doc. 46 had also been accepted in Committee I and were adopted. Decisions 17.114 to 17.117 were deleted (CITES 2019c).

20. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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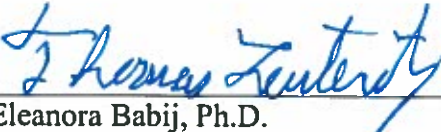
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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 54765D

Date Received by DSA: September 18, 2019

DMA Contact: Stephanie Whitley

Applicant: Jeffrey Thomas West
Salyer, California

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zimbabwe)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and occurs from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zimbabwe Parks and Wildlife Management Authority (ZPWMA), leopards are present in protected areas including National Parks and Safari Areas, as well as private conservancies such as Bulyebe and Save Valley Conservancies (CITES 2018a:5). Protected areas with persisting leopard populations include Hwange, Zambezi, Matusadona, and Mana Pools

National Parks as well as Matetsi, Chirisa, Chete, Charara, Hurungwe, Chewore, Doma and Umfurundzi Safari Areas (Jacobson *et al.* 2016: Supp. Doc. 1). Though leopards reportedly occur outside of protected areas, they have much lower densities in areas that have been subject to human disturbance and may be extinct in the majority of unprotected areas (CITES 2018a:5; Jacobson *et al.* 2016: Fig. 1). Jacobson *et al.* estimate the extant range of leopards in Zimbabwe to be 160,000 km² (2016: Supp. Table 5), which is similar to ZPWMA's estimate of 145,000 km² (CITES 2018a:12).

No countrywide estimate of the leopard population in Zimbabwe has been made (CITES 2018a:4). Several projects are currently underway to establish population estimates, including a study by ZPWMA, Zimbabwe Professional Hunting Guides Association (ZPHGA), and Safari Operators Association of Zimbabwe (SOAZ). With guidance from an independent researcher, the team aims to use spoor transects, camera trap data, and offtake trends to estimate the leopard population and use this information to manage the population (CITES 2018a:6). Several population estimates from specific regions within Zimbabwe have been made using a combination of spoor surveys and camera traps: 193 leopards in Save Valley Conservancy in 2008, 54 leopards in the Northern Tuli Game Reserve in 2010, 315 leopards in Gonarezhou National Park in 2009, and 19 leopards in the Mangwe District in 2010 (Jacobson *et al.* 2016: Supp. Doc 1; IUCN/SSC Cat Specialist Group 2017:57). In 2012, landowners estimated a leopard population of 13,521 individuals on private lands (Lindsey & Chikerema-Mandisodze 2012, as cited in IUCN/SSC Cat Specialist Group 2017:58), however this estimate would mean that leopards on private lands would occur at 8.2 times the density as on Kruger National Park, South Africa, which is highly unlikely (Zimbabwe 2012:4).

In the 2016 IUCN Red List assessment, Stein *et al.* (2016:5) stated that it is generally thought that the Zimbabwe leopard population is healthy but declining outside of human dominated areas. The leopard population in Zimbabwe appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton *et al.* 2001, du Toit 2004, Fusari *et al.* 2006, Lindsay *et al.* 2014, as cited in Stein *et al.* 2016:9).

According to ZPWMA, threats to the persistence of the leopard population in Zimbabwe include habitat loss and fragmentation, decreased prey base, persecution from the growing human population, illegal wildlife trade, harvesting for ceremonial use of skins, and poorly managed hunting (CITES 2018a:4). Widespread habitat loss in combination with prey loss is estimated to have caused a 30% decline in sub-Saharan leopard populations over the last 3 generations; the projected increase in human population and their dependence on agriculture and livestock will likely contribute to the continued decline of leopards in Zimbabwe (Stein *et al.* 2016).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Jeffrey Thomas West; Salyer, California) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zimbabwe.

2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in Big Five Safaris, Harere, Zimbabwe, during a hunt scheduled for September 9–24, 2019; with Big Five Safaris. A copy of the Zimbabwe Parks and Wildlife Management Authority Hunting Permit # --- was not submitted along with the application.

B. Zimbabwe Information:

3. Leopards in Zimbabwe are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Parks and Wildlife Act 22/2001 (Act) is the principal legislation guiding the management of wildlife in Zimbabwe, and the ZPWMA is the governmental authority responsible for the conservation of Zimbabwe's wildlife, including leopards (CITES 2018a:11, IUCN/SSC Cat Specialist Group 2017:159). According to the ZPWMA, Zimbabwe's wildlife policy seeks to maintain a network of protected areas to conserve the country's biodiversity and natural resources, including through rural economic development and encouraging the protection of wild animals and habitats outside of protected areas (CITES 2018a:11).

The Act was amended in 2011 to increase penalties for illegal hunting, sale of illegally hunted trophies or meat, and other wildlife-related crimes (IUCN/SSC Cat Specialist Group 2017:159). The Act prohibits the hunting of any animal on any land without a permit, the hunting of wildlife in protected areas, trade in trophies or animals without a permit, and the sale of animals or trophies that were hunted without a permit (Obank *et al.* 2015:458). Penalties for these crimes may include fines of up to \$500 and imprisonment up to 20 years for offenses involving specially protected animals (IUCN/SSC Cat Specialist Group 2017:159). The leopard is not listed as a specially protected animal under the Act, and illegal hunting of leopards therefore does not carry these increased penalties (Obank *et al.* 2015:464). Other legislation includes the Protection of Wildlife Indemnity Act 21/1989, the Trapping of Animals Control Act 34/1973, and the Environmental Management Act 13/2002, which give the government of Zimbabwe the authority to protect wildlife from poachers and from harmful and dangerous hunting methods (Obank *et al.* 2015:462-463).

4. Zimbabwe's legislative framework is comprehensive, though it is unclear whether the penalties create a meaningful deterrent as wildlife crime remains widespread in the country (Obank *et al.* 2015:464, 469). There is evidence that sentences for wildlife-related crimes are applied inconsistently as courts have a wide discretion when it comes to imposing penalties (Obank *et al.* 2015:469). Zimbabwe has passed regulatory measures over the last decade to address corruption, however these appear to have had little impact: there have been documented incidences of known poachers avoiding investigation and prosecution, as well as allegations of ministers and officials facilitating wildlife crime (Obank *et al.* 2015:456). Widespread corruption must be addressed in order for the regulatory framework to effectively protect the country's wildlife.

5. In a letter dated December 6, 2017, President of Zimbabwe E. D. Mnangagwa communicated to the United States Zimbabwe's political stability and commitment to conserving wildlife. Though the letter specifically discusses elephant conservation and trophy hunting programs,

President Mnangagwa makes assurances that after a smooth transition from the previous administration, all conservation initiatives being undertaken by Zimbabwe will not be reversed, but enhanced (Zimbabwe 2017).

6. According to ZPWMA, one of the most important aspects of the country's hunting program is the delegation of authority to private and communal landowners to manage and benefit from the wildlife on their land (CITES 2018a:11). Leopard hunting in Zimbabwe occurs on private land, state land, and areas managed under the Communal Areas Management Plan for Indigenous Resources (CAMPFIRE) (CITES 2018a:11; Zimbabwe 2012:17). CAMPFIRE aims to change rural communities' perceptions of wildlife resources from a threat to their livelihoods to a sustainable revenue stream (IUCN/SSC Cat Specialist Group 2017:97). Trophy hunting has become a main source of income for the CAMPFIRE program, and has shown beneficial effects for both wildlife conservation and rural community members (Loveridge *et al.* 2006:230). Rural district councils within the program area set aside an estimated 36,000 km² of land for wildlife in Zimbabwe (Loveridge *et al.* 2006:231).

7. National leopard quotas are set annually and issued to state and private landowners (CITES 2018a:7). Allocating quotas on an annual basis allows ZPWMA to use inputs from monitoring data and stakeholders in an adaptive process (CITES 2018a:7).

8. Zimbabwe has a participatory quota setting process that is based on population data, distribution patterns, trophy quality data, local and ranger monitoring, habitat quality, hunting success rates, poaching statistics, natural mortality, diseases, and other offtakes (CITES 2018a:7-8). The quota for leopards is determined with input from stakeholders including ZPWMA field and research staff, members of local communities, hunting operators, and non-governmental biologists and researchers (CITES 2018a:7). Almost all quotas are based on a 1988 survey and distribution model done by Martin and de Meulenaer that assumes that all suitable habitat is occupied, all habitat supports maximum leopard densities, and leopard numbers can be predicted by rainfall (Zimbabwe 2016:3). The model omits other threats such as human impact and habitat fragmentation (Zimbabwe 2016:3). As accurate and current population data is largely unavailable and effective trophy monitoring hasn't been established, in practice, quotas are set based primarily on opinions of stakeholders and final approval is given by ZPWMA or the Minister of Environment and Natural Resources (Zimbabwe 2012:10). Quotas and actual offtakes have been reduced in recent years as a precautionary measure (CITES 2018a:7). A new system developed at a participatory workshop in 2016 adjusts a hunting area's allocated quota based on the ages of leopards hunted, in which hunting young leopards results in a reduced quota (CITES 2018a:10). Hunting older leopards, or no leopards, results in a maintenance of the same quota, or in some cases an increase in the area's quota (CITES 2018a:10). ZPWMA is currently testing this system and monitoring compliance through the submission of photographs, hunt returns, and other data requested by ZPWMA (CITES 2018a:10).

9. There is currently no management plan for leopards in Zimbabwe (Zimbabwe 2012:16), nor does there appear to be any formal criteria for leopard trophies (CITES 2018a:9). In 2012, Zimbabwe reported that the hunting of female leopards was prohibited based on an agreement between ZPWMA and the Safari Operators Association of Zimbabwe (SOAZ), and that leopard trophies with a skull size smaller than 13.75 inches (width plus length) would not be allowed to

be exported (Zimbabwe 2012:11). However, in their 2018 review of the CITES leopard quota, Zimbabwe did not make it clear whether only males were taken as trophies; in fact, ZPWMA states that leopards taken are “usually males” (CITES 2018a:3). Leopard trophy monitoring began in the 2009 hunting season to assess catch per unit effort, hunting success, and trophy quality (Zimbabwe 2016:5). In 2013 the monitoring began to include photographs used to age hunted leopards and it was determined that between 2013 and 2015, 90% of the leopards taken were very young (between 2-3 years of age) (Zimbabwe 2016:5-8). Though Zimbabwe incentivizes hunters and hunting areas to take older males by setting quota allocations based on trophy quality, there is currently no indication of any formal mechanism requiring compliance.

10. The long term goal of ZPWMA is sustainable leopard hunting supported across a range of land uses that contributes to maintaining wildlife, biodiversity, rural livelihoods and the national economy (CITES 2018a:9). The country’s immediate objective is to achieve a well-regulated, viable and sustainable leopard hunting operation that complies with requirements of a rigorous formal non-detriment finding (CITES 2018a:9). Zimbabwe has identified five key components for a hunting program that meets their goals (CITES 2018a:9-10):

- I. Monitoring population status and trends of leopard populations
- II. Criteria for leopard trophies
- III. Evidence-based adaptive management of quotas for hunting leopards
- IV. Reviews of policy and legislation governing leopard hunting
- V. Coordination, collaboration and program management

11. Human-leopard conflict in response to perceived or actual livestock depredation is a major threat to leopard populations in Zimbabwe (IUCN/SSC Cat Specialist Group 2017:131). Many of Zimbabwe’s wildlife reserves border agro-pastoral lands, increasing the frequency of conflict incidents (Butler 2000 as cited in IUCN/SSC Cat Specialist Group 2017:131). The projected increase of the human population in sub-Saharan Africa from 1.2 billion to 2.5 billion over the next 50 years will likely lead to expansion of human land use and intensify human-wildlife conflict (Loveridge *et al.* 2017:2). Lethal problem animal control (PAC) is legal in Zimbabwe, though according to the Parks and Wildlife Act (123/1991), destruction of a leopard through PAC is only allowed if an incident threatens human life (Zimbabwe 2012:9, 11). Problem animals are reported to the nearest Rural District Council office if on communal land or to ZPWMA if on private land or near a national park (Zimbabwe 2012:11). The report must then be verified by the responsible agency to ensure that a leopard has been correctly identified as the cause of conflict (Zimbabwe 2012:11). ZPWMA considers three options when dealing with a problem animal: improving livestock husbandry to reduce losses, capturing and translocating the leopard, or hunting the problem leopard as a trophy (Zimbabwe 2012:11). In most cases, ZPWMA attempts to relocate the animal, though data on the success of reducing livestock losses within Zimbabwe is unavailable (Zimbabwe 2012:11). Elsewhere, translocation has been shown to be largely ineffective in mitigating human-leopard conflict (Athreya *et al.* 2011 and Weilenmann *et al.* 2011 as cited in Zimbabwe 2012). Hunting problem animals also raises concerns about false reporting in order to obtain additional hunting permits, and it is highly likely that some leopards are killed illegally under the name of PAC (Zimbabwe 2012:9, 11).

12. Significant demand for leopard skins drives illegal killing of leopards in southern Africa (Zimbabwe 2012:9, IUCN/SSC Cat Specialist Group 2017:131). ZPWMA stated in 2012 that

such killings appeared to be rare and few records of seizures occurred (Zimbabwe 2012:9), though there is now evidence for a rapid increase in wildlife crime including poaching in Zimbabwe (Obank *et al.* 2015). ZPWMA is lacking financial resources to effectively control protected areas within Zimbabwe, and there have been allegations that ZPWMA has been forced to allow hunting in national parks to raise funds (Obank *et al.* 2015:460).

13. Due to the cryptic nature and vast range of leopards in Zimbabwe, ZPWMA states that it is difficult to census the total leopard population, though many studies are currently being undertaken to get a better understanding of population (CITES 2018a:4). These studies involve academic researchers, non-profits, students, and Zimbabwe agencies and officials (CITES 2018a:6-7). They aim to measure the impacts of trophy hunting on behavioral ecology and population dynamics, train personnel in predator monitoring, estimate the national leopard population, and disseminate this information to the public (CITES 2018a:7). Zimbabwe is currently keeping quotas and actual offtake at conservative levels as a precautionary measure, demonstrating their commitment to sustainable hunting (CITES 2018a:7).

14. The CITES Scientific Authority of Zimbabwe has considered the country's leopard population and trend, the past and current levels of offtake, adaptive management of the leopard population and of leopard hunting, benefits derived from hunting, and other factors relevant to the sustainability of the export quota (CITES 2018a:12). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Scientific Authority of Zimbabwe concludes that the current level of offtake and the current export quota is set at a level that is not detrimental to the survival of the species in the wild (CITES 2018a:12). According to ZPWMA, the quota of 500 leopards per year is conservative and in the best interest of the conservation of the species. Zimbabwe will continue to monitor the leopard population and adaptively manage the hunting program, informing the CITES Secretariat if a significant management change occurs (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zimbabwe initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (IUCN/SSC Cat Specialist Group 2017:96). At CoP5 in 1985, Zimbabwe proposed to increase its CITES annual export quota to 350 leopard trophies and skins per year to prevent the species from being viewed as an agricultural pest (CITES 1985). The increase of the quota to 350 was adopted by the Conference of the Parties in Resolution 5.13 (IUCN/SSC Cat Specialist Group 2017:96). At CoP6 in 1987, Zimbabwe requested to increase its quota to 500; the increase of the quota was deemed sustainable, accepted, and has remained at that level ever since (CITES 1987, CITES 2018a).

Although the approved CITES export quota has been 500 leopard trophies and skins per year, the actual hunting trophy exports have been less. Between 2010 and 2017, actual annual offtake ranged from 133 leopards in 2017 to 186 leopards in 2014 (averaging about 33% of the quota across this period) (CITES 2018a:9). Zimbabwe establishes national leopard quotas annually in an adaptive process that relies on monitoring data and stakeholder input. National hunting quotas may be set higher than CITES export quotas to mitigate human-animal conflict, but hunting offtakes have been lower than both national and CITES quotas (CITES 2018a:7). Zimbabwe

issued between 578 and 882 leopard hunting permits annually between 2004 and 2012, but actual hunting offtakes during this period were between 160 and 302 (Zimbabwe 2012:7-8).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 207 trophies annually and 43 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zimbabwe:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zimbabwe, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zimbabwe in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties.

Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana,

the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Humane Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019a). The working group prepared document CoP18 Com. I. 10 on the basis of document CoP18 Doc. 46 after discussion in the second session of Committee I (CITES 2019b). At the conclusion of CoP18 (i.e., plenary), the amendments to Resolution Conf. 9.21 (Rev. CoP17) on *Interpretation and application of quotas for species included in Appendix I* contained in the in-session document CoP18 Com. I. 10 had been accepted in Committee I and were adopted. The eight draft decisions in Annex 3 to document CoP18 Doc. 46 had also been accepted in Committee I and were adopted. Decisions 17.114 to 17.117 were deleted (CITES 2019c).

20. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 55191D

Date Received by DSA: September 26, 2019

DMA Contact: Miguel Richardson

Applicant: Peter Zelif
Batavia, New York

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zambia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein et al. 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson et al. 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen et al. 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein et al. 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is **unknown**. In southern Africa, a regional range loss of approximately 21% has been reported (Stein et al. 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Braczkowski et al. 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein et al. 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein et al. 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein et al. 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zambia's Department of National Parks and Wildlife (DNPW), there are two main leopard populations in Zambia which are centered in the Kafue and Luangwa Ecosystems and are comprised of several national parks (NP) and game management areas (GMA) (CITES 2018a:3). Five smaller populations occur in northwest Zambia in the Lunga NP area, Liuwa NP area in the west, Sioma-Ngwezi NP area in the southwest, and in the NPs and GMAs in the

Bangweulu area and Lake Mweru-Wantipa area in the north (CITES 2018a:3). DNPW reports that the current total leopard range in Zambia is at least 220,000 km² (CITES 2018a:3), which is similar to the extant range of 218,000 km² determined by Jacobson et al. (2016:Supp. Table 5).

No countrywide estimate of the leopard population in Zambia has been made (CITES 2018a:5). Previous research conducted in 2011, 2016 and 2017, on leopard densities in some NPs and GMAs within Zambia found densities between 1.88 leopards/100 km² and 8.2 leopards/100 km² (CITES 2018a:5). Therefore, given the extent of leopard range in the country and assuming a conservatively low overall density of between one and two leopards per 100 km², DNPW reports that the overall leopard population in Zambia is likely to be 2,000 – 4,000 individuals (CITES 2018a:5).

In the 2016 IUCN Red List assessment, Stein et al. (2016) stated that it is generally thought that the Zambia leopard population is healthy but declining outside of human dominated areas. The leopard population in Zambia appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton et al. 2001, du Toit 2004, Fusari et al. 2006, Lindsay et al. 2014, as cited in Stein et al. 2016.)

According to DNPW, threats to the persistence of the leopard population in Zambia include habitat encroachment and fragmentation, bush meat poaching/snaring, human leopard conflict and prey depletion (CITES 2018a:36). In addition, illegal harvest is a potential threat to the species in Zambia as DNPW confiscated 110 illegal leopard skins between 2013 and 2017 (CITES 2018a:12).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Peter Zelif; Batavia, New York) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zambia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild in the Lumimba Game Management Area (GMA), Zambia, on July 5, 2019. The 2019 leopard hunting quota allocated for the Lumimba GMA has not yet been posted. A copy of the record of game and/or protected animals killed or wounded and permit to hunt in this Game Management Area (S/No. 0006159) were included in the application.

B. Zambia Information:

3. Leopards in Zambia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Wildlife Act of 2015 (Act) is the principal legislation guiding the management of wildlife in Zambia, and the DNPW is the only government department responsible for the management of wildlife, including leopards, in

Zambia (CITES 2018a:7). The Act also provides for the promotion of opportunities for the equitable and sustainable use of public wildlife estates; provides for the establishment, control and co-management of Community Partnership Parks for the conservation and restoration of ecological structures for non-consumptive forms of recreation and environmental education; provides for the sustainable use of wildlife and the effective management of the wildlife habitat in Game Management Areas; enhances the benefits of Game Management Areas to local communities and wildlife; involves local communities in the management of Game Management Areas; and provides for the development and implementation of management plans (CITES 2018a:7).

The Act also provides for stiffer penalties related to poaching and enforcing all wildlife related violations in Zambia (CITES 2018a:7). Hunting of all wild animals without a permit in Zambia is illegal (CITES 2018a:7). Further, it is a criminal offense to hunt, kill, capture or be in possession of a leopard specimen without a license (CITES 2018a:7). The leopard is considered a protected species under the Act and therefore attracts stiffer penalties without option of a fine (CITES 2018a:7). Other legislation includes regulations (Private Wildlife Estates) and Statutory Instruments already in force such as CITES, Hunting, and Elephant Hunting (CITES 2018a:7). According to DNPW, other Statutory Instruments are in preparation for the implementation of the Wildlife Act of 2015 and are currently under review, including (CITES 2018a:1,7-8):

- formulating specific regulations which place certain conditions on the hunting of leopards (and lions) in GMAs, including but not limited to: age-based regulations, banning the hunting of females, and setting a minimum number of days to hunt; and
- formulating regulations regarding off-take quota management that will regulate how quotas are set, approved and utilized, and will be based on the precautionary principle that requires the most up-to-date information be used on setting quotas.

4. Leopard hunting in Zambia is carried out in hunting blocks located in Game Management Areas surrounding National Parks in the Luangwa, Kafue and Lower Zambezi ecosystem and in Open Game Ranches/Conservancies (CITES 2018a:16). Game Management Areas (GMA) are a category of protected areas in Zambia designed to form buffer zones between National Parks and Open Areas (CITES 2018a:16). The main land use form in GMAs has been safari and resident hunting; however, a few GMAs have included photographic tourism (CITES 2018a:16). There are 36 Game Management Areas in Zambia covering 177,404 km². Open Game Ranches are unfenced private wildlife estates outside public protected areas that are reserved by a person or local community for wildlife conservation and management (CITES 2018a:16). The private sector and the community agree to protect wildlife on these privately owned or communal lands and in exchange for protecting the wildlife, DNPW issues the Open Game Ranches annual non-resident hunting quotas (CITES 2018a:16). Zambia currently has 17 registered Open Game Ranches covering over 2,500 km², of which 8 have a quota for leopards (CITES 2018a:16-17).

5. Quotas are set annually and are issued to hunting blocks in GMAs and Open Game Ranches (CITES 2018a:18). With quotas allocated on an annual basis, DNPW can react quickly to any difficulties in specific areas, whenever necessary to adjust or even suspend quotas (CITES 2018a:52).

6. Zambia has a participatory quota setting process that is based on scientific information

derived from aerial surveys, ground counts, patrol sightings, local and expert opinion, and hunting monitoring, as well as information provided by Community Resource Boards (CRBs), DNPW, lease holders/operators/professional hunters, and other organizations (CITES 2018a:18). The quota for leopards is set using information from hunting records and field observations derived from professional hunters, operators, and field officers (CITES 2018a:18). According to DNPW, this allows CRBs and DNPW to review the previous hunting season's offtake before setting the quota for the upcoming year (CITES 2018a:18). In approving the quota, management developed the sustainable maximum harvest rates which it uses to allocate and approve the leopard quota as follows (CITES 2018a:18):

- Prime hunting blocks = 3 leopard per 1,000 km²
- Secondary hunting blocks and open game ranches = 1 leopard per 1,000 km²
- Under stocked hunting blocks = 0 leopard per 1,000 km²

DNPW states that in using these rates, the total number of leopards on quota that can possibly be issued in the entire country in any hunting season is 162 (CITES 2018a:18), which is 54 percent of the CITES approved export quota for Zambian leopard trophies and skins.

7. The Zambian government suspended leopard trophy hunting from 2013 to 2015 due to concerns and uncertainty about the conservation status of the population (Stein et al. 2016). According to DNPW, the suspension was lifted in 2016 when rural communities requested that the suspension be lifted due to the detrimental impact on their livelihoods of increased human-livestock-carnivore conflict with offsets from hunting revenues (CITES 2018a:1). In view of this, Zambia established a limited offtake that was within the CITES approved quota and that they believed was sustainable (CITES 2018a:1).

8. In reopening leopard hunting in 2016, DNPW consulted with independent leopard experts to get advice and held a workshop with stakeholders in April 2016, which resulted in the formulation of guidelines on leopard (and lion) hunting in Zambia (CITES 2018a:23). According to DNPW, the guidelines have since been re-drafted for gazetting as a Statutory Instrument and are considered as part of an adaptive process to manage leopard hunting in the country (CITES 2018a:23). In addition, DNPW states that the guidelines will be further reviewed at the end of the 2018 hunting season taking into account the experiences from the first two years of implementation since the suspension was lifted (CITES 2018a:23). The guidelines include (CITES 2018a:23):

1. Utilization must be based on scientific principles: use area size and leopard density, population status trends and prey availability;
2. Hunted leopards must be an adult; and
3. Use adaptive approaches in managing leopards. This may include varying quotas according to population status in a hunting area. Therefore, it is important to establish a monitoring mechanism that provides information on:
 - A. Indicators that show the leopard trends in an area, such as:
 - Hunting effort - time spent to find the desirable trophy;
 - Hunting success – was the hunted leopard of desired and acceptable trophy size;
 - Trophy size - Size of skull, tooth measurements, body length, shoulder height, etc.; and
 - Age – the average age of lawful trophies.

- B. The status of habitat and prey in an area, including:
 - Satellite images of the area;
 - Encroachment levels; and
 - Quantitative and qualitative indication of prey.
- C. Regular collection of data on the hunted leopard with prompt checking on the accuracy of information provided, with:
 - Skull, teeth, and hide to be examined, sampled and permanently tagged; and
 - Certificates provided for proof of sampling and rating of trophy.

The guidelines also recommend (CITES 2018a:23-24): no hunting of female leopards, no hunting of any leopard born or held in captivity, no use of pre-recorded sounds in the hunting of leopards, no leopard hunting on fenced game ranches, leopard hunting only in Prime and Secondary areas and Open Game Ranches known to be rich in leopards and prey, and establishing a central place for trophy measurements and ageing of hunted leopards for export. According to DNPW, the long-term implementation and monitoring of the effectiveness of these guidelines and indicators allow for adaptive adjustment of leopard quotas (CITES 2018a:24).

9. As a result, Zambia's new management approach to leopard hunting is based on three pillars (CITES 2018a:24):

- I. A conservative, precautionary quota, well below the recommended thresholds for sustainability;
- II. An age-based harvest limit and strong monitoring of leopard offtakes; and
- III. Significant and direct community benefits. This will ensure that leopard hunting in Zambia is sustainable and does not negatively affect the population. In addition, in the hunting concession agreements signed in 2015, no hunting outfitter has been guaranteed a leopard on quota. It is made clear that the quota for any species shall be based on scientific methods including the latest available survey and aging techniques.

10. To monitor quotas and trophy hunting in Zambia, wildlife officers accompany hunters on all hunts during the hunting season (CITES 2018a:28). The officer records activities related to the hunt on specified forms (i.e., Safari Hunting monitoring forms, trophy measurement forms, and a client questionnaire) (CITES 2018a:28). The officer endorses used licenses ensuring that they cannot be used again (CITES 2018a:28). In addition, the law requires that all harvested trophies be registered (CITES 2018a:28).

DNPW is also introducing a monitoring system specific for leopards (and lions). This monitoring system will be based on a Statutory Instrument which is in preparation, which will introduce a mandatory sampling system that requires trophy leopards meet or exceed a minimum size (or possibly age) as one measure for harvesting trophy leopards (CITES 2018a:29). The monitoring system will be based on specific forms that will help ensure proper compliance with the provisions of the law, including confirmation of legal licenses and collection of data associated with the hunt (including but not limited to: location, date, participants, and photos) (CITES 2018a:29). The monitoring system will be complemented by regular surveys for leopards throughout the GMAs using camera trap and other indirect monitoring techniques (CITES 2018a:29).

11. Leopard–human conflicts occur on the interface between communities and leopard range, often resulting in “problem animals” being removed through lethal means (CITES 2018a:35). Fortunately, DNPW reports that the number of incidents of leopard–human conflict (HLC) is low in Zambia and retaliatory killings by livestock owners are not as prevalent as in other areas of Africa, however with increasing human populations, this may become an issue as human settlements expand (CITES 2018a:35,38). DNPW states that they apply an adaptive system that includes a procedure whereby reported cases of leopard damage are investigated by field officers and complete reports are reviewed by the most senior officer for immediate feedback (CITES 2018a:38). Interventions include: scaring leopards through blasting or killing the animals suspected to be responsible for the attack on livestock and humans (CITES 2018a:38). DNPW admits that this approach is considered incompatible with sustainable conservation of wildlife and may contribute to the decline in the leopard population; however, they state that they are committed to implement the best practices on HLC (for example, the HLC toolkit developed by the Niassa Carnivore Project) (CITES 2018a:38). According to DNPW, this will be done through the development of a specific policy on Human Wildlife Conflict that the department, pending the availability of funding, would like to devise as soon as possible (CITES 2018a:38).

12. According to DNPW, direct poaching of leopards is not believed to be significant (CITES 2018a:38). Between 2013 and 2017, DNPW confiscated 110 illegal leopard skins (CITES 2018a:12). As a result, DNPW is establishing an investigation into current levels of illegal trade and use of leopard skins (CITES 2018a:33). DNPW states that identifying levels and source routes will be a first step in controlling this potential threat to Zambia’s wild leopard population (CITES 2018a:33).

13. Given the elusive nature of leopards, the vast areas where they occur in Zambia and its wide-ranging biology, DNPW states that it is almost impossible to obtain reliable population estimates that can be used with confidence for management purposes (CITES 2018a:14). Moreover, DNPW states that the cost of undertaking long-term intensive surveys across the many habitats where leopards occur in Zambia is beyond the financial capacity of the DNPW (CITES 2018a:14). For these reasons, DNPW is adopting an adaptive management framework approach to determine reliable estimates of population trends to assess how leopard populations are changing over time and at a scale relevant to management (CITES 2018a:14). Going forward, DNPW will adopt “best practices” that use a combination of intensive monitoring (i.e. systematic camera trap surveys at 20 strategic sites across the country), extensive monitoring that captures relative abundance indices, and information captured from leopards that are harvested by the hunting industry (CITES 2018a:14). DNPW acknowledges that these relative abundance indices are generally less accurate and precise, but they can be collected rapidly at a landscape scale and within the capacity of the DNPW and its stakeholders (CITES 2018a:14). DNPW also recognizes that more reliable and robust monitoring techniques are required to better assess and measure the population trend and therefore, they state that they are committed to developing long-term rigorous monitoring programs that can be used to monitor the status of leopard populations across its range in Zambia (CITES 2018a:14).

14. The CITES Scientific Authority of Zambia has considered the country’s population of leopards, the quota-setting system and current precautionary quota, the newly implemented age-based harvest policy, the limited offtake, the adaptive management of leopards, and the current

threats to leopards in Zambia, including loss of habitat, human-leopard conflicts, and levels of illegal trade (CITES 2018a:51). Upon considering these factors and in accordance with Article IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the Zambian Scientific Authority concludes that the low level of offtake generated by trophy hunting is not detrimental to the survival of the leopard in Zambia (CITES 2018a:51). According to DNPW, the newly developed leopard management systems, Statutory Instruments and hunting reforms employ an adaptive management approach thereby ensuring long-term sustainability, health and enjoyment of Zambia's wild leopard populations (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zambia initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (CITES 2018a:3). At CoP5 in 1985, Zambia proposed to increase its CITES export quota to 300 leopard trophies and skins per year in order to maintain and encourage sport hunting which had been a source of employment for local people (IUCN/SSC Cat Specialist Group 2017:94). The increase of the quota to 300 was adopted by the Conference of the Parties and has remained at that level ever since.

Although the approved CITES export quota has been 300 leopard trophies and skins per year, the annual leopard quotas established by Zambia and the actual hunting trophy exports have been less. Between 2005 and 2017, the DNPW issued a total of 1,177 leopards on quota of which 687 were utilized (58% of the annual quota) (CITES 2018a:23). During this period, the highest number of leopards issued on quota was 126 individuals in 2011 and the lowest was 37 individuals in 2015 (CITES 2018a:23). Before the hunting ban was implemented in 2013 – 2014, the average annual leopard quota was 120 individuals per year (CITES 2018a:23). Since the ban was lifted, the annual leopard quotas have increased from 37 individuals per year in 2015 to 105 individuals per year in 2017 (CITES 2018a:23). The annual leopard quota for 2018 was set at 102 individuals (CITES 2018a:20-21).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 66 trophies annually and 4 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals

Committee. For Zambia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zambia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

20. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

21. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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U.S. Fish and Wildlife Service
Division of Scientific Authority
Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 56525D

Date Received by DSA: November 4, 2019

DMA Contact: Miguel Richardson

Applicant: Nicholas Leon
Royal Oak, Michigan

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Zambia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein et al. 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson et al. 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen et al. 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein et al. 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein et al. 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Braczkowski et al. 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein et al. 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein et al. 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein et al. 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah, (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

According to Zambia's Department of National Parks and Wildlife (DNPW), there are two main leopard populations in Zambia which are centered in the Kafue and Luangwa Ecosystems and are comprised of several national parks (NP) and game management areas (GMA) (CITES 2018a:3). Five smaller populations occur in northwest Zambia in the Lunga NP area, Liuwa NP area in the west, Sioma-Ngwezi NP area in the southwest, and in the NPs and GMAs in the

Bangweulu area and Lake Mweru-Wantipa area in the north (CITES 2018a:3). DNPW reports that the current total leopard range in Zambia is at least 220,000 km² (CITES 2018a:3), which is similar to the extant range of 218,000 km² determined by Jacobson et al. (2016:Supp. Table 5).

No countrywide estimate of the leopard population in Zambia has been made (CITES 2018a:5). Previous research conducted in 2011, 2016 and 2017, on leopard densities in some NPs and GMAs within Zambia found densities between 1.88 leopards/100 km² and 8.2 leopards/100 km² (CITES 2018a:5). Therefore, given the extent of leopard range in the country and assuming a conservatively low overall density of between one and two leopards per 100 km², DNPW reports that the overall leopard population in Zambia is likely to be 2,000 – 4,000 individuals (CITES 2018a:5).

In the 2016 IUCN Red List assessment, Stein et al. (2016) stated that it is generally thought that the Zambia leopard population is healthy but declining outside of human dominated areas. The leopard population in Zambia appears to be decreasing from previous estimates with leopards disappearing from areas with increased human development and intensive conflict with humans (Haton et al. 2001, du Toit 2004, Fusari et al. 2006, Lindsay et al. 2014, as cited in Stein et al. 2016.)

According to DNPW, threats to the persistence of the leopard population in Zambia include habitat encroachment and fragmentation, bush meat poaching/snaring, human leopard conflict and prey depletion (CITES 2018a:36). In addition, illegal harvest is a potential threat to the species in Zambia as DNPW confiscated 110 illegal leopard skins between 2013 and 2017 (CITES 2018a:12).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Nicholas Leon; Royal Oak, Michigan) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zambia.
2. The purpose of the proposed import is personal use. The leopard will be taken from the wild in the Sandwe Game Management Area (GMA), Zambia, during a hunt scheduled for October 13 – 16, 2019. The 2019 leopard hunting quota allocated for the Sandwe GMA has not yet been posted.

B. Zambia Information:

3. Leopards in Zambia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. The Wildlife Act of 2015 (Act) is the principal legislation guiding the management of wildlife in Zambia, and the DNPW is the only government department responsible for the management of wildlife, including leopards, in Zambia (CITES 2018a:7). The Act also provides for the promotion of opportunities for the equitable and sustainable use of public wildlife estates; provides for the establishment, control

and co-management of Community Partnership Parks for the conservation and restoration of ecological structures for non-consumptive forms of recreation and environmental education; provides for the sustainable use of wildlife and the effective management of the wildlife habitat in Game Management Areas; enhances the benefits of Game Management Areas to local communities and wildlife; involves local communities in the management of Game Management Areas; and provides for the development and implementation of management plans (CITES 2018a:7).

The Act also provides for stiffer penalties related to poaching and enforcing all wildlife related violations in Zambia (CITES 2018a:7). Hunting of all wild animals without a permit in Zambia is illegal (CITES 2018a:7). Further, it is a criminal offense to hunt, kill, capture or be in possession of a leopard specimen without a license (CITES 2018a:7). The leopard is considered a protected species under the Act and therefore attracts stiffer penalties without option of a fine (CITES 2018a:7). Other legislation includes regulations (Private Wildlife Estates) and Statutory Instruments already in force such as CITES, Hunting, and Elephant Hunting (CITES 2018a:7). According to DNPW, other Statutory Instruments are in preparation for the implementation of the Wildlife Act of 2015 and are currently under review, including (CITES 2018a:1,7-8):

- formulating specific regulations which place certain conditions on the hunting of leopards (and lions) in GMAs, including but not limited to: age-based regulations, banning the hunting of females, and setting a minimum number of days to hunt; and
- formulating regulations regarding off-take quota management that will regulate how quotas are set, approved and utilized, and will be based on the precautionary principle that requires the most up-to-date information be used on setting quotas.

4. Leopard hunting in Zambia is carried out in hunting blocks located in Game Management Areas surrounding National Parks in the Luangwa, Kafue and Lower Zambezi ecosystem and in Open Game Ranches/Conservancies (CITES 2018a:16). Game Management Areas (GMA) are a category of protected areas in Zambia designed to form buffer zones between National Parks and Open Areas (CITES 2018a:16). The main land use form in GMAs has been safari and resident hunting; however, a few GMAs have included photographic tourism (CITES 2018a:16). There are 36 Game Management Areas in Zambia covering 177,404 km². Open Game Ranches are unfenced private wildlife estates outside public protected areas that are reserved by a person or local community for wildlife conservation and management (CITES 2018a:16). The private sector and the community agree to protect wildlife on these privately owned or communal lands and in exchange for protecting the wildlife, DNPW issues the Open Game Ranches annual non-resident hunting quotas (CITES 2018a:16). Zambia currently has 17 registered Open Game Ranches covering over 2,500 km², of which 8 have a quota for leopards (CITES 2018a:16-17).

5. Quotas are set annually and are issued to hunting blocks in GMAs and Open Game Ranches (CITES 2018a:18). With quotas allocated on an annual basis, DNPW can react quickly to any difficulties in specific areas, whenever necessary to adjust or even suspend quotas (CITES 2018a:52).

6. Zambia has a participatory quota setting process that is based on scientific information derived from aerial surveys, ground counts, patrol sightings, local and expert opinion, and hunting monitoring, as well as information provided by Community Resource Boards (CRBs),

DNPW, lease holders/operators/professional hunters, and other organizations (CITES 2018a:18). The quota for leopards is set using information from hunting records and field observations derived from professional hunters, operators, and field officers (CITES 2018a:18). According to DNPW, this allows CRBs and DNPW to review the previous hunting season's offtake before setting the quota for the upcoming year (CITES 2018a:18). In approving the quota, management developed the sustainable maximum harvest rates which it uses to allocate and approve the leopard quota as follows (CITES 2018a:18):

- Prime hunting blocks = 3 leopard per 1,000 km²
- Secondary hunting blocks and open game ranches = 1 leopard per 1,000 km²
- Under stocked hunting blocks = 0 leopard per 1,000 km²

DNPW states that in using these rates, the total number of leopards on quota that can possibly be issued in the entire country in any hunting season is 162 (CITES 2018a:18), which is 54 percent of the CITES approved export quota for Zambian leopard trophies and skins.

7. The Zambian government suspended leopard trophy hunting from 2013 to 2015 due to concerns and uncertainty about the conservation status of the population (Stein et al. 2016). According to DNPW, the suspension was lifted in 2016 when rural communities requested that the suspension be lifted due to the detrimental impact on their livelihoods of increased human-livestock-carnivore conflict with offsets from hunting revenues (CITES 2018a:1). In view of this, Zambia established a limited offtake that was within the CITES approved quota and that they believed was sustainable (CITES 2018a:1).

8. In reopening leopard hunting in 2016, DNPW consulted with independent leopard experts to get advice and held a workshop with stakeholders in April 2016, which resulted in the formulation of guidelines on leopard (and lion) hunting in Zambia (CITES 2018a:23). According to DNPW, the guidelines have since been re-drafted for gazetting as a Statutory Instrument and are considered as part of an adaptive process to manage leopard hunting in the country (CITES 2018a:23). In addition, DNPW states that the guidelines will be further reviewed at the end of the 2018 hunting season taking into account the experiences from the first two years of implementation since the suspension was lifted (CITES 2018a:23). The guidelines include (CITES 2018a:23):

1. Utilization must be based on scientific principles: use area size and leopard density, population status trends and prey availability;
2. Hunted leopards must be an adult; and
3. Use adaptive approaches in managing leopards. This may include varying quotas according to population status in a hunting area. Therefore, it is important to establish a monitoring mechanism that provides information on:
 - A. Indicators that show the leopard trends in an area, such as:
 - Hunting effort - time spent to find the desirable trophy;
 - Hunting success – was the hunted leopard of desired and acceptable trophy size;
 - Trophy size - Size of skull, tooth measurements, body length, shoulder height, etc.; and
 - Age – the average age of lawful trophies.
 - B. The status of habitat and prey in an area, including:
 - Satellite images of the area;

- Encroachment levels; and
 - Quantitative and qualitative indication of prey.
- C. Regular collection of data on the hunted leopard with prompt checking on the accuracy of information provided, with:
- Skull, teeth, and hide to be examined, sampled and permanently tagged; and
 - Certificates provided for proof of sampling and rating of trophy.

The guidelines also recommend (CITES 2018a:23-24): no hunting of female leopards, no hunting of any leopard born or held in captivity, no use of pre-recorded sounds in the hunting of leopards, no leopard hunting on fenced game ranches, leopard hunting only in Prime and Secondary areas and Open Game Ranches known to be rich in leopards and prey, and establishing a central place for trophy measurements and ageing of hunted leopards for export. According to DNPW, the long-term implementation and monitoring of the effectiveness of these guidelines and indicators allow for adaptive adjustment of leopard quotas (CITES 2018a:24).

9. As a result, Zambia's new management approach to leopard hunting is based on three pillars (CITES 2018a:24):

- I. A conservative, precautionary quota, well below the recommended thresholds for sustainability;
- II. An age-based harvest limit and strong monitoring of leopard offtakes; and
- III. Significant and direct community benefits. This will ensure that leopard hunting in Zambia is sustainable and does not negatively affect the population. In addition, in the hunting concession agreements signed in 2015, no hunting outfitter has been guaranteed a leopard on quota. It is made clear that the quota for any species shall be based on scientific methods including the latest available survey and aging techniques.

10. To monitor quotas and trophy hunting in Zambia, wildlife officers accompany hunters on all hunts during the hunting season (CITES 2018a:28). The officer records activities related to the hunt on specified forms (i.e., Safari Hunting monitoring forms, trophy measurement forms, and a client questionnaire) (CITES 2018a:28). The officer endorses used licenses ensuring that they cannot be used again (CITES 2018a:28). In addition, the law requires that all harvested trophies be registered (CITES 2018a:28).

DNPW is also introducing a monitoring system specific for leopards (and lions). This monitoring system will be based on a Statutory Instrument which is in preparation, which will introduce a mandatory sampling system that requires trophy leopards meet or exceed a minimum size (or possibly age) as one measure for harvesting trophy leopards (CITES 2018a:29). The monitoring system will be based on specific forms that will help ensure proper compliance with the provisions of the law, including confirmation of legal licenses and collection of data associated with the hunt (including but not limited to: location, date, participants, and photos) (CITES 2018a:29). The monitoring system will be complemented by regular surveys for leopards throughout the GMAs using camera trap and other indirect monitoring techniques (CITES 2018a:29).

11. Leopard-human conflicts occur on the interface between communities and leopard range, often resulting in "problem animals" being removed through lethal means (CITES 2018a:35).

Fortunately, DNPW reports that the number of incidents of leopard–human conflict (HLC) is low in Zambia and retaliatory killings by livestock owners are not as prevalent as in other areas of Africa, however with increasing human populations, this may become an issue as human settlements expand (CITES 2018a:35,38). DNPW states that they apply an adaptive system that includes a procedure whereby reported cases of leopard damage are investigated by field officers and complete reports are reviewed by the most senior officer for immediate feedback (CITES 2018a:38). Interventions include: scaring leopards through blasting or killing the animals suspected to be responsible for the attack on livestock and humans (CITES 2018a:38). DNPW admits that this approach is considered incompatible with sustainable conservation of wildlife and may contribute to the decline in the leopard population; however, they state that they are committed to implement the best practices on HLC (for example, the HLC toolkit developed by the Niassa Carnivore Project) (CITES 2018a:38). According to DNPW, this will be done through the development of a specific policy on Human Wildlife Conflict that the department, pending the availability of funding, would like to devise as soon as possible (CITES 2018a:38).

12. According to DNPW, direct poaching of leopards is not believed to be significant (CITES 2018a:38). Between 2013 and 2017, DNPW confiscated 110 illegal leopard skins (CITES 2018a:12). As a result, DNPW is establishing an investigation into current levels of illegal trade and use of leopard skins (CITES 2018a:33). DNPW states that identifying levels and source routes will be a first step in controlling this potential threat to Zambia’s wild leopard population (CITES 2018a:33).

13. Given the elusive nature of leopards, the vast areas where they occur in Zambia and its wide-ranging biology, DNPW states that it is almost impossible to obtain reliable population estimates that can be used with confidence for management purposes (CITES 2018a:14). Moreover, DNPW states that the cost of undertaking long-term intensive surveys across the many habitats where leopards occur in Zambia is beyond the financial capacity of the DNPW (CITES 2018a:14). For these reasons, DNPW is adopting an adaptive management framework approach to determine reliable estimates of population trends to assess how leopard populations are changing over time and at a scale relevant to management (CITES 2018a:14). Going forward, DNPW will adopt “best practices” that use a combination of intensive monitoring (i.e. systematic camera trap surveys at 20 strategic sites across the country), extensive monitoring that captures relative abundance indices, and information captured from leopards that are harvested by the hunting industry (CITES 2018a:14). DNPW acknowledges that these relative abundance indices are generally less accurate and precise, but they can be collected rapidly at a landscape scale and within the capacity of the DNPW and its stakeholders (CITES 2018a:14). DNPW also recognizes that more reliable and robust monitoring techniques are required to better assess and measure the population trend and therefore, they state that they are committed to developing long-term rigorous monitoring programs that can be used to monitor the status of leopard populations across its range in Zambia (CITES 2018a:14).

14. The CITES Scientific Authority of Zambia has considered the country’s population of leopards, the quota-setting system and current precautionary quota, the newly implemented age-based harvest policy, the limited offtake, the adaptive management of leopards, and the current threats to leopards in Zambia, including loss of habitat, human-leopard conflicts, and levels of illegal trade (CITES 2018a:51). Upon considering these factors and in accordance with Article

IV of CITES and Resolution Conf. 16.7 (Rev. CoP17) on *Non-detriment findings*, the *Zambian Scientific Authority* concludes that the low level of offtake generated by trophy hunting is not detrimental to the survival of the leopard in Zambia (CITES 2018a:51). According to DNPW, the newly developed leopard management systems, Statutory Instruments and hunting reforms employ an adaptive management approach thereby ensuring long-term sustainability, health and enjoyment of Zambia's wild leopard populations (CITES 2018a:51).

C. CITES Export Quota Program

15. Within the context of CITES, Zambia initially had an approved export quota of 80 leopard skins established in 1983 at CoP4 (CITES 2018a:3). At CoP5 in 1985, Zambia proposed to increase its CITES export quota to 300 leopard trophies and skins per year in order to maintain and encourage sport hunting which had been a source of employment for local people (IUCN/SSC Cat Specialist Group 2017:94). The increase of the quota to 300 was adopted by the Conference of the Parties and has remained at that level ever since.

Although the approved CITES export quota has been 300 leopard trophies and skins per year, the annual leopard quotas established by Zambia and the actual hunting trophy exports have been less. Between 2005 and 2017, the DNPW issued a total of 1,177 leopards on quota of which 687 were utilized (58% of the annual quota) (CITES 2018a:23). During this period, the highest number of leopards issued on quota was 126 individuals in 2011 and the lowest was 37 individuals in 2015 (CITES 2018a:23). Before the hunting ban was implemented in 2013 – 2014, the average annual leopard quota was 120 individuals per year (CITES 2018a:23). Since the ban was lifted, the annual leopard quotas have increased from 37 individuals per year in 2015 to 105 individuals per year in 2017 (CITES 2018a:23). The annual leopard quota for 2018 was set at 102 individuals (CITES 2018a:20-21).

16. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 66 trophies annually and 4 skins annually.

17. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

18. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018b). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Zambia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Zambia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

The Animals Committee adopted this recommendation (CITES 2018c:6).

19. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

20. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

21. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 40231D

Date Received by DSA: August 12, 2019

DMA Contact: Miguel Richardson

Applicant: Robert Coplen
Largo, FL

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Namibia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Leopards inhabit most of Namibia, except for the highly-populated northern region, the arid southeast farmlands, and the desert coast (IUCN/SSC Cat Specialist Group 2017:28–29; CITES 2018c:3–4). Approximately 77% of the countryside, about 570,000 km², provides suitable leopard habitat (Jacobson *et al.* 2016, Supplement, page 32). In Namibia, the key threat to leopard conservation is excessive off-take (illegal) of problem-causing animals due to human-

wildlife conflicts (recently ca. 70–110 leopards per year; CITES 2018c:7). These leopards usually are taken by the affected livestock owner (IUCN/SSC Cat Specialist Group 2017:116). Habitat loss, more so than in other range States, also negatively affects leopards in Namibia (Stein *et al.* 2016:13). These threats have not ceased (Stein *et al.* 2016).

A National leopard survey conducted by Stein *et al.* (2011), estimates leopard populations in Namibia to be approximately 14,154 individuals (CITES 2018c:5). This survey was conducted using camera-traps, questionnaires, spoor counts, and stakeholder interviews. The estimate takes into account high- (3.1 inds./100 km²), medium- (2.0 inds./100 km²), and low- (1.2 inds./100 km²) density estimates extrapolated over the surface areas of the corresponding habitats (IUCN/SSC Cat Specialist Group 2017:51). The combination of these components and the explanation about how they were derived suggest that the population estimate is reliable.

The national leopard population trend, according to the 2011 survey, is increasing (CITES 2018c:6). While this estimate (14,154 inds.) is much larger than earlier ones (e.g., 1,000–10,000 by Nowell and Jackson 1996:27), the current estimate could also be a more accurate approximation of a leopard population size that has not changed much over the years. This approximation, regardless, reflects the use of better survey techniques and the application of new relevant biological information (e.g., population densities and estimated area of occupancy; CITES 2018c:6). These results support the conclusion that the population trend is increasing.

Questions remain, however, about the quality of the biological data (CITES 2018c:7–8). In response, efforts are underway by the Government of Namibia to obtain detailed biological and ecological information about the species. Currently there is a national leopard census project underway (CITES 2018c:15). The results of this project will be used to inform the national leopard management strategy that is being developed. These efforts include field studies and a follow-up leopard survey to be completed in 2019 that will update the information available on the population status, density, and distribution of leopards in Namibia. These results will increase the quality of information available to wildlife managers.

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Robert Coplen; Largo, FL) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Namibia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Namibia, Sebra Farms #264 Outju District; during a hunt scheduled on: August 7, 2018.

B. Namibia Information:

3. Leopards in Namibia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. Under national legislation in Namibia, the leopard is listed as Protected Game (Nature Conservation Ordinance 4 of 1975, Controlled Wildlife Products and Trade Act, 2008) (CITES 2018c:8). Under this legislation, no

person may kill, hunt, or possess a leopard, or trade in leopard products without a permit. However, owners or occupiers of land may kill leopards in defense of human life or to protect their livestock and must report the killing to the Ministry of Environment and Tourism (CITES 2008c:8). Leopards are also protected under other legislation that provides for stiff penalties for illegal possession, poaching, and trade in controlled wildlife products (see: IUCN/SSC Cat Specialist Group 2017:144–148). Despite these measures, many leopards are killed illegally.

4. Namibia has a well-established leopard trophy-hunting system (CITES 2018c:8). Several measures regulate the actual take of the trophy leopard, while other measures regulate the process under which leopard trophies are acquired. With regard to actual take, for example, hunts are conducted under the supervision of registered hunting guides. In addition, only adult, free ranging male leopards with a minimum skull measurement of 32 cm may be harvested. Based on an assessment of leopard skull size of trophies taken during 2004–2017, trophy quality is stable with skull size ranging 35–40 cm. This is well above the cut-off limit of 32 cm (CITES 2018c:12–13). Other restrictions also apply, for example: the export of specimens from leopards categorized as problem animals and destroyed is not allowed (CITES 2018c:8). These measures provide a measure of control over which leopards are harvested or exported.

5. The quantity of leopards killed as problem animals in Namibia is greater than the quantity taken as trophy hunted animals (IUCN/SSC Cat Specialist Group 2017:116–117). This situation may present management challenges because less than 50% of problem animal kills are reported to government wildlife officials who manage trophy hunting. Accurate estimates of problem-animals mortality are essential to management of the leopard trophy hunting system.

6. According to the U.S. Department of State (State 2018), Namibia uses a rigorous, science-based system for quota setting for hunting in communal conservancies. This practice ensures wildlife sustainability. The quota process begins by combining hunting data from the previous year with current information for the species. An initial quota is adjusted taking into account five factors that are indicated on a Quota Setting Sheet (e.g., population estimate, species status, and population trend). The quota setting process is a team effort by local conservancy committee members, the Ministry of Environment and Tourism, and conservation NGOs. Initial data compilation takes about 6 months.

7. The State Department (2018) reports that results of the quota setting process are confirmed through site visits by technical advisors to the conservancy. A preliminary quota based on annual population growth rate of the species is developed during a day-long discussion at the conservancy with team members. This preliminary quota is submitted to local ministry representatives for review and comment. Once the quota request sheet is agreed upon and signed by the respective parties, it is submitted to central ministry representatives for final approval. Throughout the year, monitoring of species utilization and benefits continues. At the end of the year, an annual report is generated for each conservancy. These results inform the next quota setting cycle.

8. With regard to processes under the trophy hunting system, the overall harvest quota is allocated among hunting concessions taking into account the size of the parcel and any relevant scientific information such as estimated population size and habitat (CITES 2018c:9). Larger

parcels with healthier leopard populations, supported by monitoring results, are awarded higher quotas. In the absence of population estimates, trophy quality and trend assessments are used as a guide (CITES 2018c:9).

9. Leopard off-take is well monitored (CITES 2018c:9). An individual leopard hunting permit, for example, must be obtained prior to the hunt. This permit is only valid for a specific site and time period (CITES 2018c:9). At least 7 days prior to a hunt, the hunting operator must give notice to the Ministry of Environment and Tourism. The results of the hunt must be reported within 72 hours regardless of the success of the outing (CITES 2018c:9). The hunting guide must also submit a detailed leopard record sheet (CITES 2018c:10). These measures assist ministry officials to track trophy hunts.

10. Additional tracking measures also apply to the monitoring system. All harvested leopard trophies, for example, must be presented to the Ministry of Environment and Tourism for inspection and tagging (CITES 2018c:10). This step is compulsory for the issuance of a CITES Export Permit. All skulls are also photographed and measured in order to assess age and physical condition. Small, young, or unhealthy leopards (for instance, due to disease or injury) should not be harvested. These measures assist managers to ensure that only adult male leopards that are in good condition and meet the minimum size threshold are harvested and exported (CITES 2018c:12–13).

11. According to Namibia (CITES 2018c:15–16), the leopard population is stable, increasing in size, and widely distributed. The trophy hunting program is strictly controlled. In addition, the trophy quality analysis suggests that larger leopards are being harvested, the annual quota of 2.4% of the total population is low and harvest management practices are good. Based on these circumstances, Namibian officials have concluded that their trophy hunting is sustainable and non-detrimental to the leopard population (CITES 2018c:16).

C. CITES Export Quota Program

12. Within the context of CITES, Namibia initially had an approved export quota of 100 individuals (CITES 2018a,b). That quota was modified in 2004 and increased to the current total of 250 leopards per year (UNEP 2018). Although this quota was increased, actual hunting trophy exports have been less. During 2004–2017, on average 142 leopards were harvested per year (about 56% of the annual quota; CITES 2018c:11). When the quota of 250 leopards was reached in 2008, Namibia instituted a temporary harvest moratorium, assessed population data, evaluated their hunting management strategy, and ultimately revised their hunting regulations. The quota of 250 leopards was maintained. Under the new regulations, hunting of female leopards and use of dogs were outlawed, and individual operator harvest limits were set. During 2008–2010, following the implementation of these new regulations, the number of leopard trophies harvested declined precipitously, but subsequent harvest levels have recovered to about 140–160 leopards per year (CITES 2018c:11–12).

13. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 166 trophies annually and 8 skins annually.

14. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

15. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Namibia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Namibia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

16. The Animals Committee adopted this recommendation (CITES 2018e:6).

17. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on Quotas for leopard hunting trophies (*Panthera pardus*): Report of the Animals Committee. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Namibia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on Interpretation and application of quotas for species included in Appendix I concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018f). These results may be taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

18. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of

Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

19. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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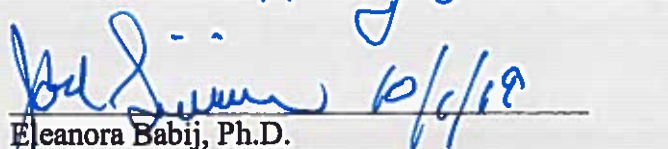
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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 46541D

Date Received by DSA: July 24, 2019

DMA Contact: Ailteas Braxton

Applicant: James Lawless
Philadelphia, PA

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Namibia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Leopards inhabit most of Namibia, except for the highly-populated northern region, the arid southeast farmlands, and the desert coast (IUCN/SSC Cat Specialist Group 2017:28–29; CITES 2018c:3–4). Approximately 77% of the countryside, about 570,000 km², provides suitable leopard habitat (Jacobson *et al.* 2016, Supplement, page 32). In Namibia, the key threat to leopard conservation is excessive off-take (illegal) of problem-causing animals due to human-

wildlife conflicts (recently ca. 70–110 leopards per year; CITES 2018c:7). These leopards usually are taken by the affected livestock owner (IUCN/SSC Cat Specialist Group 2017:116). Habitat loss, more so than in other range States, also negatively affects leopards in Namibia (Stein *et al.* 2016:13). These threats have not ceased (Stein *et al.* 2016).

A National leopard survey conducted by Stein *et al.* (2011), estimates leopard populations in Namibia to be approximately 14,154 individuals (CITES 2018c:5). This survey was conducted using camera-traps, questionnaires, spoor counts, and stakeholder interviews. The estimate takes into account high- (3.1 inds./100 km²), medium- (2.0 inds./100 km²), and low- (1.2 inds./100 km²) density estimates extrapolated over the surface areas of the corresponding habitats (IUCN/SSC Cat Specialist Group 2017:51). The combination of these components and the explanation about how they were derived suggest that the population estimate is reliable.

The national leopard population trend, according to the 2011 survey, is increasing (CITES 2018c:6). While this estimate (14,154 inds.) is much larger than earlier ones (e.g., 1,000–10,000 by Nowell and Jackson 1996:27), the current estimate could also be a more accurate approximation of a leopard population size that has not changed much over the years. This approximation, regardless, reflects the use of better survey techniques and the application of new relevant biological information (e.g., population densities and estimated area of occupancy; CITES 2018c:6). These results support the conclusion that the population trend is increasing.

Questions remain, however, about the quality of the biological data (CITES 2018c:7–8). In response, efforts are underway by the Government of Namibia to obtain detailed biological and ecological information about the species. Currently there is a national leopard census project underway (CITES 2018c:15). The results of this project will be used to inform the national leopard management strategy that is being developed. These efforts include field studies and a follow-up leopard survey to be completed in 2019 that will update the information available on the population status, density, and distribution of leopards in Namibia. These results will increase the quality of information available to wildlife managers.

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (James Lawless; Philadelphia, PA) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Namibia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Namibia GPS Coordinates: 21 Degrees 25' 54.99" S, 16 Degrees 13' 04.34"E, with Otjandaue Hunting Safaris; during a hunt on: July 10, 2019.

B. Namibia Information:

3. Leopards in Namibia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. Under national legislation in

Namibia, the leopard is listed as Protected Game (Nature Conservation Ordinance 4 of 1975, Controlled Wildlife Products and Trade Act, 2008) (CITES 2018c:8). Under this legislation, no person may kill, hunt, or possess a leopard, or trade in leopard products without a permit. However, owners or occupiers of land may kill leopards in defense of human life or to protect their livestock and must report the killing to the Ministry of Environment and Tourism (CITES 2008c:8). Leopards are also protected under other legislation that provides for stiff penalties for illegal possession, poaching, and trade in controlled wildlife products (see: IUCN/SSC Cat Specialist Group 2017:144–148). Despite these measures, many leopards are killed illegally.

4. Namibia has a well-established leopard trophy-hunting system (CITES 2018c:8). Several measures regulate the actual take of the trophy leopard, while other measures regulate the process under which leopard trophies are acquired. With regard to actual take, for example, hunts are conducted under the supervision of registered hunting guides. In addition, only adult, free ranging male leopards with a minimum skull measurement of 32 cm may be harvested. Based on an assessment of leopard skull size of trophies taken during 2004–2017, trophy quality is stable with skull size ranging 35–40 cm. This is well above the cut-off limit of 32 cm (CITES 2018c:12–13). Other restrictions also apply, for example: the export of specimens from leopards categorized as problem animals and destroyed is not allowed (CITES 2018c:8). These measures provide a measure of control over which leopards are harvested or exported.

5. The quantity of leopards killed as problem animals in Namibia is greater than the quantity taken as trophy hunted animals (IUCN/SSC Cat Specialist Group 2017:116–117). This situation may present management challenges because less than 50% of problem animal kills are reported to government wildlife officials who manage trophy hunting. Accurate estimates of problem-animals mortality are essential to management of the leopard trophy hunting system.

6. According to the U.S. Department of State (State 2018), Namibia uses a rigorous, science-based system for quota setting for hunting in communal conservancies. This practice ensures wildlife sustainability. The quota process begins by combining hunting data from the previous year with current information for the species. An initial quota is adjusted taking into account five factors that are indicated on a Quota Setting Sheet (e.g., population estimate, species status, and population trend). The quota setting process is a team effort by local conservancy committee members, the Ministry of Environment and Tourism, and conservation NGOs. Initial data compilation takes about 6 months.

7. The State Department (2018) reports that results of the quota setting process are confirmed through site visits by technical advisors to the conservancy. A preliminary quota based on annual population growth rate of the species is developed during a day-long discussion at the conservancy with team members. This preliminary quota is submitted to local ministry representatives for review and comment. Once the quota request sheet is agreed upon and signed by the respective parties, it is submitted to central ministry representatives for final approval. Throughout the year, monitoring of species utilization and benefits continues. At the end of the year, an annual report is generated for each conservancy. These results inform the next quota setting cycle.

8. With regard to processes under the trophy hunting system, the overall harvest quota is

allocated among hunting concessions taking into account the size of the parcel and any relevant scientific information such as estimated population size and habitat (CITES 2018c:9). Larger parcels with healthier leopard populations, supported by monitoring results, are awarded higher quotas. In the absence of population estimates, trophy quality and trend assessments are used as a guide (CITES 2018c:9).

9. Leopard off-take is well monitored (CITES 2018c:9). An individual leopard hunting permit, for example, must be obtained prior to the hunt. This permit is only valid for a specific site and time period (CITES 2018c:9). At least 7 days prior to a hunt, the hunting operator must give notice to the Ministry of Environment and Tourism. The results of the hunt must be reported within 72 hours regardless of the success of the outing (CITES 2018c:9). The hunting guide must also submit a detailed leopard record sheet (CITES 2018c:10). These measures assist ministry officials to track trophy hunts.

10. Additional tracking measures also apply to the monitoring system. All harvested leopard trophies, for example, must be presented to the Ministry of Environment and Tourism for inspection and tagging (CITES 2018c:10). This step is compulsory for the issuance of a CITES Export Permit. All skulls are also photographed and measured in order to assess age and physical condition. Small, young, or unhealthy leopards (for instance, due to disease or injury) should not be harvested. These measures assist managers to ensure that only adult male leopards that are in good condition and meet the minimum size threshold are harvested and exported (CITES 2018c:12–13).

11. According to Namibia (CITES 2018c:15–16), the leopard population is stable, increasing in size, and widely distributed. The trophy hunting program is strictly controlled. In addition, the trophy quality analysis suggests that larger leopards are being harvested, the annual quota of 2.4% of the total population is low and harvest management practices are good. Based on these circumstances, Namibian officials have concluded that their trophy hunting is sustainable and non-detrimental to the leopard population (CITES 2018c:16).

C. CITES Export Quota Program

12. Within the context of CITES, Namibia initially had an approved export quota of 100 individuals (CITES 2018a,b). That quota was modified in 2004 and increased to the current total of 250 leopards per year (UNEP 2018). Although this quota was increased, actual hunting trophy exports have been less. During 2004–2017, on average 142 leopards were harvested per year (about 56% of the annual quota; CITES 2018c:11). When the quota of 250 leopards was reached in 2008, Namibia instituted a temporary harvest moratorium, assessed population data, evaluated their hunting management strategy, and ultimately revised their hunting regulations. The quota of 250 leopards was maintained. Under the new regulations, hunting of female leopards and use of dogs were outlawed, and individual operator harvest limits were set. During 2008–2010, following the implementation of these new regulations, the number of leopard trophies harvested declined precipitously, but subsequent harvest levels have recovered to about 140–160 leopards per year (CITES 2018c:11–12).

13. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 166

trophies annually and 8 skins annually.

14. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

15. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Namibia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Namibia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

16. The Animals Committee adopted this recommendation (CITES 2018e:6).

17. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on Quotas for leopard hunting trophies (*Panthera pardus*): Report of the Animals Committee. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Namibia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on Interpretation and application of quotas for species included in Appendix I concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018f). These results may be taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

18. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for

Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

19. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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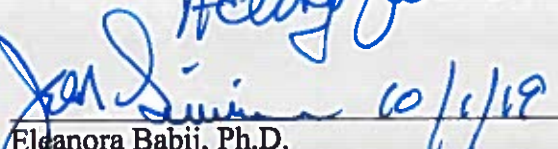
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DSA BIOLOGIST:

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 48846D

Date Received by DSA: July 30, 2019

DMA Contact: Miguel Richardson

Applicant: Howard Coker
Jacksonville, FL

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Namibia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

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In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Leopards inhabit most of Namibia, except for the highly-populated northern region, the arid southeast farmlands, and the desert coast (IUCN/SSC Cat Specialist Group 2017:28–29; CITES 2018c:3–4). Approximately 77% of the countryside, about 570,000 km², provides suitable leopard habitat (Jacobson *et al.* 2016, Supplement, page 32). In Namibia, the key threat to leopard conservation is excessive off-take (illegal) of problem-causing animals due to human-

wildlife conflicts (recently ca. 70–110 leopards per year; CITES 2018c:7). These leopards usually are taken by the affected livestock owner (IUCN/SSC Cat Specialist Group 2017:116). Habitat loss, more so than in other range States, also negatively affects leopards in Namibia (Stein *et al.* 2016:13). These threats have not ceased (Stein *et al.* 2016).

A National leopard survey conducted by Stein *et al.* (2011), estimates leopard populations in Namibia to be approximately 14,154 individuals (CITES 2018c:5). This survey was conducted using camera-traps, questionnaires, spoor counts, and stakeholder interviews. The estimate takes into account high- (3.1 inds./100 km²), medium- (2.0 inds./100 km²), and low- (1.2 inds./100 km²) density estimates extrapolated over the surface areas of the corresponding habitats (IUCN/SSC Cat Specialist Group 2017:51). The combination of these components and the explanation about how they were derived suggest that the population estimate is reliable.

The national leopard population trend, according to the 2011 survey, is increasing (CITES 2018c:6). While this estimate (14,154 inds.) is much larger than earlier ones (e.g., 1,000–10,000 by Nowell and Jackson 1996:27), the current estimate could also be a more accurate approximation of a leopard population size that has not changed much over the years. This approximation, regardless, reflects the use of better survey techniques and the application of new relevant biological information (e.g., population densities and estimated area of occupancy; CITES 2018c:6). These results support the conclusion that the population trend is increasing.

Questions remain, however, about the quality of the biological data (CITES 2018c:7–8). In response, efforts are underway by the Government of Namibia to obtain detailed biological and ecological information about the species. Currently there is a national leopard census project underway (CITES 2018c:15). The results of this project will be used to inform the national leopard management strategy that is being developed. These efforts include field studies and a follow-up leopard survey to be completed in 2019 that will update the information available on the population status, density, and distribution of leopards in Namibia. These results will increase the quality of information available to wildlife managers.

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Howard Coker; Jacksonville, FL) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Namibia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Namibia, Zambesi Region, Bwabwata National Park East; during a hunt scheduled on: August 27 to September 12, 2019.

B. Namibia Information:

3. Leopards in Namibia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. Under national legislation in Namibia, the leopard is listed as Protected Game (Nature Conservation Ordinance 4 of 1975,

Controlled Wildlife Products and Trade Act, 2008) (CITES 2018c:8). Under this legislation, no person may kill, hunt, or possess a leopard, or trade in leopard products without a permit. However, owners or occupiers of land may kill leopards in defense of human life or to protect their livestock and must report the killing to the Ministry of Environment and Tourism (CITES 2008c:8). Leopards are also protected under other legislation that provides for stiff penalties for illegal possession, poaching, and trade in controlled wildlife products (see: IUCN/SSC Cat Specialist Group 2017:144–148). Despite these measures, many leopards are killed illegally.

4. Namibia has a well-established leopard trophy-hunting system (CITES 2018c:8). Several measures regulate the actual take of the trophy leopard, while other measures regulate the process under which leopard trophies are acquired. With regard to actual take, for example, hunts are conducted under the supervision of registered hunting guides. In addition, only adult, free ranging male leopards with a minimum skull measurement of 32 cm may be harvested. Based on an assessment of leopard skull size of trophies taken during 2004–2017, trophy quality is stable with skull size ranging 35–40 cm. This is well above the cut-off limit of 32 cm (CITES 2018c:12–13). Other restrictions also apply, for example: the export of specimens from leopards categorized as problem animals and destroyed is not allowed (CITES 2018c:8). These measures provide a measure of control over which leopards are harvested or exported.

5. The quantity of leopards killed as problem animals in Namibia is greater than the quantity taken as trophy hunted animals (IUCN/SSC Cat Specialist Group 2017:116–117). This situation may present management challenges because less than 50% of problem animal kills are reported to government wildlife officials who manage trophy hunting. Accurate estimates of problem-animals mortality are essential to management of the leopard trophy hunting system.

6. According to the U.S. Department of State (State 2018), Namibia uses a rigorous, science-based system for quota setting for hunting in communal conservancies. This practice ensures wildlife sustainability. The quota process begins by combining hunting data from the previous year with current information for the species. An initial quota is adjusted taking into account five factors that are indicated on a Quota Setting Sheet (e.g., population estimate, species status, and population trend). The quota setting process is a team effort by local conservancy committee members, the Ministry of Environment and Tourism, and conservation NGOs. Initial data compilation takes about 6 months.

7. The State Department (2018) reports that results of the quota setting process are confirmed through site visits by technical advisors to the conservancy. A preliminary quota based on annual population growth rate of the species is developed during a day-long discussion at the conservancy with team members. This preliminary quota is submitted to local ministry representatives for review and comment. Once the quota request sheet is agreed upon and signed by the respective parties, it is submitted to central ministry representatives for final approval. Throughout the year, monitoring of species utilization and benefits continues. At the end of the year, an annual report is generated for each conservancy. These results inform the next quota setting cycle.

8. With regard to processes under the trophy hunting system, the overall harvest quota is allocated among hunting concessions taking into account the size of the parcel and any relevant

scientific information such as estimated population size and habitat (CITES 2018c:9). Larger parcels with healthier leopard populations, supported by monitoring results, are awarded higher quotas. In the absence of population estimates, trophy quality and trend assessments are used as a guide (CITES 2018c:9).

9. Leopard off-take is well monitored (CITES 2018c:9). An individual leopard hunting permit, for example, must be obtained prior to the hunt. This permit is only valid for a specific site and time period (CITES 2018c:9). At least 7 days prior to a hunt, the hunting operator must give notice to the Ministry of Environment and Tourism. The results of the hunt must be reported within 72 hours regardless of the success of the outing (CITES 2018c:9). The hunting guide must also submit a detailed leopard record sheet (CITES 2018c:10). These measures assist ministry officials to track trophy hunts.

10. Additional tracking measures also apply to the monitoring system. All harvested leopard trophies, for example, must be presented to the Ministry of Environment and Tourism for inspection and tagging (CITES 2018c:10). This step is compulsory for the issuance of a CITES Export Permit. All skulls are also photographed and measured in order to assess age and physical condition. Small, young, or unhealthy leopards (for instance, due to disease or injury) should not be harvested. These measures assist managers to ensure that only adult male leopards that are in good condition and meet the minimum size threshold are harvested and exported (CITES 2018c:12–13).

11. According to Namibia (CITES 2018c:15–16), the leopard population is stable, increasing in size, and widely distributed. The trophy hunting program is strictly controlled. In addition, the trophy quality analysis suggests that larger leopards are being harvested, the annual quota of 2.4% of the total population is low and harvest management practices are good. Based on these circumstances, Namibian officials have concluded that their trophy hunting is sustainable and non-detrimental to the leopard population (CITES 2018c:16).

C. CITES Export Quota Program

12. Within the context of CITES, Namibia initially had an approved export quota of 100 individuals (CITES 2018a,b). That quota was modified in 2004 and increased to the current total of 250 leopards per year (UNEP 2018). Although this quota was increased, actual hunting trophy exports have been less. During 2004–2017, on average 142 leopards were harvested per year (about 56% of the annual quota; CITES 2018c:11). When the quota of 250 leopards was reached in 2008, Namibia instituted a temporary harvest moratorium, assessed population data, evaluated their hunting management strategy, and ultimately revised their hunting regulations. The quota of 250 leopards was maintained. Under the new regulations, hunting of female leopards and use of dogs were outlawed, and individual operator harvest limits were set. During 2008–2010, following the implementation of these new regulations, the number of leopard trophies harvested declined precipitously, but subsequent harvest levels have recovered to about 140–160 leopards per year (CITES 2018c:11–12).

13. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 166 trophies annually and 8 skins annually.

14. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

15. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Namibia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Namibia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

16. The Animals Committee adopted this recommendation (CITES 2018e:6).

17. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on Quotas for leopard hunting trophies (*Panthera pardus*): Report of the Animals Committee. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Namibia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on Interpretation and application of quotas for species included in Appendix I concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018f). These results may be taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

18. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and

Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

19. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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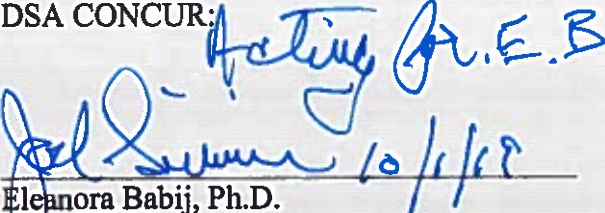
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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 48880D

Date Received by DSA: August 1, 2019

DMA Contact: Robert Williams

Applicant: Michael Bouchard
Bloomfield, MI

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Namibia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

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A National leopard survey conducted by Stein *et al.* (2011), estimates leopard populations in Namibia to be approximately 14,154 individuals (CITES 2018c:5). This survey was conducted using camera-traps, questionnaires, spoor counts, and stakeholder interviews. The estimate takes into account high- (3.1 inds./100 km²), medium- (2.0 inds./100 km²), and low- (1.2 inds./100 km²) density estimates extrapolated over the surface areas of the corresponding habitats (IUCN/SSC Cat Specialist Group 2017:51). The combination of these components and the explanation about how they were derived suggest that the population estimate is reliable.

The national leopard population trend, according to the 2011 survey, is increasing (CITES 2018c:6). While this estimate (14,154 inds.) is much larger than earlier ones (e.g., 1,000–10,000 by Nowell and Jackson 1996:27), the current estimate could also be a more accurate approximation of a leopard population size that has not changed much over the years. This approximation, regardless, reflects the use of better survey techniques and the application of new relevant biological information (e.g., population densities and estimated area of occupancy; CITES 2018c:6). These results support the conclusion that the population trend is increasing.

Questions remain, however, about the quality of the biological data (CITES 2018c:7–8). In response, efforts are underway by the Government of Namibia to obtain detailed biological and ecological information about the species. Currently there is a national leopard census project underway (CITES 2018c:15). The results of this project will be used to inform the national leopard management strategy that is being developed. These efforts include field studies and a follow-up leopard survey to be completed in 2019 that will update the information available on the population status, density, and distribution of leopards in Namibia. These results will increase the quality of information available to wildlife managers.

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Michael Bouchard; Bloomfield, MI) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Namibia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Namibia, Farm Mecklenburg, Windhoek; during a hunt scheduled on: April 4, 2019.

B. Namibia Information:

3. Leopards in Namibia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. Under national legislation in Namibia, the leopard is listed as Protected Game (Nature Conservation Ordinance 4 of 1975, Controlled Wildlife Products and Trade Act, 2008) (CITES 2018c:8). Under this legislation, no

person may kill, hunt, or possess a leopard, or trade in leopard products without a permit. However, owners or occupiers of land may kill leopards in defense of human life or to protect their livestock and must report the killing to the Ministry of Environment and Tourism (CITES 2008c:8). Leopards are also protected under other legislation that provides for stiff penalties for illegal possession, poaching, and trade in controlled wildlife products (see: IUCN/SSC Cat Specialist Group 2017:144–148). Despite these measures, many leopards are killed illegally.

4. Namibia has a well-established leopard trophy-hunting system (CITES 2018c:8). Several measures regulate the actual take of the trophy leopard, while other measures regulate the process under which leopard trophies are acquired. With regard to actual take, for example, hunts are conducted under the supervision of registered hunting guides. In addition, only adult, free ranging male leopards with a minimum skull measurement of 32 cm may be harvested. Based on an assessment of leopard skull size of trophies taken during 2004–2017, trophy quality is stable with skull size ranging 35–40 cm. This is well above the cut-off limit of 32 cm (CITES 2018c:12–13). Other restrictions also apply, for example: the export of specimens from leopards categorized as problem animals and destroyed is not allowed (CITES 2018c:8). These measures provide a measure of control over which leopards are harvested or exported.

5. The quantity of leopards killed as problem animals in Namibia is greater than the quantity taken as trophy hunted animals (IUCN/SSC Cat Specialist Group 2017:116–117). This situation may present management challenges because less than 50% of problem animal kills are reported to government wildlife officials who manage trophy hunting. Accurate estimates of problem-animals mortality are essential to management of the leopard trophy hunting system.

6. According to the U.S. Department of State (State 2018), Namibia uses a rigorous, science-based system for quota setting for hunting in communal conservancies. This practice ensures wildlife sustainability. The quota process begins by combining hunting data from the previous year with current information for the species. An initial quota is adjusted taking into account five factors that are indicated on a Quota Setting Sheet (e.g., population estimate, species status, and population trend). The quota setting process is a team effort by local conservancy committee members, the Ministry of Environment and Tourism, and conservation NGOs. Initial data compilation takes about 6 months.

7. The State Department (2018) reports that results of the quota setting process are confirmed through site visits by technical advisors to the conservancy. A preliminary quota based on annual population growth rate of the species is developed during a day-long discussion at the conservancy with team members. This preliminary quota is submitted to local ministry representatives for review and comment. Once the quota request sheet is agreed upon and signed by the respective parties, it is submitted to central ministry representatives for final approval. Throughout the year, monitoring of species utilization and benefits continues. At the end of the year, an annual report is generated for each conservancy. These results inform the next quota setting cycle.

8. With regard to processes under the trophy hunting system, the overall harvest quota is allocated among hunting concessions taking into account the size of the parcel and any relevant scientific information such as estimated population size and habitat (CITES 2018c:9). Larger

parcels with healthier leopard populations, supported by monitoring results, are awarded higher quotas. In the absence of population estimates, trophy quality and trend assessments are used as a guide (CITES 2018c:9).

9. Leopard off-take is well monitored (CITES 2018c:9). An individual leopard hunting permit, for example, must be obtained prior to the hunt. This permit is only valid for a specific site and time period (CITES 2018c:9). At least 7 days prior to a hunt, the hunting operator must give notice to the Ministry of Environment and Tourism. The results of the hunt must be reported within 72 hours regardless of the success of the outing (CITES 2018c:9). The hunting guide must also submit a detailed leopard record sheet (CITES 2018c:10). These measures assist ministry officials to track trophy hunts.

10. Additional tracking measures also apply to the monitoring system. All harvested leopard trophies, for example, must be presented to the Ministry of Environment and Tourism for inspection and tagging (CITES 2018c:10). This step is compulsory for the issuance of a CITES Export Permit. All skulls are also photographed and measured in order to assess age and physical condition. Small, young, or unhealthy leopards (for instance, due to disease or injury) should not be harvested. These measures assist managers to ensure that only adult male leopards that are in good condition and meet the minimum size threshold are harvested and exported (CITES 2018c:12–13).

11. According to Namibia (CITES 2018c:15–16), the leopard population is stable, increasing in size, and widely distributed. The trophy hunting program is strictly controlled. In addition, the trophy quality analysis suggests that larger leopards are being harvested, the annual quota of 2.4% of the total population is low and harvest management practices are good. Based on these circumstances, Namibian officials have concluded that their trophy hunting is sustainable and non-detrimental to the leopard population (CITES 2018c:16).

C. CITES Export Quota Program

12. Within the context of CITES, Namibia initially had an approved export quota of 100 individuals (CITES 2018a,b). That quota was modified in 2004 and increased to the current total of 250 leopards per year (UNEP 2018). Although this quota was increased, actual hunting trophy exports have been less. During 2004–2017, on average 142 leopards were harvested per year (about 56% of the annual quota; CITES 2018c:11). When the quota of 250 leopards was reached in 2008, Namibia instituted a temporary harvest moratorium, assessed population data, evaluated their hunting management strategy, and ultimately revised their hunting regulations. The quota of 250 leopards was maintained. Under the new regulations, hunting of female leopards and use of dogs were outlawed, and individual operator harvest limits were set. During 2008–2010, following the implementation of these new regulations, the number of leopard trophies harvested declined precipitously, but subsequent harvest levels have recovered to about 140–160 leopards per year (CITES 2018c:11–12).

13. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 166 trophies annually and 8 skins annually.

14. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

15. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Namibia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Namibia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

16. The Animals Committee adopted this recommendation (CITES 2018e:6).

17. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on Quotas for leopard hunting trophies (*Panthera pardus*): Report of the Animals Committee. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Namibia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on Interpretation and application of quotas for species included in Appendix I concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018f). These results may be taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

18. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of

Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

19. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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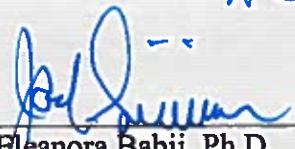
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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 50322D

Date Received by DSA: August 26, 2019

DMA Contact: Rogelio Hubbard

Applicant: Thea Beth Gates
Seguin, TX

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Namibia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Leopards inhabit most of Namibia, except for the highly-populated northern region, the arid southeast farmlands, and the desert coast (IUCN/SSC Cat Specialist Group 2017:28–29; CITES 2018c:3–4). Approximately 77% of the countryside, about 570,000 km², provides suitable leopard habitat (Jacobson *et al.* 2016, Supplement, page 32). In Namibia, the key threat to leopard conservation is excessive off-take (illegal) of problem-causing animals due to human-

wildlife conflicts (recently ca. 70–110 leopards per year; CITES 2018c:7). These leopards usually are taken by the affected livestock owner (IUCN/SSC Cat Specialist Group 2017:116). Habitat loss, more so than in other range States, also negatively affects leopards in Namibia (Stein *et al.* 2016:13). These threats have not ceased (Stein *et al.* 2016).

A National leopard survey conducted by Stein *et al.* (2011), estimates leopard populations in Namibia to be approximately 14,154 individuals (CITES 2018c:5). This survey was conducted using camera-traps, questionnaires, spoor counts, and stakeholder interviews. The estimate takes into account high- (3.1 inds./100 km²), medium- (2.0 inds./100 km²), and low- (1.2 inds./100 km²) density estimates extrapolated over the surface areas of the corresponding habitats (IUCN/SSC Cat Specialist Group 2017:51). The combination of these components and the explanation about how they were derived suggest that the population estimate is reliable.

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Questions remain, however, about the quality of the biological data (CITES 2018c:7–8). In response, efforts are underway by the Government of Namibia to obtain detailed biological and ecological information about the species. Currently there is a national leopard census project underway (CITES 2018c:15). The results of this project will be used to inform the national leopard management strategy that is being developed. These efforts include field studies and a follow-up leopard survey to be completed in 2019 that will update the information available on the population status, density, and distribution of leopards in Namibia. These results will increase the quality of information available to wildlife managers.

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Thea Beth Gates; Seguin, TX) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Namibia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Namibia, Silversand Farm/Ranch, Orumbo #198A, with Hugo Kotze Safaris, PH: Hugo Kotze; during a hunt scheduled on: June 1, 2019.

B. Namibia Information:

3. Leopards in Namibia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. Under national legislation in Namibia, the leopard is listed as Protected Game (Nature Conservation Ordinance 4 of 1975,

Controlled Wildlife Products and Trade Act, 2008) (CITES 2018c:8). Under this legislation, no person may kill, hunt, or possess a leopard, or trade in leopard products without a permit. However, owners or occupiers of land may kill leopards in defense of human life or to protect their livestock and must report the killing to the Ministry of Environment and Tourism (CITES 2008c:8). Leopards are also protected under other legislation that provides for stiff penalties for illegal possession, poaching, and trade in controlled wildlife products (see: IUCN/SSC Cat Specialist Group 2017:144–148). Despite these measures, many leopards are killed illegally.

4. Namibia has a well-established leopard trophy-hunting system (CITES 2018c:8). Several measures regulate the actual take of the trophy leopard, while other measures regulate the process under which leopard trophies are acquired. With regard to actual take, for example, hunts are conducted under the supervision of registered hunting guides. In addition, only adult, free ranging male leopards with a minimum skull measurement of 32 cm may be harvested. Based on an assessment of leopard skull size of trophies taken during 2004–2017, trophy quality is stable with skull size ranging 35–40 cm. This is well above the cut-off limit of 32 cm (CITES 2018c:12–13). Other restrictions also apply, for example: the export of specimens from leopards categorized as problem animals and destroyed is not allowed (CITES 2018c:8). These measures provide a measure of control over which leopards are harvested or exported.

5. The quantity of leopards killed as problem animals in Namibia is greater than the quantity taken as trophy hunted animals (IUCN/SSC Cat Specialist Group 2017:116–117). This situation may present management challenges because less than 50% of problem animal kills are reported to government wildlife officials who manage trophy hunting. Accurate estimates of problem-animals mortality are essential to management of the leopard trophy hunting system.

6. According to the U.S. Department of State (State 2018), Namibia uses a rigorous, science-based system for quota setting for hunting in communal conservancies. This practice ensures wildlife sustainability. The quota process begins by combining hunting data from the previous year with current information for the species. An initial quota is adjusted taking into account five factors that are indicated on a Quota Setting Sheet (e.g., population estimate, species status, and population trend). The quota setting process is a team effort by local conservancy committee members, the Ministry of Environment and Tourism, and conservation NGOs. Initial data compilation takes about 6 months.

7. The State Department (2018) reports that results of the quota setting process are confirmed through site visits by technical advisors to the conservancy. A preliminary quota based on annual population growth rate of the species is developed during a day-long discussion at the conservancy with team members. This preliminary quota is submitted to local ministry representatives for review and comment. Once the quota request sheet is agreed upon and signed by the respective parties, it is submitted to central ministry representatives for final approval. Throughout the year, monitoring of species utilization and benefits continues. At the end of the year, an annual report is generated for each conservancy. These results inform the next quota setting cycle.

8. With regard to processes under the trophy hunting system, the overall harvest quota is allocated among hunting concessions taking into account the size of the parcel and any relevant

scientific information such as estimated population size and habitat (CITES 2018c:9). Larger parcels with healthier leopard populations, supported by monitoring results, are awarded higher quotas. In the absence of population estimates, trophy quality and trend assessments are used as a guide (CITES 2018c:9).

9. Leopard off-take is well monitored (CITES 2018c:9). An individual leopard hunting permit, for example, must be obtained prior to the hunt. This permit is only valid for a specific site and time period (CITES 2018c:9). At least 7 days prior to a hunt, the hunting operator must give notice to the Ministry of Environment and Tourism. The results of the hunt must be reported within 72 hours regardless of the success of the outing (CITES 2018c:9). The hunting guide must also submit a detailed leopard record sheet (CITES 2018c:10). These measures assist ministry officials to track trophy hunts.

10. Additional tracking measures also apply to the monitoring system. All harvested leopard trophies, for example, must be presented to the Ministry of Environment and Tourism for inspection and tagging (CITES 2018c:10). This step is compulsory for the issuance of a CITES Export Permit. All skulls are also photographed and measured in order to assess age and physical condition. Small, young, or unhealthy leopards (for instance, due to disease or injury) should not be harvested. These measures assist managers to ensure that only adult male leopards that are in good condition and meet the minimum size threshold are harvested and exported (CITES 2018c:12–13).

11. According to Namibia (CITES 2018c:15–16), the leopard population is stable, increasing in size, and widely distributed. The trophy hunting program is strictly controlled. In addition, the trophy quality analysis suggests that larger leopards are being harvested, the annual quota of 2.4% of the total population is low and harvest management practices are good. Based on these circumstances, Namibian officials have concluded that their trophy hunting is sustainable and non-detrimental to the leopard population (CITES 2018c:16).

C. CITES Export Quota Program

12. Within the context of CITES, Namibia initially had an approved export quota of 100 individuals (CITES 2018a,b). That quota was modified in 2004 and increased to the current total of 250 leopards per year (UNEP 2018). Although this quota was increased, actual hunting trophy exports have been less. During 2004–2017, on average 142 leopards were harvested per year (about 56% of the annual quota; CITES 2018c:11). When the quota of 250 leopards was reached in 2008, Namibia instituted a temporary harvest moratorium, assessed population data, evaluated their hunting management strategy, and ultimately revised their hunting regulations. The quota of 250 leopards was maintained. Under the new regulations, hunting of female leopards and use of dogs were outlawed, and individual operator harvest limits were set. During 2008–2010, following the implementation of these new regulations, the number of leopard trophies harvested declined precipitously, but subsequent harvest levels have recovered to about 140–160 leopards per year (CITES 2018c:11–12).

13. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 166 trophies annually and 8 skins annually.

14. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

15. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Namibia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Namibia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

16. The Animals Committee adopted this recommendation (CITES 2018e:6).

17. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on Quotas for leopard hunting trophies (*Panthera pardus*): Report of the Animals Committee. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Namibia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on Interpretation and application of quotas for species included in Appendix I concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018f). These results may be taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

18. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and

Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

19. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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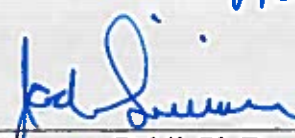
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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 51064D

Date Received by DSA: August 21, 2019

DMA Contact: Stephanie Whitley

Applicant: Dale C. Donndelinger
Anderson Island, WA

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Namibia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Leopards inhabit most of Namibia, except for the highly-populated northern region, the arid southeast farmlands, and the desert coast (IUCN/SSC Cat Specialist Group 2017:28–29; CITES 2018c:3–4). Approximately 77% of the countryside, about 570,000 km², provides suitable leopard habitat (Jacobson *et al.* 2016, Supplement, page 32). In Namibia, the key threat to leopard conservation is excessive off-take (illegal) of problem-causing animals due to human-

wildlife conflicts (recently ca. 70–110 leopards per year; CITES 2018c:7). These leopards usually are taken by the affected livestock owner (IUCN/SSC Cat Specialist Group 2017:116). Habitat loss, more so than in other range States, also negatively affects leopards in Namibia (Stein *et al.* 2016:13). These threats have not ceased (Stein *et al.* 2016).

A National leopard survey conducted by Stein *et al.* (2011), estimates leopard populations in Namibia to be approximately 14,154 individuals (CITES 2018c:5). This survey was conducted using camera-traps, questionnaires, spoor counts, and stakeholder interviews. The estimate takes into account high- (3.1 inds./100 km²), medium- (2.0 inds./100 km²), and low- (1.2 inds./100 km²) density estimates extrapolated over the surface areas of the corresponding habitats (IUCN/SSC Cat Specialist Group 2017:51). The combination of these components and the explanation about how they were derived suggest that the population estimate is reliable.

The national leopard population trend, according to the 2011 survey, is increasing (CITES 2018c:6). While this estimate (14,154 inds.) is much larger than earlier ones (e.g., 1,000–10,000 by Nowell and Jackson 1996:27), the current estimate could also be a more accurate approximation of a leopard population size that has not changed much over the years. This approximation, regardless, reflects the use of better survey techniques and the application of new relevant biological information (e.g., population densities and estimated area of occupancy; CITES 2018c:6). These results support the conclusion that the population trend is increasing.

Questions remain, however, about the quality of the biological data (CITES 2018c:7–8). In response, efforts are underway by the Government of Namibia to obtain detailed biological and ecological information about the species. Currently there is a national leopard census project underway (CITES 2018c:15). The results of this project will be used to inform the national leopard management strategy that is being developed. These efforts include field studies and a follow-up leopard survey to be completed in 2019 that will update the information available on the population status, density, and distribution of leopards in Namibia. These results will increase the quality of information available to wildlife managers.

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Dale C. Donndelinger; Anderson Island, WA) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Namibia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Koukuas and Gross Immentau #1056, 756, Namibia, with Africa Awaits Hunting Safaris; during a hunt scheduled on: June 15, 2019.

B. Namibia Information:

3. Leopards in Namibia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. Under national legislation in Namibia, the leopard is listed as Protected Game (Nature Conservation Ordinance 4 of 1975,

Controlled Wildlife Products and Trade Act, 2008) (CITES 2018c:8). Under this legislation, no person may kill, hunt, or possess a leopard, or trade in leopard products without a permit. However, owners or occupiers of land may kill leopards in defense of human life or to protect their livestock and must report the killing to the Ministry of Environment and Tourism (CITES 2008c:8). Leopards are also protected under other legislation that provides for stiff penalties for illegal possession, poaching, and trade in controlled wildlife products (see: IUCN/SSC Cat Specialist Group 2017:144–148). Despite these measures, many leopards are killed illegally.

4. Namibia has a well-established leopard trophy-hunting system (CITES 2018c:8). Several measures regulate the actual take of the trophy leopard, while other measures regulate the process under which leopard trophies are acquired. With regard to actual take, for example, hunts are conducted under the supervision of registered hunting guides. In addition, only adult, free ranging male leopards with a minimum skull measurement of 32 cm may be harvested. Based on an assessment of leopard skull size of trophies taken during 2004–2017, trophy quality is stable with skull size ranging 35–40 cm. This is well above the cut-off limit of 32 cm (CITES 2018c:12–13). Other restrictions also apply, for example: the export of specimens from leopards categorized as problem animals and destroyed is not allowed (CITES 2018c:8). These measures provide a measure of control over which leopards are harvested or exported.

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6. According to the U.S. Department of State (State 2018), Namibia uses a rigorous, science-based system for quota setting for hunting in communal conservancies. This practice ensures wildlife sustainability. The quota process begins by combining hunting data from the previous year with current information for the species. An initial quota is adjusted taking into account five factors that are indicated on a Quota Setting Sheet (e.g., population estimate, species status, and population trend). The quota setting process is a team effort by local conservancy committee members, the Ministry of Environment and Tourism, and conservation NGOs. Initial data compilation takes about 6 months.

7. The State Department (2018) reports that results of the quota setting process are confirmed through site visits by technical advisors to the conservancy. A preliminary quota based on annual population growth rate of the species is developed during a day-long discussion at the conservancy with team members. This preliminary quota is submitted to local ministry representatives for review and comment. Once the quota request sheet is agreed upon and signed by the respective parties, it is submitted to central ministry representatives for final approval. Throughout the year, monitoring of species utilization and benefits continues. At the end of the year, an annual report is generated for each conservancy. These results inform the next quota setting cycle.

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9. Leopard off-take is well monitored (CITES 2018c:9). An individual leopard hunting permit, for example, must be obtained prior to the hunt. This permit is only valid for a specific site and time period (CITES 2018c:9). At least 7 days prior to a hunt, the hunting operator must give notice to the Ministry of Environment and Tourism. The results of the hunt must be reported within 72 hours regardless of the success of the outing (CITES 2018c:9). The hunting guide must also submit a detailed leopard record sheet (CITES 2018c:10). These measures assist ministry officials to track trophy hunts.

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11. According to Namibia (CITES 2018c:15–16), the leopard population is stable, increasing in size, and widely distributed. The trophy hunting program is strictly controlled. In addition, the trophy quality analysis suggests that larger leopards are being harvested, the annual quota of 2.4% of the total population is low and harvest management practices are good. Based on these circumstances, Namibian officials have concluded that their trophy hunting is sustainable and non-detrimental to the leopard population (CITES 2018c:16).

C. CITES Export Quota Program

12. Within the context of CITES, Namibia initially had an approved export quota of 100 individuals (CITES 2018a,b). That quota was modified in 2004 and increased to the current total of 250 leopards per year (UNEP 2018). Although this quota was increased, actual hunting trophy exports have been less. During 2004–2017, on average 142 leopards were harvested per year (about 56% of the annual quota; CITES 2018c:11). When the quota of 250 leopards was reached in 2008, Namibia instituted a temporary harvest moratorium, assessed population data, evaluated their hunting management strategy, and ultimately revised their hunting regulations. The quota of 250 leopards was maintained. Under the new regulations, hunting of female leopards and use of dogs were outlawed, and individual operator harvest limits were set. During 2008–2010, following the implementation of these new regulations, the number of leopard trophies harvested declined precipitously, but subsequent harvest levels have recovered to about 140–160 leopards per year (CITES 2018c:11–12).

13. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 166 trophies annually and 8 skins annually.

14. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

15. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Namibia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Namibia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

16. The Animals Committee adopted this recommendation (CITES 2018e:6).

17. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on Quotas for leopard hunting trophies (*Panthera pardus*): Report of the Animals Committee. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Namibia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on Interpretation and application of quotas for species included in Appendix I concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018f). These results may be taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

18. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and

Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

19. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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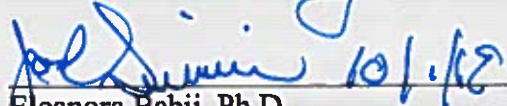
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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 53314D

Date Received by DSA: September 04, 2019

DMA Contact: Rogelio Hubbard

Applicant: Robert Kyle Smith
Dallas, TX

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Namibia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Leopards inhabit most of Namibia, except for the highly-populated northern region, the arid southeast farmlands, and the desert coast (IUCN/SSC Cat Specialist Group 2017:28–29; CITES 2018c:3–4). Approximately 77% of the countryside, about 570,000 km², provides suitable leopard habitat (Jacobson *et al.* 2016, Supplement, page 32). In Namibia, the key threat to leopard conservation is excessive off-take (illegal) of problem-causing animals due to human-

wildlife conflicts (recently ca. 70–110 leopards per year; CITES 2018c:7). These leopards usually are taken by the affected livestock owner (IUCN/SSC Cat Specialist Group 2017:116). Habitat loss, more so than in other range States, also negatively affects leopards in Namibia (Stein *et al.* 2016:13). These threats have not ceased (Stein *et al.* 2016).

A National leopard survey conducted by Stein *et al.* (2011), estimates leopard populations in Namibia to be approximately 14,154 individuals (CITES 2018c:5). This survey was conducted using camera-traps, questionnaires, spoor counts, and stakeholder interviews. The estimate takes into account high- (3.1 inds./100 km²), medium- (2.0 inds./100 km²), and low- (1.2 inds./100 km²) density estimates extrapolated over the surface areas of the corresponding habitats (IUCN/SSC Cat Specialist Group 2017:51). The combination of these components and the explanation about how they were derived suggest that the population estimate is reliable.

The national leopard population trend, according to the 2011 survey, is increasing (CITES 2018c:6). While this estimate (14,154 inds.) is much larger than earlier ones (e.g., 1,000–10,000 by Nowell and Jackson 1996:27), the current estimate could also be a more accurate approximation of a leopard population size that has not changed much over the years. This approximation, regardless, reflects the use of better survey techniques and the application of new relevant biological information (e.g., population densities and estimated area of occupancy; CITES 2018c:6). These results support the conclusion that the population trend is increasing.

Questions remain, however, about the quality of the biological data (CITES 2018c:7–8). In response, efforts are underway by the Government of Namibia to obtain detailed biological and ecological information about the species. Currently there is a national leopard census project underway (CITES 2018c:15). The results of this project will be used to inform the national leopard management strategy that is being developed. These efforts include field studies and a follow-up leopard survey to be completed in 2019 that will update the information available on the population status, density, and distribution of leopards in Namibia. These results will increase the quality of information available to wildlife managers.

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Robert Kyle Smith; Dallas, TX) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Namibia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Ondjou Conservancy, nearest city Windhoek, Namibia, with Professional Hunter Abiliu Hlhuilepo; during a hunt scheduled on: April 1-3, 2019.

B. Namibia Information:

3. Leopards in Namibia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. Under national legislation in Namibia, the leopard is listed as Protected Game (Nature Conservation Ordinance 4 of 1975,

Controlled Wildlife Products and Trade Act, 2008) (CITES 2018c:8). Under this legislation, no person may kill, hunt, or possess a leopard, or trade in leopard products without a permit. However, owners or occupiers of land may kill leopards in defense of human life or to protect their livestock and must report the killing to the Ministry of Environment and Tourism (CITES 2008c:8). Leopards are also protected under other legislation that provides for stiff penalties for illegal possession, poaching, and trade in controlled wildlife products (see: IUCN/SSC Cat Specialist Group 2017:144–148). Despite these measures, many leopards are killed illegally.

4. Namibia has a well-established leopard trophy-hunting system (CITES 2018c:8). Several measures regulate the actual take of the trophy leopard, while other measures regulate the process under which leopard trophies are acquired. With regard to actual take, for example, hunts are conducted under the supervision of registered hunting guides. In addition, only adult, free ranging male leopards with a minimum skull measurement of 32 cm may be harvested. Based on an assessment of leopard skull size of trophies taken during 2004–2017, trophy quality is stable with skull size ranging 35–40 cm. This is well above the cut-off limit of 32 cm (CITES 2018c:12–13). Other restrictions also apply, for example: the export of specimens from leopards categorized as problem animals and destroyed is not allowed (CITES 2018c:8). These measures provide a measure of control over which leopards are harvested or exported.

5. The quantity of leopards killed as problem animals in Namibia is greater than the quantity taken as trophy hunted animals (IUCN/SSC Cat Specialist Group 2017:116–117). This situation may present management challenges because less than 50% of problem animal kills are reported to government wildlife officials who manage trophy hunting. Accurate estimates of problem-animals mortality are essential to management of the leopard trophy hunting system.

6. According to the U.S. Department of State (State 2018), Namibia uses a rigorous, science-based system for quota setting for hunting in communal conservancies. This practice ensures wildlife sustainability. The quota process begins by combining hunting data from the previous year with current information for the species. An initial quota is adjusted taking into account five factors that are indicated on a Quota Setting Sheet (e.g., population estimate, species status, and population trend). The quota setting process is a team effort by local conservancy committee members, the Ministry of Environment and Tourism, and conservation NGOs. Initial data compilation takes about 6 months.

7. The State Department (2018) reports that results of the quota setting process are confirmed through site visits by technical advisors to the conservancy. A preliminary quota based on annual population growth rate of the species is developed during a day-long discussion at the conservancy with team members. This preliminary quota is submitted to local ministry representatives for review and comment. Once the quota request sheet is agreed upon and signed by the respective parties, it is submitted to central ministry representatives for final approval. Throughout the year, monitoring of species utilization and benefits continues. At the end of the year, an annual report is generated for each conservancy. These results inform the next quota setting cycle.

8. With regard to processes under the trophy hunting system, the overall harvest quota is allocated among hunting concessions taking into account the size of the parcel and any relevant

scientific information such as estimated population size and habitat (CITES 2018c:9). Larger parcels with healthier leopard populations, supported by monitoring results, are awarded higher quotas. In the absence of population estimates, trophy quality and trend assessments are used as a guide (CITES 2018c:9).

9. Leopard off-take is well monitored (CITES 2018c:9). An individual leopard hunting permit, for example, must be obtained prior to the hunt. This permit is only valid for a specific site and time period (CITES 2018c:9). At least 7 days prior to a hunt, the hunting operator must give notice to the Ministry of Environment and Tourism. The results of the hunt must be reported within 72 hours regardless of the success of the outing (CITES 2018c:9). The hunting guide must also submit a detailed leopard record sheet (CITES 2018c:10). These measures assist ministry officials to track trophy hunts.

10. Additional tracking measures also apply to the monitoring system. All harvested leopard trophies, for example, must be presented to the Ministry of Environment and Tourism for inspection and tagging (CITES 2018c:10). This step is compulsory for the issuance of a CITES Export Permit. All skulls are also photographed and measured in order to assess age and physical condition. Small, young, or unhealthy leopards (for instance, due to disease or injury) should not be harvested. These measures assist managers to ensure that only adult male leopards that are in good condition and meet the minimum size threshold are harvested and exported (CITES 2018c:12–13).

11. According to Namibia (CITES 2018c:15–16), the leopard population is stable, increasing in size, and widely distributed. The trophy hunting program is strictly controlled. In addition, the trophy quality analysis suggests that larger leopards are being harvested, the annual quota of 2.4% of the total population is low and harvest management practices are good. Based on these circumstances, Namibian officials have concluded that their trophy hunting is sustainable and non-detrimental to the leopard population (CITES 2018c:16).

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15. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Namibia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Namibia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

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18. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and

Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

19. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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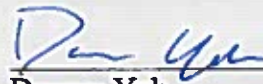
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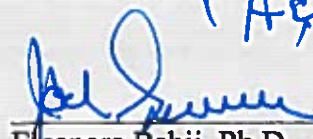
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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 53454D

Date Received by DSA: September 04, 2019

DMA Contact: Rogelio Hubbard

Applicant: Theodore Nelson
Spring, TX

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Namibia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Leopards inhabit most of Namibia, except for the highly-populated northern region, the arid southeast farmlands, and the desert coast (IUCN/SSC Cat Specialist Group 2017:28–29; CITES 2018c:3–4). Approximately 77% of the countryside, about 570,000 km², provides suitable leopard habitat (Jacobson *et al.* 2016, Supplement, page 32). In Namibia, the key threat to leopard conservation is excessive off-take (illegal) of problem-causing animals due to human-

wildlife conflicts (recently ca. 70–110 leopards per year; CITES 2018c:7). These leopards usually are taken by the affected livestock owner (IUCN/SSC Cat Specialist Group 2017:116). Habitat loss, more so than in other range States, also negatively affects leopards in Namibia (Stein *et al.* 2016:13). These threats have not ceased (Stein *et al.* 2016).

A National leopard survey conducted by Stein *et al.* (2011), estimates leopard populations in Namibia to be approximately 14,154 individuals (CITES 2018c:5). This survey was conducted using camera-traps, questionnaires, spoor counts, and stakeholder interviews. The estimate takes into account high- (3.1 inds./100 km²), medium- (2.0 inds./100 km²), and low- (1.2 inds./100 km²) density estimates extrapolated over the surface areas of the corresponding habitats (IUCN/SSC Cat Specialist Group 2017:51). The combination of these components and the explanation about how they were derived suggest that the population estimate is reliable.

The national leopard population trend, according to the 2011 survey, is increasing (CITES 2018c:6). While this estimate (14,154 inds.) is much larger than earlier ones (e.g., 1,000–10,000 by Nowell and Jackson 1996:27), the current estimate could also be a more accurate approximation of a leopard population size that has not changed much over the years. This approximation, regardless, reflects the use of better survey techniques and the application of new relevant biological information (e.g., population densities and estimated area of occupancy; CITES 2018c:6). These results support the conclusion that the population trend is increasing.

Questions remain, however, about the quality of the biological data (CITES 2018c:7–8). In response, efforts are underway by the Government of Namibia to obtain detailed biological and ecological information about the species. Currently there is a national leopard census project underway (CITES 2018c:15). The results of this project will be used to inform the national leopard management strategy that is being developed. These efforts include field studies and a follow-up leopard survey to be completed in 2019 that will update the information available on the population status, density, and distribution of leopards in Namibia. These results will increase the quality of information available to wildlife managers.

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Theodore Nelson; Spring, TX) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Namibia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Namibia, Sondernam #467, Outjo, with Andre Bennett of Undjouo Hunting Safaris; during a hunt scheduled on: April 24- May 8, 2019.

B. Namibia Information:

3. Leopards in Namibia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. Under national legislation in Namibia, the leopard is listed as Protected Game (Nature Conservation Ordinance 4 of 1975,

Controlled Wildlife Products and Trade Act, 2008) (CITES 2018c:8). Under this legislation, no person may kill, hunt, or possess a leopard, or trade in leopard products without a permit. However, owners or occupiers of land may kill leopards in defense of human life or to protect their livestock and must report the killing to the Ministry of Environment and Tourism (CITES 2008c:8). Leopards are also protected under other legislation that provides for stiff penalties for illegal possession, poaching, and trade in controlled wildlife products (see: IUCN/SSC Cat Specialist Group 2017:144–148). Despite these measures, many leopards are killed illegally.

4. Namibia has a well-established leopard trophy-hunting system (CITES 2018c:8). Several measures regulate the actual take of the trophy leopard, while other measures regulate the process under which leopard trophies are acquired. With regard to actual take, for example, hunts are conducted under the supervision of registered hunting guides. In addition, only adult, free ranging male leopards with a minimum skull measurement of 32 cm may be harvested. Based on an assessment of leopard skull size of trophies taken during 2004–2017, trophy quality is stable with skull size ranging 35–40 cm. This is well above the cut-off limit of 32 cm (CITES 2018c:12–13). Other restrictions also apply, for example: the export of specimens from leopards categorized as problem animals and destroyed is not allowed (CITES 2018c:8). These measures provide a measure of control over which leopards are harvested or exported.

5. The quantity of leopards killed as problem animals in Namibia is greater than the quantity taken as trophy hunted animals (IUCN/SSC Cat Specialist Group 2017:116–117). This situation may present management challenges because less than 50% of problem animal kills are reported to government wildlife officials who manage trophy hunting. Accurate estimates of problem-animals mortality are essential to management of the leopard trophy hunting system.

6. According to the U.S. Department of State (State 2018), Namibia uses a rigorous, science-based system for quota setting for hunting in communal conservancies. This practice ensures wildlife sustainability. The quota process begins by combining hunting data from the previous year with current information for the species. An initial quota is adjusted taking into account five factors that are indicated on a Quota Setting Sheet (e.g., population estimate, species status, and population trend). The quota setting process is a team effort by local conservancy committee members, the Ministry of Environment and Tourism, and conservation NGOs. Initial data compilation takes about 6 months.

7. The State Department (2018) reports that results of the quota setting process are confirmed through site visits by technical advisors to the conservancy. A preliminary quota based on annual population growth rate of the species is developed during a day-long discussion at the conservancy with team members. This preliminary quota is submitted to local ministry representatives for review and comment. Once the quota request sheet is agreed upon and signed by the respective parties, it is submitted to central ministry representatives for final approval. Throughout the year, monitoring of species utilization and benefits continues. At the end of the year, an annual report is generated for each conservancy. These results inform the next quota setting cycle.

8. With regard to processes under the trophy hunting system, the overall harvest quota is allocated among hunting concessions taking into account the size of the parcel and any relevant

scientific information such as estimated population size and habitat (CITES 2018c:9). Larger parcels with healthier leopard populations, supported by monitoring results, are awarded higher quotas. In the absence of population estimates, trophy quality and trend assessments are used as a guide (CITES 2018c:9).

9. Leopard off-take is well monitored (CITES 2018c:9). An individual leopard hunting permit, for example, must be obtained prior to the hunt. This permit is only valid for a specific site and time period (CITES 2018c:9). At least 7 days prior to a hunt, the hunting operator must give notice to the Ministry of Environment and Tourism. The results of the hunt must be reported within 72 hours regardless of the success of the outing (CITES 2018c:9). The hunting guide must also submit a detailed leopard record sheet (CITES 2018c:10). These measures assist ministry officials to track trophy hunts.

10. Additional tracking measures also apply to the monitoring system. All harvested leopard trophies, for example, must be presented to the Ministry of Environment and Tourism for inspection and tagging (CITES 2018c:10). This step is compulsory for the issuance of a CITES Export Permit. All skulls are also photographed and measured in order to assess age and physical condition. Small, young, or unhealthy leopards (for instance, due to disease or injury) should not be harvested. These measures assist managers to ensure that only adult male leopards that are in good condition and meet the minimum size threshold are harvested and exported (CITES 2018c:12–13).

11. According to Namibia (CITES 2018c:15–16), the leopard population is stable, increasing in size, and widely distributed. The trophy hunting program is strictly controlled. In addition, the trophy quality analysis suggests that larger leopards are being harvested, the annual quota of 2.4% of the total population is low and harvest management practices are good. Based on these circumstances, Namibian officials have concluded that their trophy hunting is sustainable and non-detrimental to the leopard population (CITES 2018c:16).

C. CITES Export Quota Program

12. Within the context of CITES, Namibia initially had an approved export quota of 100 individuals (CITES 2018a,b). That quota was modified in 2004 and increased to the current total of 250 leopards per year (UNEP 2018). Although this quota was increased, actual hunting trophy exports have been less. During 2004–2017, on average 142 leopards were harvested per year (about 56% of the annual quota; CITES 2018c:11). When the quota of 250 leopards was reached in 2008, Namibia instituted a temporary harvest moratorium, assessed population data, evaluated their hunting management strategy, and ultimately revised their hunting regulations. The quota of 250 leopards was maintained. Under the new regulations, hunting of female leopards and use of dogs were outlawed, and individual operator harvest limits were set. During 2008–2010, following the implementation of these new regulations, the number of leopard trophies harvested declined precipitously, but subsequent harvest levels have recovered to about 140–160 leopards per year (CITES 2018c:11–12).

13. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 166 trophies annually and 8 skins annually.

14. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

15. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Namibia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Namibia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

16. The Animals Committee adopted this recommendation (CITES 2018e:6).

17. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on Quotas for leopard hunting trophies (*Panthera pardus*): Report of the Animals Committee. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Namibia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on Interpretation and application of quotas for species included in Appendix I concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018f). These results may be taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

18. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and

Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

19. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)

Record of Advice on Import Permit Application

Application Number: 53592D

Date Received by DSA: September 09, 2019

DMA Contact: Stephanie Whitley

Applicant: Joe Lynn McCray
Hopeton, OK

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Namibia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Leopards inhabit most of Namibia, except for the highly-populated northern region, the arid southeast farmlands, and the desert coast (IUCN/SSC Cat Specialist Group 2017:28–29; CITES 2018c:3–4). Approximately 77% of the countryside, about 570,000 km², provides suitable leopard habitat (Jacobson *et al.* 2016, Supplement, page 32). In Namibia, the key threat to leopard conservation is excessive off-take (illegal) of problem-causing animals due to human-

wildlife conflicts (recently ca. 70–110 leopards per year; CITES 2018c:7). These leopards usually are taken by the affected livestock owner (IUCN/SSC Cat Specialist Group 2017:116). Habitat loss, more so than in other range States, also negatively affects leopards in Namibia (Stein *et al.* 2016:13). These threats have not ceased (Stein *et al.* 2016).

A National leopard survey conducted by Stein *et al.* (2011), estimates leopard populations in Namibia to be approximately 14,154 individuals (CITES 2018c:5). This survey was conducted using camera-traps, questionnaires, spoor counts, and stakeholder interviews. The estimate takes into account high- (3.1 inds./100 km²), medium- (2.0 inds./100 km²), and low- (1.2 inds./100 km²) density estimates extrapolated over the surface areas of the corresponding habitats (IUCN/SSC Cat Specialist Group 2017:51). The combination of these components and the explanation about how they were derived suggest that the population estimate is reliable.

The national leopard population trend, according to the 2011 survey, is increasing (CITES 2018c:6). While this estimate (14,154 inds.) is much larger than earlier ones (e.g., 1,000–10,000 by Nowell and Jackson 1996:27), the current estimate could also be a more accurate approximation of a leopard population size that has not changed much over the years. This approximation, regardless, reflects the use of better survey techniques and the application of new relevant biological information (e.g., population densities and estimated area of occupancy; CITES 2018c:6). These results support the conclusion that the population trend is increasing.

Questions remain, however, about the quality of the biological data (CITES 2018c:7–8). In response, efforts are underway by the Government of Namibia to obtain detailed biological and ecological information about the species. Currently there is a national leopard census project underway (CITES 2018c:15). The results of this project will be used to inform the national leopard management strategy that is being developed. These efforts include field studies and a follow-up leopard survey to be completed in 2019 that will update the information available on the population status, density, and distribution of leopards in Namibia. These results will increase the quality of information available to wildlife managers.

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Joe McCray; Hopeton, OK) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Namibia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Omatendeka Conservancy, nearest city Windhoek, Namibia, with Jamy Traut Hunting Safaris; during a hunt scheduled on: July 11, 2019.

B. Namibia Information:

3. Leopards in Namibia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. Under national legislation in Namibia, the leopard is listed as Protected Game (Nature Conservation Ordinance 4 of 1975,

Controlled Wildlife Products and Trade Act, 2008) (CITES 2018c:8). Under this legislation, no person may kill, hunt, or possess a leopard, or trade in leopard products without a permit. However, owners or occupiers of land may kill leopards in defense of human life or to protect their livestock and must report the killing to the Ministry of Environment and Tourism (CITES 2008c:8). Leopards are also protected under other legislation that provides for stiff penalties for illegal possession, poaching, and trade in controlled wildlife products (see: IUCN/SSC Cat Specialist Group 2017:144–148). Despite these measures, many leopards are killed illegally.

4. Namibia has a well-established leopard trophy-hunting system (CITES 2018c:8). Several measures regulate the actual take of the trophy leopard, while other measures regulate the process under which leopard trophies are acquired. With regard to actual take, for example, hunts are conducted under the supervision of registered hunting guides. In addition, only adult, free ranging male leopards with a minimum skull measurement of 32 cm may be harvested. Based on an assessment of leopard skull size of trophies taken during 2004–2017, trophy quality is stable with skull size ranging 35–40 cm. This is well above the cut-off limit of 32 cm (CITES 2018c:12–13). Other restrictions also apply, for example: the export of specimens from leopards categorized as problem animals and destroyed is not allowed (CITES 2018c:8). These measures provide a measure of control over which leopards are harvested or exported.

5. The quantity of leopards killed as problem animals in Namibia is greater than the quantity taken as trophy hunted animals (IUCN/SSC Cat Specialist Group 2017:116–117). This situation may present management challenges because less than 50% of problem animal kills are reported to government wildlife officials who manage trophy hunting. Accurate estimates of problem-animals mortality are essential to management of the leopard trophy hunting system.

6. According to the U.S. Department of State (State 2018), Namibia uses a rigorous, science-based system for quota setting for hunting in communal conservancies. This practice ensures wildlife sustainability. The quota process begins by combining hunting data from the previous year with current information for the species. An initial quota is adjusted taking into account five factors that are indicated on a Quota Setting Sheet (e.g., population estimate, species status, and population trend). The quota setting process is a team effort by local conservancy committee members, the Ministry of Environment and Tourism, and conservation NGOs. Initial data compilation takes about 6 months.

7. The State Department (2018) reports that results of the quota setting process are confirmed through site visits by technical advisors to the conservancy. A preliminary quota based on annual population growth rate of the species is developed during a day-long discussion at the conservancy with team members. This preliminary quota is submitted to local ministry representatives for review and comment. Once the quota request sheet is agreed upon and signed by the respective parties, it is submitted to central ministry representatives for final approval. Throughout the year, monitoring of species utilization and benefits continues. At the end of the year, an annual report is generated for each conservancy. These results inform the next quota setting cycle.

8. With regard to processes under the trophy hunting system, the overall harvest quota is allocated among hunting concessions taking into account the size of the parcel and any relevant

scientific information such as estimated population size and habitat (CITES 2018c:9). Larger parcels with healthier leopard populations, supported by monitoring results, are awarded higher quotas. In the absence of population estimates, trophy quality and trend assessments are used as a guide (CITES 2018c:9).

9. Leopard off-take is well monitored (CITES 2018c:9). An individual leopard hunting permit, for example, must be obtained prior to the hunt. This permit is only valid for a specific site and time period (CITES 2018c:9). At least 7 days prior to a hunt, the hunting operator must give notice to the Ministry of Environment and Tourism. The results of the hunt must be reported within 72 hours regardless of the success of the outing (CITES 2018c:9). The hunting guide must also submit a detailed leopard record sheet (CITES 2018c:10). These measures assist ministry officials to track trophy hunts.

10. Additional tracking measures also apply to the monitoring system. All harvested leopard trophies, for example, must be presented to the Ministry of Environment and Tourism for inspection and tagging (CITES 2018c:10). This step is compulsory for the issuance of a CITES Export Permit. All skulls are also photographed and measured in order to assess age and physical condition. Small, young, or unhealthy leopards (for instance, due to disease or injury) should not be harvested. These measures assist managers to ensure that only adult male leopards that are in good condition and meet the minimum size threshold are harvested and exported (CITES 2018c:12–13).

11. According to Namibia (CITES 2018c:15–16), the leopard population is stable, increasing in size, and widely distributed. The trophy hunting program is strictly controlled. In addition, the trophy quality analysis suggests that larger leopards are being harvested, the annual quota of 2.4% of the total population is low and harvest management practices are good. Based on these circumstances, Namibian officials have concluded that their trophy hunting is sustainable and non-detrimental to the leopard population (CITES 2018c:16).

C. CITES Export Quota Program

12. Within the context of CITES, Namibia initially had an approved export quota of 100 individuals (CITES 2018a,b). That quota was modified in 2004 and increased to the current total of 250 leopards per year (UNEP 2018). Although this quota was increased, actual hunting trophy exports have been less. During 2004–2017, on average 142 leopards were harvested per year (about 56% of the annual quota; CITES 2018c:11). When the quota of 250 leopards was reached in 2008, Namibia instituted a temporary harvest moratorium, assessed population data, evaluated their hunting management strategy, and ultimately revised their hunting regulations. The quota of 250 leopards was maintained. Under the new regulations, hunting of female leopards and use of dogs were outlawed, and individual operator harvest limits were set. During 2008–2010, following the implementation of these new regulations, the number of leopard trophies harvested declined precipitously, but subsequent harvest levels have recovered to about 140–160 leopards per year (CITES 2018c:11–12).

13. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 166 trophies annually and 8 skins annually.

14. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

15. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Namibia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Namibia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

16. The Animals Committee adopted this recommendation (CITES 2018e:6).

17. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on Quotas for leopard hunting trophies (*Panthera pardus*): Report of the Animals Committee. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Namibia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on Interpretation and application of quotas for species included in Appendix I concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018f). These results may be taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

18. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and

Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

19. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 54764D

Date Received by DSA: September 18, 2019

DMA Contact: Rogelio Hubbard

Applicant: Mark Lawrence Maunder
Sandy, OR

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Namibia)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Species Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae) (Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This rangewide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Leopards inhabit most of Namibia, except for the highly-populated northern region, the arid southeast farmlands, and the desert coast (IUCN/SSC Cat Specialist Group 2017:28–29; CITES 2018c:3–4). Approximately 77% of the countryside, about 570,000 km², provides suitable leopard habitat (Jacobson *et al.* 2016, Supplement, page 32). In Namibia, the key threat to leopard conservation is excessive off-take (illegal) of problem-causing animals due to human-

wildlife conflicts (recently ca. 70–110 leopards per year; CITES 2018c:7). These leopards usually are taken by the affected livestock owner (IUCN/SSC Cat Specialist Group 2017:116). Habitat loss, more so than in other range States, also negatively affects leopards in Namibia (Stein *et al.* 2016:13). These threats have not ceased (Stein *et al.* 2016).

A National leopard survey conducted by Stein *et al.* (2011), estimates leopard populations in Namibia to be approximately 14,154 individuals (CITES 2018c:5). This survey was conducted using camera-traps, questionnaires, spoor counts, and stakeholder interviews. The estimate takes into account high- (3.1 inds./100 km²), medium- (2.0 inds./100 km²), and low- (1.2 inds./100 km²) density estimates extrapolated over the surface areas of the corresponding habitats (IUCN/SSC Cat Specialist Group 2017:51). The combination of these components and the explanation about how they were derived suggest that the population estimate is reliable.

The national leopard population trend, according to the 2011 survey, is increasing (CITES 2018c:6). While this estimate (14,154 inds.) is much larger than earlier ones (e.g., 1,000–10,000 by Nowell and Jackson 1996:27), the current estimate could also be a more accurate approximation of a leopard population size that has not changed much over the years. This approximation, regardless, reflects the use of better survey techniques and the application of new relevant biological information (e.g., population densities and estimated area of occupancy; CITES 2018c:6). These results support the conclusion that the population trend is increasing.

Questions remain, however, about the quality of the biological data (CITES 2018c:7–8). In response, efforts are underway by the Government of Namibia to obtain detailed biological and ecological information about the species. Currently there is a national leopard census project underway (CITES 2018c:15). The results of this project will be used to inform the national leopard management strategy that is being developed. These efforts include field studies and a follow-up leopard survey to be completed in 2019 that will update the information available on the population status, density, and distribution of leopards in Namibia. These results will increase the quality of information available to wildlife managers.

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Mark Maunder; Sandy OR) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Namibia.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Mayuni, Namibia, with PH: Emile Kirchner of Jamy Traut Safaris; during a hunt scheduled on: April 27, 2018.

B. Namibia Information:

3. Leopards in Namibia are managed under a sustainable use program that includes trophy hunting and are the beneficiary of several protective measures. Under national legislation in Namibia, the leopard is listed as Protected Game (Nature Conservation Ordinance 4 of 1975,

Controlled Wildlife Products and Trade Act, 2008) (CITES 2018c:8). Under this legislation, no person may kill, hunt, or possess a leopard, or trade in leopard products without a permit. However, owners or occupiers of land may kill leopards in defense of human life or to protect their livestock and must report the killing to the Ministry of Environment and Tourism (CITES 2008c:8). Leopards are also protected under other legislation that provides for stiff penalties for illegal possession, poaching, and trade in controlled wildlife products (see: IUCN/SSC Cat Specialist Group 2017:144–148). Despite these measures, many leopards are killed illegally.

4. Namibia has a well-established leopard trophy-hunting system (CITES 2018c:8). Several measures regulate the actual take of the trophy leopard, while other measures regulate the process under which leopard trophies are acquired. With regard to actual take, for example, hunts are conducted under the supervision of registered hunting guides. In addition, only adult, free ranging male leopards with a minimum skull measurement of 32 cm may be harvested. Based on an assessment of leopard skull size of trophies taken during 2004–2017, trophy quality is stable with skull size ranging 35–40 cm. This is well above the cut-off limit of 32 cm (CITES 2018c:12–13). Other restrictions also apply, for example: the export of specimens from leopards categorized as problem animals and destroyed is not allowed (CITES 2018c:8). These measures provide a measure of control over which leopards are harvested or exported.

5. The quantity of leopards killed as problem animals in Namibia is greater than the quantity taken as trophy hunted animals (IUCN/SSC Cat Specialist Group 2017:116–117). This situation may present management challenges because less than 50% of problem animal kills are reported to government wildlife officials who manage trophy hunting. Accurate estimates of problem-animals mortality are essential to management of the leopard trophy hunting system.

6. According to the U.S. Department of State (State 2018), Namibia uses a rigorous, science-based system for quota setting for hunting in communal conservancies. This practice ensures wildlife sustainability. The quota process begins by combining hunting data from the previous year with current information for the species. An initial quota is adjusted taking into account five factors that are indicated on a Quota Setting Sheet (e.g., population estimate, species status, and population trend). The quota setting process is a team effort by local conservancy committee members, the Ministry of Environment and Tourism, and conservation NGOs. Initial data compilation takes about 6 months.

7. The State Department (2018) reports that results of the quota setting process are confirmed through site visits by technical advisors to the conservancy. A preliminary quota based on annual population growth rate of the species is developed during a day-long discussion at the conservancy with team members. This preliminary quota is submitted to local ministry representatives for review and comment. Once the quota request sheet is agreed upon and signed by the respective parties, it is submitted to central ministry representatives for final approval. Throughout the year, monitoring of species utilization and benefits continues. At the end of the year, an annual report is generated for each conservancy. These results inform the next quota setting cycle.

8. With regard to processes under the trophy hunting system, the overall harvest quota is allocated among hunting concessions taking into account the size of the parcel and any relevant

scientific information such as estimated population size and habitat (CITES 2018c:9). Larger parcels with healthier leopard populations, supported by monitoring results, are awarded higher quotas. In the absence of population estimates, trophy quality and trend assessments are used as a guide (CITES 2018c:9).

9. Leopard off-take is well monitored (CITES 2018c:9). An individual leopard hunting permit, for example, must be obtained prior to the hunt. This permit is only valid for a specific site and time period (CITES 2018c:9). At least 7 days prior to a hunt, the hunting operator must give notice to the Ministry of Environment and Tourism. The results of the hunt must be reported within 72 hours regardless of the success of the outing (CITES 2018c:9). The hunting guide must also submit a detailed leopard record sheet (CITES 2018c:10). These measures assist ministry officials to track trophy hunts.

10. Additional tracking measures also apply to the monitoring system. All harvested leopard trophies, for example, must be presented to the Ministry of Environment and Tourism for inspection and tagging (CITES 2018c:10). This step is compulsory for the issuance of a CITES Export Permit. All skulls are also photographed and measured in order to assess age and physical condition. Small, young, or unhealthy leopards (for instance, due to disease or injury) should not be harvested. These measures assist managers to ensure that only adult male leopards that are in good condition and meet the minimum size threshold are harvested and exported (CITES 2018c:12–13).

11. According to Namibia (CITES 2018c:15–16), the leopard population is stable, increasing in size, and widely distributed. The trophy hunting program is strictly controlled. In addition, the trophy quality analysis suggests that larger leopards are being harvested, the annual quota of 2.4% of the total population is low and harvest management practices are good. Based on these circumstances, Namibian officials have concluded that their trophy hunting is sustainable and non-detrimental to the leopard population (CITES 2018c:16).

C. CITES Export Quota Program

12. Within the context of CITES, Namibia initially had an approved export quota of 100 individuals (CITES 2018a,b). That quota was modified in 2004 and increased to the current total of 250 leopards per year (UNEP 2018). Although this quota was increased, actual hunting trophy exports have been less. During 2004–2017, on average 142 leopards were harvested per year (about 56% of the annual quota; CITES 2018c:11). When the quota of 250 leopards was reached in 2008, Namibia instituted a temporary harvest moratorium, assessed population data, evaluated their hunting management strategy, and ultimately revised their hunting regulations. The quota of 250 leopards was maintained. Under the new regulations, hunting of female leopards and use of dogs were outlawed, and individual operator harvest limits were set. During 2008–2010, following the implementation of these new regulations, the number of leopard trophies harvested declined precipitously, but subsequent harvest levels have recovered to about 140–160 leopards per year (CITES 2018c:11–12).

13. Since 2006, according to UNEP-WCMC (2018), reported gross exports have averaged 166 trophies annually and 8 skins annually.

14. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

15. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Namibia:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Namibia, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

16. The Animals Committee adopted this recommendation (CITES 2018e:6).

17. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on Quotas for leopard hunting trophies (*Panthera pardus*): Report of the Animals Committee. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Namibia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on Interpretation and application of quotas for species included in Appendix I concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018f). These results may be taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

18. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and

Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

19. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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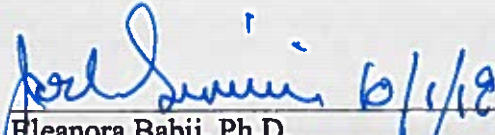
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DSA BIOLOGIST:

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 6/1/18

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 50069D

Date Received by DSA: August 28, 2019

DMA Contact: Miguel Richardson

Applicant: Savannah Friedkin
Houston, TX

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Tanzania)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae; Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Braczkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This range wide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Since the last IUCN Assessment in 2008, leopard populations have declined in Tanzania especially in central part of the country (IUCN/SSC Cat Specialist Group 2017:34). Leopards are found throughout the Serengeti-Ngorogoro Crater system, and to the south and west of this area, but are thought to be absent from Lake Victoria's southeastern boundary to Central Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately

76% of the countryside of Tanzania, or about 672,100 km² (Jacobson *et al.* 2016, Supplemental Table 5). The Tanzania Wildlife Research Institute (TAWIRI) plans to conduct additional leopard surveys during 2018–2019 (CITES 2018c:3).

Range wide, the main conservation threats to leopards are habitat loss and fragmentation, reduced prey base, conflict with livestock and game farming, and trophy hunting if poorly managed (Stein *et al.* 2016:13). In Tanzania, the key threats to leopard conservation are direct persecution in retaliation for livestock losses and accidental capture in snares set for other animals (CITES 2018c:5). These threats are ongoing (Stein *et al.* 2016:3). In addition, according to Tanzania (CITES 2018c:5): 4–15 leopards are killed annually through the control of problem animals; incidental snaring or poaching is worth noting and may be under-reported; prey abundance does not appear to be an issue; and habitat loss is not a significant threat. According to the IUCN/SSC Cat Specialist Group (2017:126–127), however, prey species depletion, as well as habitat loss and agricultural conversion, may in fact be significant leopard conservation threats. The significance of hostility towards leopards by local tribes, as well as the illegal harvest of female leopards, may also be under-appreciated. Additional information about all leopard conservation threats in Tanzania is indicated.

Until recently, given the absence of substantial baseline data, leopard species accounts typically did not include precise national population size estimates, for example: Jacobson *et al.* (2016, Supplement to Document 1, p. 26), Stein *et al.* (2016:8–10), and IUCN/SSC Cat Specialist Group (2017:56). As an example for leopard management purposes, however, Tanzania presents a qualitative assessment of leopard abundance based on camera traps at 23 sites. Leopards were assessed as abundant at three sites and as common or fairly common at nine sites (CITES 2018c:4). Leopard population density estimates are also available for four sites in Tanzania. Based on these values, Tanzania calculated overall densities, extrapolated those values to the surface areas of lands inside and outside of protected areas, and estimated a total population size of 19,673 leopards in that country (CITES 2018c:5). While this value is less than previous estimates (> 30K leopards, see IUCN/SSC Cat Specialist Group 2017:56), it would not be categorized by the Red List as a very small or restricted population. According to the IUCN Red List assessment however, while healthy leopard populations may occur outside of human dominated areas, widespread habitat loss and prey loss inside protected areas are likely to have caused leopard declines of > 30% over the past three leopard generations (ca. 22 years) in sub-Saharan Africa, perhaps suggesting that a more endangered assessment is indicated (Stein *et al.* 2016:9–10).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Savannah Friedkin ; Houston, TX) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Tanzania.
2. The purpose of the proposed import is personal use. The leopard was/will be taken from the wild at: Tanzania, Arusha with Tanzania Game Tracker Safaris; during a hunt scheduled for September 15 – October 31, 2019.

B. Tanzania Information:

3. Conservation activities in Tanzania are managed in accordance with four general principles: responsibility principle, precautionary principle, adaptive management principle, and participatory principle (CITES 2018c:11). Furthermore, leopards are the beneficiary of several protective measures and are sustainably utilized under a regulated trophy hunting system (CITES 2018c:6–7; see below). Leopards are also the beneficiary of an extensive network of protected areas that encompass about 23.9 % of their range (Jacobson *et al.* 2016, Supplemental Table 5; CITES 2018c:3). These activities and measures provide a strong protective framework for the species in Tanzania.

4. Leopard hunting in Tanzania is regulated by three legislative measures (CITES 2018c:6): Wildlife Conservation Act No. 5 of 2009, Wildlife Conservation (Tourist Hunting) Regulations of 2015, and CITES Implementation Regulations of 2005. These measures implement several general procedures (quota control system), including: (i) Allocating a quota for each licensed hunting operator; (ii) Authorizing hunting of male leopards; (iii) Hunting supervised and verified by game scouts; (iv) Verified leopard harvests that are recorded on official quota control sheets; (v) Actual exports are supported by CITES Export Permits; and (vi) Export documents that are verified by wildlife inspectors at exit points (CITES 2018c:6). Leopard harvests are also subject to a minimum body length requirement of 130 cm (tip of the nose to the base of the tail (CITES 2018c:7). The implementation of these measures by Tanzania enhances leopard conservation in that country.

5. Tanzania also manages its leopard population in accordance with the Tanzania Carnivore Conservation Action Plan (TAWIRI 2009). This plan summarizes current information about leopard distribution, abundance, conservation threats, information needs, conservation needs, and research priorities. Based on these preliminary results, the group of species and subject matter experts identified several immediate leopard information needs, including: (i) information on anthropogenic threats targeting conflict hotspots; (ii) research on effectiveness of mitigation strategies; (iii) status in representative areas; (iv) addressing gaps in knowledge of distribution; (v) movement of leopards in parks and between game reserves; (vi) GIS resource maps; and (vii) threats posed by trade in skins and parts (TAWIRI 2009:98–99). At the national level, biodiversity is managed within the context of the National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 (Tanzania 2015). Within the context of the Convention on Biological Diversity, this plan calls for the characterization and conservation of biodiversity – including the leopard and its habitat – at various levels, including: ecosystems, species, and protected areas. Together, these two plans guide the activities of leopard researchers and managers.

6. According to Tanzania, the leopard management program has been subject to monitoring at both the national and regional levels through questionnaires, camera-traps, call-ups and spoor counts (CITES 2018c:8). Presently, camera traps and spoor counts are being utilized as monitoring tools. These results inform the decisions of leopard managers with regard to the calculation of estimated leopard population sizes, characterization of human-leopard conflicts, confirmation of distribution outside of protected areas, and quantification of non-trophy hunting killings of leopards.

7. There are three general categories of areas in Tanzania where big game hunting is permitted (Tanzania Wildlife Management Authority; TAWA 2018; Tanzania Tourist Board 2018): (i) Game Reserves are areas which are declared for the purpose of conservation, including both consumptive and non-consumptive uses. Licensed tourist hunting and licensed non-consumptive tourist activities are permitted. (ii) Game Controlled Areas are areas declared for conservation of wildlife outside of village lands where activities detrimental to wildlife are prohibited, for example, residence and livestock grazing. (iii) Wildlife Management Areas are areas set aside for community-based wildlife conservation within village lands, but excluding protected areas. There are currently 63 Game Controlled Areas/Open Areas where hunting is permitted (CITES 2018c:3).
8. Tourist hunting is regulated by a block and quota system (CITES 2018c:7). Hunting blocks are areas within Game Reserves, Game Controlled Areas, or Open Areas and are allocated to a licensed hunting operator subject to an application process. For the period 2018–2022, there are 56 hunting blocks available and applicants can be allocated up to five hunting blocks (Vemma 2017). Applicants are required to demonstrate technical capability and financial stability. Successful applicants are subject to an annual performance review (Vemma 2017).
9. Quotas are set at the national level on an annual basis under the direction of the Wildlife Division (CITES 2018c:2). Leopard quotas are set annually by a Committee comprised of experts from the Wildlife Division, Tanzania Wildlife Management Authority (TAWA), Tanzania Wildlife Research Institute (TAWIRI), which is the CITES Scientific Authority in Tanzania, and some selected renown biologists from academic institutions (CITES 2018c:7). Quotas are based on available biological and management information, including: species distribution, natural history, recruitment rate, and population estimates (CITES 2018c:7). This information is generated by researchers, agency staffs, and concession operators.
10. Tanzania justifies the continuation of the present quota in accordance with the following circumstances (CITES 2018c:7): (i) observed conservation status of leopards in that country (large and widely distributed population; see: CITES 2018c:3 & 5); (ii) improvement in population monitoring (see: CITES 2018c:4 & 8); (iii) scientific assessment of the harvest regime (see: CITES 2018c:9); and (iv) contribution of trophy hunting revenues to leopard conservation and the livelihoods of local communities (CITES 2018c:9–11). Based on these circumstances, according to Tanzania, the present quota should be continued.
11. According to Tanzania (CITES 2018c:12–13):

Upon considering all the factors illustrated in this document and in accordance with Article IV of CITES and CITES Resolution Conf.16.7, the Scientific Authority of Tanzania has advised the Management Authority that the low level of off-take generated by safari hunting is not detrimental to the survival of the leopard in Tanzania and enhances its survival 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 rural communities.

It concludes by indicating that the quota for leopard in Tanzania found in Resolution Conf. 10.14 (Rev. CoP16) is sustainable and at levels which are non-detrimental to the survival of the species in the wild.

C. CITES Export Quota Program

12. Within the context of CITES, Tanzania initially had an approved export quota of 60 individuals (1983–1997; CITES 1983; CITES 2018a,b). That value – however, according to the United Republic of Tanzania – was not based on actual scientific data (CITES 2002:2). Given the absence of scientific data at that time, the quota was justified instead in large measure by trophy hunting considerations. Based on several additional factors, the leopard quota was increased in 1997 to 250: (i) more than 90% of Tanzania was considered to be excellent leopard habitat; (ii) leopard hunting was limited to that by tourists and for control purposes; (iii) 301–645 leopards were harvested annually for leopard control purposes with no apparent negative effect on the population; and (iv) there was no evidence of illegal trade (CITES 2002:2; UNEP 2018). By 2003, when the quota was increased for a third time, limited scientific data were available, including: (i) total population size (ca. 39,000 leopards); (ii) estimated annual harvest (390 individuals); and (iii) estimated potential safe harvest (5%; 1,827 individuals; CITES 2002:3). Although this quota has been increased, actual hunting trophy exports have been less than the corresponding quota. Since 2008, according to UNEP-WCMC (2018), reported gross exports have averaged 188 trophies annually and 44 skins annually (total = 232 leopards; about 46% of the annual quota) *versus* the annual quota of 500.

13. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

14. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Tanzania:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Tanzania, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

15. The Animals Committee adopted this recommendation (CITES 2018e:6).

16. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

17. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

18. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 50072D

Date Received by DSA: August 23, 2019

DMA Contact: Rogelio Hubbard

Applicant: Corbin William Friedkin
Houston, TX

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Tanzania)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae; Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Braczkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This range wide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Since the last IUCN Assessment in 2008, leopard populations have declined in Tanzania especially in central part of the country (IUCN/SSC Cat Specialist Group 2017:34). Leopards are found throughout the Serengeti-Ngorogoro Crater system, and to the south and west of this area, but are thought to be absent from Lake Victoria's southeastern boundary to Central

Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately 76% of the countryside of Tanzania, or about 672,100 km² (Jacobson *et al.* 2016, Supplemental Table 5). The Tanzania Wildlife Research Institute (TAWIRI) plans to conduct additional leopard surveys during 2018–2019 (CITES 2018c:3).

Range wide, the main conservation threats to leopards are habitat loss and fragmentation, reduced prey base, conflict with livestock and game farming, and trophy hunting if poorly managed (Stein *et al.* 2016:13). In Tanzania, the key threats to leopard conservation are direct persecution in retaliation for livestock losses and accidental capture in snares set for other animals (CITES 2018c:5). These threats are ongoing (Stein *et al.* 2016:3). In addition, according to Tanzania (CITES 2018c:5): 4–15 leopards are killed annually through the control of problem animals; incidental snaring or poaching is worth noting and may be under-reported; prey abundance does not appear to be an issue; and habitat loss is not a significant threat. According to the IUCN/SSC Cat Specialist Group (2017:126–127), however, prey species depletion, as well as habitat loss and agricultural conversion, may in fact be significant leopard conservation threats. The significance of hostility towards leopards by local tribes, as well as the illegal harvest of female leopards, may also be under-appreciated. Additional information about all leopard conservation threats in Tanzania is indicated.

Until recently, given the absence of substantial baseline data, leopard species accounts typically did not include precise national population size estimates, for example: Jacobson *et al.* (2016, Supplement to Document 1, p. 26), Stein *et al.* (2016:8–10), and IUCN/SSC Cat Specialist Group (2017:56). As an example for leopard management purposes, however, Tanzania presents a qualitative assessment of leopard abundance based on camera traps at 23 sites. Leopards were assessed as abundant at three sites and as common or fairly common at nine sites (CITES 2018c:4). Leopard population density estimates are also available for four sites in Tanzania. Based on these values, Tanzania calculated overall densities, extrapolated those values to the surface areas of lands inside and outside of protected areas, and estimated a total population size of 19,673 leopards in that country (CITES 2018c:5). While this value is less than previous estimates (> 30K leopards, see IUCN/SSC Cat Specialist Group 2017:56), it would not be categorized by the Red List as a very small or restricted population. According to the IUCN Red List assessment however, while healthy leopard populations may occur outside of human dominated areas, widespread habitat loss and prey loss inside protected areas are likely to have caused leopard declines of > 30% over the past three leopard generations (ca. 22 years) in sub-Saharan Africa, perhaps suggesting that a more endangered assessment is indicated (Stein *et al.* 2016:9–10).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Corbin William Friedkin ; Houston, TX) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Tanzania.
2. The purpose of the proposed import is personal use. The leopard was/will be taken from the wild at: Tanzania, Arusha with Tanzania Game Tracker Safaris; during a hunt scheduled for

September 15 – October 31, 2019.

B. Tanzania Information:

3. Conservation activities in Tanzania are managed in accordance with four general principles: responsibility principle, precautionary principle, adaptive management principle, and participatory principle (CITES 2018c:11). Furthermore, leopards are the beneficiary of several protective measures and are sustainably utilized under a regulated trophy hunting system (CITES 2018c:6–7; see below). Leopards are also the beneficiary of an extensive network of protected areas that encompass about 23.9 % of their range (Jacobson *et al.* 2016, Supplemental Table 5; CITES 2018c:3). These activities and measures provide a strong protective framework for the species in Tanzania.

4. Leopard hunting in Tanzania is regulated by three legislative measures (CITES 2018c:6): Wildlife Conservation Act No. 5 of 2009, Wildlife Conservation (Tourist Hunting) Regulations of 2015, and CITES Implementation Regulations of 2005. These measures implement several general procedures (quota control system), including: (i) Allocating a quota for each licensed hunting operator; (ii) Authorizing hunting of male leopards; (iii) Hunting supervised and verified by game scouts; (iv) Verified leopard harvests that are recorded on official quota control sheets; (v) Actual exports are supported by CITES Export Permits; and (vi) Export documents that are verified by wildlife inspectors at exit points (CITES 2018c:6). Leopard harvests are also subject to a minimum body length requirement of 130 cm (tip of the nose to the base of the tail (CITES 2018c:7). The implementation of these measures by Tanzania enhances leopard conservation in that country.

5. Tanzania also manages its leopard population in accordance with the Tanzania Carnivore Conservation Action Plan (TAWIRI 2009). This plan summarizes current information about leopard distribution, abundance, conservation threats, information needs, conservation needs, and research priorities. Based on these preliminary results, the group of species and subject matter experts identified several immediate leopard information needs, including: (i) information on anthropogenic threats targeting conflict hotspots; (ii) research on effectiveness of mitigation strategies; (iii) status in representative areas; (iv) addressing gaps in knowledge of distribution; (v) movement of leopards in parks and between game reserves; (vi) GIS resource maps; and (vii) threats posed by trade in skins and parts (TAWIRI 2009:98–99). At the national level, biodiversity is managed within the context of the National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 (Tanzania 2015). Within the context of the Convention on Biological Diversity, this plan calls for the characterization and conservation of biodiversity – including the leopard and its habitat – at various levels, including: ecosystems, species, and protected areas. Together, these two plans guide the activities of leopard researchers and managers.

6. According to Tanzania, the leopard management program has been subject to monitoring at both the national and regional levels through questionnaires, camera-traps, call-ups and spoor counts (CITES 2018c:8). Presently, camera traps and spoor counts are being utilized as monitoring tools. These results inform the decisions of leopard managers with regard to the calculation of estimated leopard population sizes, characterization of human-leopard conflicts, confirmation of distribution outside of protected areas, and quantification of non-trophy hunting

killings of leopards.

7. There are three general categories of areas in Tanzania where big game hunting is permitted (Tanzania Wildlife Management Authority; TAWA 2018; Tanzania Tourist Board 2018): (i) Game Reserves are areas which are declared for the purpose of conservation, including both consumptive and non-consumptive uses. Licensed tourist hunting and licensed non-consumptive tourist activities are permitted. (ii) Game Controlled Areas are areas declared for conservation of wildlife outside of village lands where activities detrimental to wildlife are prohibited, for example, residence and livestock grazing. (iii) Wildlife Management Areas are areas set aside for community-based wildlife conservation within village lands, but excluding protected areas. There are currently 63 Game Controlled Areas/Open Areas where hunting is permitted (CITES 2018c:3).
8. Tourist hunting is regulated by a block and quota system (CITES 2018c:7). Hunting blocks are areas within Game Reserves, Game Controlled Areas, or Open Areas and are allocated to a licensed hunting operator subject to an application process. For the period 2018–2022, there are 56 hunting blocks available and applicants can be allocated up to five hunting blocks (Vemba 2017). Applicants are required to demonstrate technical capability and financial stability. Successful applicants are subject to an annual performance review (Vemba 2017).
9. Quotas are set at the national level on an annual basis under the direction of the Wildlife Division (CITES 2018c:2). Leopard quotas are set annually by a Committee comprised of experts from the Wildlife Division, Tanzania Wildlife Management Authority (TAWA), Tanzania Wildlife Research Institute (TAWIRI), which is the CITES Scientific Authority in Tanzania, and some selected renown biologists from academic institutions (CITES 2018c:7). Quotas are based on available biological and management information, including: species distribution, natural history, recruitment rate, and population estimates (CITES 2018c:7). This information is generated by researchers, agency staffs, and concession operators.
10. Tanzania justifies the continuation of the present quota in accordance with the following circumstances (CITES 2018c:7): (i) observed conservation status of leopards in that country (large and widely distributed population; see: CITES 2018c:3 & 5); (ii) improvement in population monitoring (see: CITES 2018c:4 & 8); (iii) scientific assessment of the harvest regime (see: CITES 2018c:9); and (iv) contribution of trophy hunting revenues to leopard conservation and the livelihoods of local communities (CITES 2018c:9–11). Based on these circumstances, according to Tanzania, the present quota should be continued.
11. According to Tanzania (CITES 2018c:12–13):

Upon considering all the factors illustrated in this document and in accordance with Article IV of CITES and CITES Resolution Conf.16.7, the Scientific Authority of Tanzania has advised the Management Authority that the low level of off-take generated by safari hunting is not detrimental to the survival of the leopard in Tanzania and enhances its survival 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 rural communities.

It concludes by indicating that the quota for leopard in Tanzania found in Resolution Conf. 10.14 (Rev. CoP16) is sustainable and at levels which are non-detrimental to the survival of the species in the wild.

C. CITES Export Quota Program

12. Within the context of CITES, Tanzania initially had an approved export quota of 60 individuals (1983–1997; CITES 1983; CITES 2018a,b). That value – however, according to the United Republic of Tanzania – was not based on actual scientific data (CITES 2002:2). Given the absence of scientific data at that time, the quota was justified instead in large measure by trophy hunting considerations. Based on several additional factors, the leopard quota was increased in 1997 to 250: (i) more than 90% of Tanzania was considered to be excellent leopard habitat; (ii) leopard hunting was limited to that by tourists and for control purposes; (iii) 301–645 leopards were harvested annually for leopard control purposes with no apparent negative effect on the population; and (iv) there was no evidence of illegal trade (CITES 2002:2; UNEP 2018). By 2003, when the quota was increased for a third time, limited scientific data were available, including: (i) total population size (ca. 39,000 leopards); (ii) estimated annual harvest (390 individuals); and (iii) estimated potential safe harvest (5%; 1,827 individuals; CITES 2002:3). Although this quota has been increased, actual hunting trophy exports have been less than the corresponding quota. Since 2008, according to UNEP-WCMC (2018), reported gross exports have averaged 188 trophies annually and 44 skins annually (total = 232 leopards; about 46% of the annual quota) *versus* the annual quota of 500.

13. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

14. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Tanzania:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Tanzania, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

15. The Animals Committee adopted this recommendation (CITES 2018e:6).

16. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

17. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

18. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 50073D

Date Received by DSA: August 28, 2019

DMA Contact: Miguel Richardson

Applicant: Ryan Friedkin
Houston, TX

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Tanzania)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae; Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Braczkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This range wide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Since the last IUCN Assessment in 2008, leopard populations have declined in Tanzania especially in central part of the country (IUCN/SSC Cat Specialist Group 2017:34). Leopards are found throughout the Serengeti-Ngorogoro Crater system, and to the south and west of this area, but are thought to be absent from Lake Victoria's southeastern boundary to Central Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately

76% of the countryside of Tanzania, or about 672,100 km² (Jacobson *et al.* 2016, Supplemental Table 5). The Tanzania Wildlife Research Institute (TAWIRI) plans to conduct additional leopard surveys during 2018–2019 (CITES 2018c:3).

Range wide, the main conservation threats to leopards are habitat loss and fragmentation, reduced prey base, conflict with livestock and game farming, and trophy hunting if poorly managed (Stein *et al.* 2016:13). In Tanzania, the key threats to leopard conservation are direct persecution in retaliation for livestock losses and accidental capture in snares set for other animals (CITES 2018c:5). These threats are ongoing (Stein *et al.* 2016:3). In addition, according to Tanzania (CITES 2018c:5): 4–15 leopards are killed annually through the control of problem animals; incidental snaring or poaching is worth noting and may be under-reported; prey abundance does not appear to be an issue; and habitat loss is not a significant threat. According to the IUCN/SSC Cat Specialist Group (2017:126–127), however, prey species depletion, as well as habitat loss and agricultural conversion, may in fact be significant leopard conservation threats. The significance of hostility towards leopards by local tribes, as well as the illegal harvest of female leopards, may also be under-appreciated. Additional information about all leopard conservation threats in Tanzania is indicated.

Until recently, given the absence of substantial baseline data, leopard species accounts typically did not include precise national population size estimates, for example: Jacobson *et al.* (2016, Supplement to Document 1, p. 26), Stein *et al.* (2016:8–10), and IUCN/SSC Cat Specialist Group (2017:56). As an example for leopard management purposes, however, Tanzania presents a qualitative assessment of leopard abundance based on camera traps at 23 sites. Leopards were assessed as abundant at three sites and as common or fairly common at nine sites (CITES 2018c:4). Leopard population density estimates are also available for four sites in Tanzania. Based on these values, Tanzania calculated overall densities, extrapolated those values to the surface areas of lands inside and outside of protected areas, and estimated a total population size of 19,673 leopards in that country (CITES 2018c:5). While this value is less than previous estimates (> 30K leopards, see IUCN/SSC Cat Specialist Group 2017:56), it would not be categorized by the Red List as a very small or restricted population. According to the IUCN Red List assessment however, while healthy leopard populations may occur outside of human dominated areas, widespread habitat loss and prey loss inside protected areas are likely to have caused leopard declines of > 30% over the past three leopard generations (ca. 22 years) in sub-Saharan Africa, perhaps suggesting that a more endangered assessment is indicated (Stein *et al.* 2016:9–10).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Ryan Friedkin ; Houston, TX) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Tanzania.
2. The purpose of the proposed import is personal use. The leopard was/will be taken from the wild at: Tanzania, Arusha with Tanzania Game Tracker Safaris; during a hunt scheduled for September 15 – October 31, 2019.

B. Tanzania Information:

3. Conservation activities in Tanzania are managed in accordance with four general principles: responsibility principle, precautionary principle, adaptive management principle, and participatory principle (CITES 2018c:11). Furthermore, leopards are the beneficiary of several protective measures and are sustainably utilized under a regulated trophy hunting system (CITES 2018c:6–7; see below). Leopards are also the beneficiary of an extensive network of protected areas that encompass about 23.9 % of their range (Jacobson *et al.* 2016, Supplemental Table 5; CITES 2018c:3). These activities and measures provide a strong protective framework for the species in Tanzania.

4. Leopard hunting in Tanzania is regulated by three legislative measures (CITES 2018c:6): Wildlife Conservation Act No. 5 of 2009, Wildlife Conservation (Tourist Hunting) Regulations of 2015, and CITES Implementation Regulations of 2005. These measures implement several general procedures (quota control system), including: (i) Allocating a quota for each licensed hunting operator; (ii) Authorizing hunting of male leopards; (iii) Hunting supervised and verified by game scouts; (iv) Verified leopard harvests that are recorded on official quota control sheets; (v) Actual exports are supported by CITES Export Permits; and (vi) Export documents that are verified by wildlife inspectors at exit points (CITES 2018c:6). Leopard harvests are also subject to a minimum body length requirement of 130 cm (tip of the nose to the base of the tail (CITES 2018c:7). The implementation of these measures by Tanzania enhances leopard conservation in that country.

5. Tanzania also manages its leopard population in accordance with the Tanzania Carnivore Conservation Action Plan (TAWIRI 2009). This plan summarizes current information about leopard distribution, abundance, conservation threats, information needs, conservation needs, and research priorities. Based on these preliminary results, the group of species and subject matter experts identified several immediate leopard information needs, including: (i) information on anthropogenic threats targeting conflict hotspots; (ii) research on effectiveness of mitigation strategies; (iii) status in representative areas; (iv) addressing gaps in knowledge of distribution; (v) movement of leopards in parks and between game reserves; (vi) GIS resource maps; and (vii) threats posed by trade in skins and parts (TAWIRI 2009:98–99). At the national level, biodiversity is managed within the context of the National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 (Tanzania 2015). Within the context of the Convention on Biological Diversity, this plan calls for the characterization and conservation of biodiversity – including the leopard and its habitat – at various levels, including: ecosystems, species, and protected areas. Together, these two plans guide the activities of leopard researchers and managers.

6. According to Tanzania, the leopard management program has been subject to monitoring at both the national and regional levels through questionnaires, camera-traps, call-ups and spoor counts (CITES 2018c:8). Presently, camera traps and spoor counts are being utilized as monitoring tools. These results inform the decisions of leopard managers with regard to the calculation of estimated leopard population sizes, characterization of human-leopard conflicts, confirmation of distribution outside of protected areas, and quantification of non-trophy hunting killings of leopards.

7. There are three general categories of areas in Tanzania where big game hunting is permitted (Tanzania Wildlife Management Authority; TAWA 2018; Tanzania Tourist Board 2018): (i) Game Reserves are areas which are declared for the purpose of conservation, including both consumptive and non-consumptive uses. Licensed tourist hunting and licensed non-consumptive tourist activities are permitted. (ii) Game Controlled Areas are areas declared for conservation of wildlife outside of village lands where activities detrimental to wildlife are prohibited, for example, residence and livestock grazing. (iii) Wildlife Management Areas are areas set aside for community-based wildlife conservation within village lands, but excluding protected areas. There are currently 63 Game Controlled Areas/Open Areas where hunting is permitted (CITES 2018c:3).
8. Tourist hunting is regulated by a block and quota system (CITES 2018c:7). Hunting blocks are areas within Game Reserves, Game Controlled Areas, or Open Areas and are allocated to a licensed hunting operator subject to an application process. For the period 2018–2022, there are 56 hunting blocks available and applicants can be allocated up to five hunting blocks (Vemma 2017). Applicants are required to demonstrate technical capability and financial stability. Successful applicants are subject to an annual performance review (Vemma 2017).
9. Quotas are set at the national level on an annual basis under the direction of the Wildlife Division (CITES 2018c:2). Leopard quotas are set annually by a Committee comprised of experts from the Wildlife Division, Tanzania Wildlife Management Authority (TAWA), Tanzania Wildlife Research Institute (TAWIRI), which is the CITES Scientific Authority in Tanzania, and some selected renowned biologists from academic institutions (CITES 2018c:7). Quotas are based on available biological and management information, including: species distribution, natural history, recruitment rate, and population estimates (CITES 2018c:7). This information is generated by researchers, agency staffs, and concession operators.
10. Tanzania justifies the continuation of the present quota in accordance with the following circumstances (CITES 2018c:7): (i) observed conservation status of leopards in that country (large and widely distributed population; see: CITES 2018c:3 & 5); (ii) improvement in population monitoring (see: CITES 2018c:4 & 8); (iii) scientific assessment of the harvest regime (see: CITES 2018c:9); and (iv) contribution of trophy hunting revenues to leopard conservation and the livelihoods of local communities (CITES 2018c:9–11). Based on these circumstances, according to Tanzania, the present quota should be continued.
11. According to Tanzania (CITES 2018c:12–13):

Upon considering all the factors illustrated in this document and in accordance with Article IV of CITES and CITES Resolution Conf.16.7, the Scientific Authority of Tanzania has advised the Management Authority that the low level of off-take generated by safari hunting is not detrimental to the survival of the leopard in Tanzania and enhances its survival 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 rural communities.

It concludes by indicating that the quota for leopard in Tanzania found in Resolution Conf. 10.14 (Rev. CoP16) is sustainable and at levels which are non-detrimental to the survival of the species in the wild.

C. CITES Export Quota Program

12. Within the context of CITES, Tanzania initially had an approved export quota of 60 individuals (1983–1997; CITES 1983; CITES 2018a,b). That value – however, according to the United Republic of Tanzania – was not based on actual scientific data (CITES 2002:2). Given the absence of scientific data at that time, the quota was justified instead in large measure by trophy hunting considerations. Based on several additional factors, the leopard quota was increased in 1997 to 250: (i) more than 90% of Tanzania was considered to be excellent leopard habitat; (ii) leopard hunting was limited to that by tourists and for control purposes; (iii) 301–645 leopards were harvested annually for leopard control purposes with no apparent negative effect on the population; and (iv) there was no evidence of illegal trade (CITES 2002:2; UNEP 2018). By 2003, when the quota was increased for a third time, limited scientific data were available, including: (i) total population size (ca. 39,000 leopards); (ii) estimated annual harvest (390 individuals); and (iii) estimated potential safe harvest (5%; 1,827 individuals; CITES 2002:3). Although this quota has been increased, actual hunting trophy exports have been less than the corresponding quota. Since 2008, according to UNEP-WCMC (2018), reported gross exports have averaged 188 trophies annually and 44 skins annually (total = 232 leopards; about 46% of the annual quota) *versus* the annual quota of 500.

13. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

14. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Tanzania:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Tanzania, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

15. The Animals Committee adopted this recommendation (CITES 2018e:6).

16. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

17. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

18. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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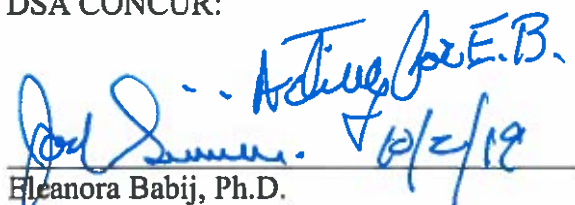
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DSA BIOLOGIST:

 10/2/19

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Division of Scientific Authority
Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 50074D

Date Received by DSA: August 23, 2019

DMA Contact: Rogelio Hubbard

Applicant: Thomas Dan Friedkin Jr.
Houston, TX

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Tanzania)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae; Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Braczkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This range wide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Since the last IUCN Assessment in 2008, leopard populations have declined in Tanzania especially in central part of the country (IUCN/SSC Cat Specialist Group 2017:34). Leopards are found throughout the Serengeti-Ngorogoro Crater system, and to the south and west of this area, but are thought to be absent from Lake Victoria's southeastern boundary to Central Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately

Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately 76% of the countryside of Tanzania, or about 672,100 km² (Jacobson *et al.* 2016, Supplemental Table 5). The Tanzania Wildlife Research Institute (TAWIRI) plans to conduct additional leopard surveys during 2018–2019 (CITES 2018c:3).

Range wide, the main conservation threats to leopards are habitat loss and fragmentation, reduced prey base, conflict with livestock and game farming, and trophy hunting if poorly managed (Stein *et al.* 2016:13). In Tanzania, the key threats to leopard conservation are direct persecution in retaliation for livestock losses and accidental capture in snares set for other animals (CITES 2018c:5). These threats are ongoing (Stein *et al.* 2016:3). In addition, according to Tanzania (CITES 2018c:5): 4–15 leopards are killed annually through the control of problem animals; incidental snaring or poaching is worth noting and may be under-reported; prey abundance does not appear to be an issue; and habitat loss is not a significant threat. According to the IUCN/SSC Cat Specialist Group (2017:126–127), however, prey species depletion, as well as habitat loss and agricultural conversion, may in fact be significant leopard conservation threats. The significance of hostility towards leopards by local tribes, as well as the illegal harvest of female leopards, may also be under-appreciated. Additional information about all leopard conservation threats in Tanzania is indicated.

Until recently, given the absence of substantial baseline data, leopard species accounts typically did not include precise national population size estimates, for example: Jacobson *et al.* (2016, Supplement to Document 1, p. 26), Stein *et al.* (2016:8–10), and IUCN/SSC Cat Specialist Group (2017:56). As an example for leopard management purposes, however, Tanzania presents a qualitative assessment of leopard abundance based on camera traps at 23 sites. Leopards were assessed as abundant at three sites and as common or fairly common at nine sites (CITES 2018c:4). Leopard population density estimates are also available for four sites in Tanzania. Based on these values, Tanzania calculated overall densities, extrapolated those values to the surface areas of lands inside and outside of protected areas, and estimated a total population size of 19,673 leopards in that country (CITES 2018c:5). While this value is less than previous estimates (> 30K leopards, see IUCN/SSC Cat Specialist Group 2017:56), it would not be categorized by the Red List as a very small or restricted population. According to the IUCN Red List assessment however, while healthy leopard populations may occur outside of human dominated areas, widespread habitat loss and prey loss inside protected areas are likely to have caused leopard declines of > 30% over the past three leopard generations (ca. 22 years) in sub-Saharan Africa, perhaps suggesting that a more endangered assessment is indicated (Stein *et al.* 2016:9–10).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Thomas Dan Friedkin ; Houston, TX) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Tanzania.
2. The purpose of the proposed import is personal use. The leopard was/will be taken from the wild at: Tanzania, Arusha with Tanzania Game Tracker Safaris; during a hunt scheduled for

September 15 – October 31, 2019.

B. Tanzania Information:

3. Conservation activities in Tanzania are managed in accordance with four general principles: responsibility principle, precautionary principle, adaptive management principle, and participatory principle (CITES 2018c:11). Furthermore, leopards are the beneficiary of several protective measures and are sustainably utilized under a regulated trophy hunting system (CITES 2018c:6–7; see below). Leopards are also the beneficiary of an extensive network of protected areas that encompass about 23.9 % of their range (Jacobson *et al.* 2016, Supplemental Table 5; CITES 2018c:3). These activities and measures provide a strong protective framework for the species in Tanzania.

4. Leopard hunting in Tanzania is regulated by three legislative measures (CITES 2018c:6): Wildlife Conservation Act No. 5 of 2009, Wildlife Conservation (Tourist Hunting) Regulations of 2015, and CITES Implementation Regulations of 2005. These measures implement several general procedures (quota control system), including: (i) Allocating a quota for each licensed hunting operator; (ii) Authorizing hunting of male leopards; (iii) Hunting supervised and verified by game scouts; (iv) Verified leopard harvests that are recorded on official quota control sheets; (v) Actual exports are supported by CITES Export Permits; and (vi) Export documents that are verified by wildlife inspectors at exit points (CITES 2018c:6). Leopard harvests are also subject to a minimum body length requirement of 130 cm (tip of the nose to the base of the tail (CITES 2018c:7). The implementation of these measures by Tanzania enhances leopard conservation in that country.

5. Tanzania also manages its leopard population in accordance with the Tanzania Carnivore Conservation Action Plan (TAWIRI 2009). This plan summarizes current information about leopard distribution, abundance, conservation threats, information needs, conservation needs, and research priorities. Based on these preliminary results, the group of species and subject matter experts identified several immediate leopard information needs, including: (i) information on anthropogenic threats targeting conflict hotspots; (ii) research on effectiveness of mitigation strategies; (iii) status in representative areas; (iv) addressing gaps in knowledge of distribution; (v) movement of leopards in parks and between game reserves; (vi) GIS resource maps; and (vii) threats posed by trade in skins and parts (TAWIRI 2009:98–99). At the national level, biodiversity is managed within the context of the National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 (Tanzania 2015). Within the context of the Convention on Biological Diversity, this plan calls for the characterization and conservation of biodiversity – including the leopard and its habitat – at various levels, including: ecosystems, species, and protected areas. Together, these two plans guide the activities of leopard researchers and managers.

6. According to Tanzania, the leopard management program has been subject to monitoring at both the national and regional levels through questionnaires, camera-traps, call-ups and spoor counts (CITES 2018c:8). Presently, camera traps and spoor counts are being utilized as monitoring tools. These results inform the decisions of leopard managers with regard to the calculation of estimated leopard population sizes, characterization of human-leopard conflicts, confirmation of distribution outside of protected areas, and quantification of non-trophy hunting

killings of leopards.

7. There are three general categories of areas in Tanzania where big game hunting is permitted (Tanzania Wildlife Management Authority; TAWA 2018; Tanzania Tourist Board 2018): (i) Game Reserves are areas which are declared for the purpose of conservation, including both consumptive and non-consumptive uses. Licensed tourist hunting and licensed non-consumptive tourist activities are permitted. (ii) Game Controlled Areas are areas declared for conservation of wildlife outside of village lands where activities detrimental to wildlife are prohibited, for example, residence and livestock grazing. (iii) Wildlife Management Areas are areas set aside for community-based wildlife conservation within village lands, but excluding protected areas. There are currently 63 Game Controlled Areas/Open Areas where hunting is permitted (CITES 2018c:3).
8. Tourist hunting is regulated by a block and quota system (CITES 2018c:7). Hunting blocks are areas within Game Reserves, Game Controlled Areas, or Open Areas and are allocated to a licensed hunting operator subject to an application process. For the period 2018–2022, there are 56 hunting blocks available and applicants can be allocated up to five hunting blocks (Vemma 2017). Applicants are required to demonstrate technical capability and financial stability. Successful applicants are subject to an annual performance review (Vemma 2017).
9. Quotas are set at the national level on an annual basis under the direction of the Wildlife Division (CITES 2018c:2). Leopard quotas are set annually by a Committee comprised of experts from the Wildlife Division, Tanzania Wildlife Management Authority (TAWA), Tanzania Wildlife Research Institute (TAWIRI), which is the CITES Scientific Authority in Tanzania, and some selected renown biologists from academic institutions (CITES 2018c:7). Quotas are based on available biological and management information, including: species distribution, natural history, recruitment rate, and population estimates (CITES 2018c:7). This information is generated by researchers, agency staffs, and concession operators.
10. Tanzania justifies the continuation of the present quota in accordance with the following circumstances (CITES 2018c:7): (i) observed conservation status of leopards in that country (large and widely distributed population; see: CITES 2018c:3 & 5); (ii) improvement in population monitoring (see: CITES 2018c:4 & 8); (iii) scientific assessment of the harvest regime (see: CITES 2018c:9); and (iv) contribution of trophy hunting revenues to leopard conservation and the livelihoods of local communities (CITES 2018c:9–11). Based on these circumstances, according to Tanzania, the present quota should be continued.
11. According to Tanzania (CITES 2018c:12–13):

Upon considering all the factors illustrated in this document and in accordance with Article IV of CITES and CITES Resolution Conf.16.7, the Scientific Authority of Tanzania has advised the Management Authority that the low level of off-take generated by safari hunting is not detrimental to the survival of the leopard in Tanzania and enhances its survival 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 rural communities.

It concludes by indicating that the quota for leopard in Tanzania found in Resolution Conf. 10.14 (Rev. CoP16) is sustainable and at levels which are non-detrimental to the survival of the species in the wild.

C. CITES Export Quota Program

12. Within the context of CITES, Tanzania initially had an approved export quota of 60 individuals (1983–1997; CITES 1983; CITES 2018a,b). That value – however, according to the United Republic of Tanzania – was not based on actual scientific data (CITES 2002:2). Given the absence of scientific data at that time, the quota was justified instead in large measure by trophy hunting considerations. Based on several additional factors, the leopard quota was increased in 1997 to 250: (i) more than 90% of Tanzania was considered to be excellent leopard habitat; (ii) leopard hunting was limited to that by tourists and for control purposes; (iii) 301–645 leopards were harvested annually for leopard control purposes with no apparent negative effect on the population; and (iv) there was no evidence of illegal trade (CITES 2002:2; UNEP 2018). By 2003, when the quota was increased for a third time, limited scientific data were available, including: (i) total population size (ca. 39,000 leopards); (ii) estimated annual harvest (390 individuals); and (iii) estimated potential safe harvest (5%; 1,827 individuals; CITES 2002:3). Although this quota has been increased, actual hunting trophy exports have been less than the corresponding quota. Since 2008, according to UNEP-WCMC (2018), reported gross exports have averaged 188 trophies annually and 44 skins annually (total = 232 leopards; about 46% of the annual quota) *versus* the annual quota of 500.

13. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

14. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Tanzania:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Tanzania, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

15. The Animals Committee adopted this recommendation (CITES 2018e:6).

16. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

17. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

18. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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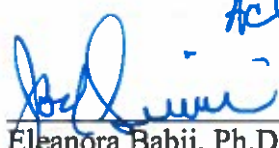
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Division of Scientific Authority
Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 50075D

Date Received by DSA: August 09, 2019

DMA Contact: Stephanie Whitley

Applicant: Debra Lynn Friedkin
Houston, TX

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Tanzania)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011).

Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on medium-sized ungulates, especially deer (Family Cervidae; Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Braczkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This range wide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Since the last IUCN Assessment in 2008, leopard populations have declined in Tanzania especially in central part of the country (IUCN/SSC Cat Specialist Group 2017:34). Leopards are found throughout the Serengeti-Ngorogoro Crater system, and to the south and west of this area, but are thought to be absent from Lake Victoria's southeastern boundary to Central

Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately 76% of the countryside of Tanzania, or about 672,100 km² (Jacobson *et al.* 2016, Supplemental Table 5). The Tanzania Wildlife Research Institute (TAWIRI) plans to conduct additional leopard surveys during 2018–2019 (CITES 2018c:3).

Range wide, the main conservation threats to leopards are habitat loss and fragmentation, reduced prey base, conflict with livestock and game farming, and trophy hunting if poorly managed (Stein *et al.* 2016:13). In Tanzania, the key threats to leopard conservation are direct persecution in retaliation for livestock losses and accidental capture in snares set for other animals (CITES 2018c:5). These threats are ongoing (Stein *et al.* 2016:3). In addition, according to Tanzania (CITES 2018c:5): 4–15 leopards are killed annually through the control of problem animals; incidental snaring or poaching is worth noting and may be under-reported; prey abundance does not appear to be an issue; and habitat loss is not a significant threat. According to the IUCN/SSC Cat Specialist Group (2017:126–127), however, prey species depletion, as well as habitat loss and agricultural conversion, may in fact be significant leopard conservation threats. The significance of hostility towards leopards by local tribes, as well as the illegal harvest of female leopards, may also be under-appreciated. Additional information about all leopard conservation threats in Tanzania is indicated.

Until recently, given the absence of substantial baseline data, leopard species accounts typically did not include precise national population size estimates, for example: Jacobson *et al.* (2016, Supplement to Document 1, p. 26), Stein *et al.* (2016:8–10), and IUCN/SSC Cat Specialist Group (2017:56). As an example for leopard management purposes, however, Tanzania presents a qualitative assessment of leopard abundance based on camera traps at 23 sites. Leopards were assessed as abundant at three sites and as common or fairly common at nine sites (CITES 2018c:4). Leopard population density estimates are also available for four sites in Tanzania. Based on these values, Tanzania calculated overall densities, extrapolated those values to the surface areas of lands inside and outside of protected areas, and estimated a total population size of 19,673 leopards in that country (CITES 2018c:5). While this value is less than previous estimates (> 30K leopards, see IUCN/SSC Cat Specialist Group 2017:56), it would not be categorized by the Red List as a very small or restricted population. According to the IUCN Red List assessment however, while healthy leopard populations may occur outside of human dominated areas, widespread habitat loss and prey loss inside protected areas are likely to have caused leopard declines of > 30% over the past three leopard generations (ca. 22 years) in sub-Saharan Africa, perhaps suggesting that a more endangered assessment is indicated (Stein *et al.* 2016:9–10).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Debra Lynn Friedkin ; Houston, TX) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Tanzania.
2. The purpose of the proposed import is personal use. The leopard was/will be taken from the wild at: Tanzania, Arusha with Tanzania Game Tracker Safaris; during a hunt scheduled for

September 15 – October 31, 2019.

B. Tanzania Information:

3. Conservation activities in Tanzania are managed in accordance with four general principles: responsibility principle, precautionary principle, adaptive management principle, and participatory principle (CITES 2018c:11). Furthermore, leopards are the beneficiary of several protective measures and are sustainably utilized under a regulated trophy hunting system (CITES 2018c:6–7; see below). Leopards are also the beneficiary of an extensive network of protected areas that encompass about 23.9 % of their range (Jacobson *et al.* 2016, Supplemental Table 5; CITES 2018c:3). These activities and measures provide a strong protective framework for the species in Tanzania.

4. Leopard hunting in Tanzania is regulated by three legislative measures (CITES 2018c:6): Wildlife Conservation Act No. 5 of 2009, Wildlife Conservation (Tourist Hunting) Regulations of 2015, and CITES Implementation Regulations of 2005. These measures implement several general procedures (quota control system), including: (i) Allocating a quota for each licensed hunting operator; (ii) Authorizing hunting of male leopards; (iii) Hunting supervised and verified by game scouts; (iv) Verified leopard harvests that are recorded on official quota control sheets; (v) Actual exports are supported by CITES Export Permits; and (vi) Export documents that are verified by wildlife inspectors at exit points (CITES 2018c:6). Leopard harvests are also subject to a minimum body length requirement of 130 cm (tip of the nose to the base of the tail (CITES 2018c:7). The implementation of these measures by Tanzania enhances leopard conservation in that country.

5. Tanzania also manages its leopard population in accordance with the Tanzania Carnivore Conservation Action Plan (TAWIRI 2009). This plan summarizes current information about leopard distribution, abundance, conservation threats, information needs, conservation needs, and research priorities. Based on these preliminary results, the group of species and subject matter experts identified several immediate leopard information needs, including: (i) information on anthropogenic threats targeting conflict hotspots; (ii) research on effectiveness of mitigation strategies; (iii) status in representative areas; (iv) addressing gaps in knowledge of distribution; (v) movement of leopards in parks and between game reserves; (vi) GIS resource maps; and (vii) threats posed by trade in skins and parts (TAWIRI 2009:98–99). At the national level, biodiversity is managed within the context of the National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 (Tanzania 2015). Within the context of the Convention on Biological Diversity, this plan calls for the characterization and conservation of biodiversity – including the leopard and its habitat – at various levels, including: ecosystems, species, and protected areas. Together, these two plans guide the activities of leopard researchers and managers.

6. According to Tanzania, the leopard management program has been subject to monitoring at both the national and regional levels through questionnaires, camera-traps, call-ups and spoor counts (CITES 2018c:8). Presently, camera traps and spoor counts are being utilized as monitoring tools. These results inform the decisions of leopard managers with regard to the calculation of estimated leopard population sizes, characterization of human-leopard conflicts, confirmation of distribution outside of protected areas, and quantification of non-trophy hunting

killings of leopards.

7. There are three general categories of areas in Tanzania where big game hunting is permitted (Tanzania Wildlife Management Authority; TAWA 2018; Tanzania Tourist Board 2018): (i) Game Reserves are areas which are declared for the purpose of conservation, including both consumptive and non-consumptive uses. Licensed tourist hunting and licensed non-consumptive tourist activities are permitted. (ii) Game Controlled Areas are areas declared for conservation of wildlife outside of village lands where activities detrimental to wildlife are prohibited, for example, residence and livestock grazing. (iii) Wildlife Management Areas are areas set aside for community-based wildlife conservation within village lands, but excluding protected areas. There are currently 63 Game Controlled Areas/Open Areas where hunting is permitted (CITES 2018c:3).
8. Tourist hunting is regulated by a block and quota system (CITES 2018c:7). Hunting blocks are areas within Game Reserves, Game Controlled Areas, or Open Areas and are allocated to a licensed hunting operator subject to an application process. For the period 2018–2022, there are 56 hunting blocks available and applicants can be allocated up to five hunting blocks (Vemma 2017). Applicants are required to demonstrate technical capability and financial stability. Successful applicants are subject to an annual performance review (Vemma 2017).
9. Quotas are set at the national level on an annual basis under the direction of the Wildlife Division (CITES 2018c:2). Leopard quotas are set annually by a Committee comprised of experts from the Wildlife Division, Tanzania Wildlife Management Authority (TAWA), Tanzania Wildlife Research Institute (TAWIRI), which is the CITES Scientific Authority in Tanzania, and some selected renown biologists from academic institutions (CITES 2018c:7). Quotas are based on available biological and management information, including: species distribution, natural history, recruitment rate, and population estimates (CITES 2018c:7). This information is generated by researchers, agency staffs, and concession operators.
10. Tanzania justifies the continuation of the present quota in accordance with the following circumstances (CITES 2018c:7): (i) observed conservation status of leopards in that country (large and widely distributed population; see: CITES 2018c:3 & 5); (ii) improvement in population monitoring (see: CITES 2018c:4 & 8); (iii) scientific assessment of the harvest regime (see: CITES 2018c:9); and (iv) contribution of trophy hunting revenues to leopard conservation and the livelihoods of local communities (CITES 2018c:9–11). Based on these circumstances, according to Tanzania, the present quota should be continued.
11. According to Tanzania (CITES 2018c:12–13):

Upon considering all the factors illustrated in this document and in accordance with Article IV of CITES and CITES Resolution Conf.16.7, the Scientific Authority of Tanzania has advised the Management Authority that the low level of off-take generated by safari hunting is not detrimental to the survival of the leopard in Tanzania and enhances its survival 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 rural communities.

It concludes by indicating that the quota for leopard in Tanzania found in Resolution Conf. 10.14 (Rev. CoP16) is sustainable and at levels which are non-detrimental to the survival of the species in the wild.

C. CITES Export Quota Program

12. Within the context of CITES, Tanzania initially had an approved export quota of 60 individuals (1983–1997; CITES 1983; CITES 2018a,b). That value – however, according to the United Republic of Tanzania – was not based on actual scientific data (CITES 2002:2). Given the absence of scientific data at that time, the quota was justified instead in large measure by trophy hunting considerations. Based on several additional factors, the leopard quota was increased in 1997 to 250: (i) more than 90% of Tanzania was considered to be excellent leopard habitat; (ii) leopard hunting was limited to that by tourists and for control purposes; (iii) 301–645 leopards were harvested annually for leopard control purposes with no apparent negative effect on the population; and (iv) there was no evidence of illegal trade (CITES 2002:2; UNEP 2018). By 2003, when the quota was increased for a third time, limited scientific data were available, including: (i) total population size (ca. 39,000 leopards); (ii) estimated annual harvest (390 individuals); and (iii) estimated potential safe harvest (5%; 1,827 individuals; CITES 2002:3). Although this quota has been increased, actual hunting trophy exports have been less than the corresponding quota. Since 2008, according to UNEP-WCMC (2018), reported gross exports have averaged 188 trophies annually and 44 skins annually (total = 232 leopards; about 46% of the annual quota) *versus* the annual quota of 500.

13. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

14. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Tanzania:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Tanzania, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

15. The Animals Committee adopted this recommendation (CITES 2018e:6).

16. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

17. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

18. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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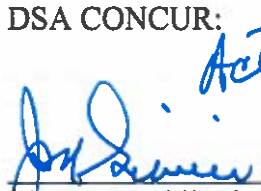
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Division of Scientific Authority
Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 50092D

Date Received by DSA: August 28, 2019

DMA Contact: Miguel Richardson

Applicant: Thomas Dan Friedkin
Houston, TX

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Tanzania)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae; Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is **unknown**. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus* ssp. *pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This range wide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Since the last IUCN Assessment in 2008, leopard populations have declined in Tanzania especially in central part of the country (IUCN/SSC Cat Specialist Group 2017:34). Leopards are found throughout the Serengeti-Ngorogoro Crater system, and to the south and west of this area, but are thought to be absent from Lake Victoria's southeastern boundary to Central Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately

76% of the countryside of Tanzania, or about 672,100 km² (Jacobson *et al.* 2016, Supplemental Table 5). The Tanzania Wildlife Research Institute (TAWIRI) plans to conduct additional leopard surveys during 2018–2019 (CITES 2018c:3).

Range wide, the main conservation threats to leopards are habitat loss and fragmentation, reduced prey base, conflict with livestock and game farming, and trophy hunting if poorly managed (Stein *et al.* 2016:13). In Tanzania, the key threats to leopard conservation are direct persecution in retaliation for livestock losses and accidental capture in snares set for other animals (CITES 2018c:5). These threats are ongoing (Stein *et al.* 2016:3). In addition, according to Tanzania (CITES 2018c:5): 4–15 leopards are killed annually through the control of problem animals; incidental snaring or poaching is worth noting and may be under-reported; prey abundance does not appear to be an issue; and habitat loss is not a significant threat. According to the IUCN/SSC Cat Specialist Group (2017:126–127), however, prey species depletion, as well as habitat loss and agricultural conversion, may in fact be significant leopard conservation threats. The significance of hostility towards leopards by local tribes, as well as the illegal harvest of female leopards, may also be under-appreciated. Additional information about all leopard conservation threats in Tanzania is indicated.

Until recently, given the absence of substantial baseline data, leopard species accounts typically did not include precise national population size estimates, for example: Jacobson *et al.* (2016, Supplement to Document 1, p. 26), Stein *et al.* (2016:8–10), and IUCN/SSC Cat Specialist Group (2017:56). As an example for leopard management purposes, however, Tanzania presents a qualitative assessment of leopard abundance based on camera traps at 23 sites. Leopards were assessed as abundant at three sites and as common or fairly common at nine sites (CITES 2018c:4). Leopard population density estimates are also available for four sites in Tanzania. Based on these values, Tanzania calculated overall densities, extrapolated those values to the surface areas of lands inside and outside of protected areas, and estimated a total population size of 19,673 leopards in that country (CITES 2018c:5). While this value is less than previous estimates (> 30K leopards, see IUCN/SSC Cat Specialist Group 2017:56), it would not be categorized by the Red List as a very small or restricted population. According to the IUCN Red List assessment however, while healthy leopard populations may occur outside of human dominated areas, widespread habitat loss and prey loss inside protected areas are likely to have caused leopard declines of > 30% over the past three leopard generations (ca. 22 years) in sub-Saharan Africa, perhaps suggesting that a more endangered assessment is indicated (Stein *et al.* 2016:9–10).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Thomas Dan Friedkin ; Houston, TX) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Tanzania.
2. The purpose of the proposed import is personal use. The leopard was/will be taken from the wild at: Tanzania, Arusha with Tanzania Game Tracker Safaris; during a hunt scheduled for September 15 – October 31, 2019.

B. Tanzania Information:

3. Conservation activities in Tanzania are managed in accordance with four general principles: responsibility principle, precautionary principle, adaptive management principle, and participatory principle (CITES 2018c:11). Furthermore, leopards are the beneficiary of several protective measures and are sustainably utilized under a regulated trophy hunting system (CITES 2018c:6–7; see below). Leopards are also the beneficiary of an extensive network of protected areas that encompass about 23.9 % of their range (Jacobson *et al.* 2016, Supplemental Table 5; CITES 2018c:3). These activities and measures provide a strong protective framework for the species in Tanzania.

4. Leopard hunting in Tanzania is regulated by three legislative measures (CITES 2018c:6): Wildlife Conservation Act No. 5 of 2009, Wildlife Conservation (Tourist Hunting) Regulations of 2015, and CITES Implementation Regulations of 2005. These measures implement several general procedures (quota control system), including: (i) Allocating a quota for each licensed hunting operator; (ii) Authorizing hunting of male leopards; (iii) Hunting supervised and verified by game scouts; (iv) Verified leopard harvests that are recorded on official quota control sheets; (v) Actual exports are supported by CITES Export Permits; and (vi) Export documents that are verified by wildlife inspectors at exit points (CITES 2018c:6). Leopard harvests are also subject to a minimum body length requirement of 130 cm (tip of the nose to the base of the tail (CITES 2018c:7). The implementation of these measures by Tanzania enhances leopard conservation in that country.

5. Tanzania also manages its leopard population in accordance with the Tanzania Carnivore Conservation Action Plan (TAWIRI 2009). This plan summarizes current information about leopard distribution, abundance, conservation threats, information needs, conservation needs, and research priorities. Based on these preliminary results, the group of species and subject matter experts identified several immediate leopard information needs, including: (i) information on anthropogenic threats targeting conflict hotspots; (ii) research on effectiveness of mitigation strategies; (iii) status in representative areas; (iv) addressing gaps in knowledge of distribution; (v) movement of leopards in parks and between game reserves; (vi) GIS resource maps; and (vii) threats posed by trade in skins and parts (TAWIRI 2009:98–99). At the national level, biodiversity is managed within the context of the National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 (Tanzania 2015). Within the context of the Convention on Biological Diversity, this plan calls for the characterization and conservation of biodiversity – including the leopard and its habitat – at various levels, including: ecosystems, species, and protected areas. Together, these two plans guide the activities of leopard researchers and managers.

6. According to Tanzania, the leopard management program has been subject to monitoring at both the national and regional levels through questionnaires, camera-traps, call-ups and spoor counts (CITES 2018c:8). Presently, camera traps and spoor counts are being utilized as monitoring tools. These results inform the decisions of leopard managers with regard to the calculation of estimated leopard population sizes, characterization of human-leopard conflicts, confirmation of distribution outside of protected areas, and quantification of non-trophy hunting killings of leopards.

7. There are three general categories of areas in Tanzania where big game hunting is permitted (Tanzania Wildlife Management Authority; TAWA 2018; Tanzania Tourist Board 2018): (i) Game Reserves are areas which are declared for the purpose of conservation, including both consumptive and non-consumptive uses. Licensed tourist hunting and licensed non-consumptive tourist activities are permitted. (ii) Game Controlled Areas are areas declared for conservation of wildlife outside of village lands where activities detrimental to wildlife are prohibited, for example, residence and livestock grazing. (iii) Wildlife Management Areas are areas set aside for community-based wildlife conservation within village lands, but excluding protected areas. There are currently 63 Game Controlled Areas/Open Areas where hunting is permitted (CITES 2018c:3).

8. Tourist hunting is regulated by a block and quota system (CITES 2018c:7). Hunting blocks are areas within Game Reserves, Game Controlled Areas, or Open Areas and are allocated to a licensed hunting operator subject to an application process. For the period 2018–2022, there are 56 hunting blocks available and applicants can be allocated up to five hunting blocks (Vemma 2017). Applicants are required to demonstrate technical capability and financial stability. Successful applicants are subject to an annual performance review (Vemma 2017).

9. Quotas are set at the national level on an annual basis under the direction of the Wildlife Division (CITES 2018c:2). Leopard quotas are set annually by a Committee comprised of experts from the Wildlife Division, Tanzania Wildlife Management Authority (TAWA), Tanzania Wildlife Research Institute (TAWIRI), which is the CITES Scientific Authority in Tanzania, and some selected renowned biologists from academic institutions (CITES 2018c:7). Quotas are based on available biological and management information, including: species distribution, natural history, recruitment rate, and population estimates (CITES 2018c:7). This information is generated by researchers, agency staffs, and concession operators.

10. Tanzania justifies the continuation of the present quota in accordance with the following circumstances (CITES 2018c:7): (i) observed conservation status of leopards in that country (large and widely distributed population; see: CITES 2018c:3 & 5); (ii) improvement in population monitoring (see: CITES 2018c:4 & 8); (iii) scientific assessment of the harvest regime (see: CITES 2018c:9); and (iv) contribution of trophy hunting revenues to leopard conservation and the livelihoods of local communities (CITES 2018c:9–11). Based on these circumstances, according to Tanzania, the present quota should be continued.

11. According to Tanzania (CITES 2018c:12–13):

Upon considering all the factors illustrated in this document and in accordance with Article IV of CITES and CITES Resolution Conf.16.7, the Scientific Authority of Tanzania has advised the Management Authority that the low level of off-take generated by safari hunting is not detrimental to the survival of the leopard in Tanzania and enhances its survival 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 rural communities.

It concludes by indicating that the quota for leopard in Tanzania found in Resolution Conf. 10.14 (Rev. CoP16) is sustainable and at levels which are non-detrimental to the survival of the species in the wild.

C. CITES Export Quota Program

12. Within the context of CITES, Tanzania initially had an approved export quota of 60 individuals (1983–1997; CITES 1983; CITES 2018a,b). That value – however, according to the United Republic of Tanzania – was not based on actual scientific data (CITES 2002:2). Given the absence of scientific data at that time, the quota was justified instead in large measure by trophy hunting considerations. Based on several additional factors, the leopard quota was increased in 1997 to 250: (i) more than 90% of Tanzania was considered to be excellent leopard habitat; (ii) leopard hunting was limited to that by tourists and for control purposes; (iii) 301–645 leopards were harvested annually for leopard control purposes with no apparent negative effect on the population; and (iv) there was no evidence of illegal trade (CITES 2002:2; UNEP 2018). By 2003, when the quota was increased for a third time, limited scientific data were available, including: (i) total population size (ca. 39,000 leopards); (ii) estimated annual harvest (390 individuals); and (iii) estimated potential safe harvest (5%; 1,827 individuals; CITES 2002:3). Although this quota has been increased, actual hunting trophy exports have been less than the corresponding quota. Since 2008, according to UNEP-WCMC (2018), reported gross exports have averaged 188 trophies annually and 44 skins annually (total = 232 leopards; about 46% of the annual quota) *versus* the annual quota of 500.

13. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

14. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Tanzania:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Tanzania, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

15. The Animals Committee adopted this recommendation (CITES 2018e:6).

16. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

17. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

18. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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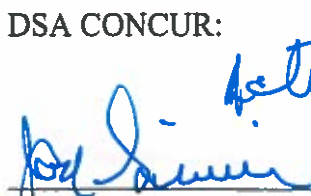
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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 52969D

Date Received by DSA: September 2, 2019

DMA Contact: Stephanie Whitley

Applicant: James John Liautaud
Key Largo, FL

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Tanzania)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae; Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is **unknown**. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This range wide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Since the last IUCN Assessment in 2008, leopard populations have declined in Tanzania especially in central part of the country (IUCN/SSC Cat Specialist Group 2017:34). Leopards are found throughout the Serengeti-Ngorogoro Crater system, and to the south and west of this area, but are thought to be absent from Lake Victoria's southeastern boundary to Central Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately

76% of the countryside of Tanzania, or about 672,100 km² (Jacobson *et al.* 2016, Supplemental Table 5). The Tanzania Wildlife Research Institute (TAWIRI) plans to conduct additional leopard surveys during 2018–2019 (CITES 2018c:3).

Range wide, the main conservation threats to leopards are habitat loss and fragmentation, reduced prey base, conflict with livestock and game farming, and trophy hunting if poorly managed (Stein *et al.* 2016:13). In Tanzania, the key threats to leopard conservation are direct persecution in retaliation for livestock losses and accidental capture in snares set for other animals (CITES 2018c:5). These threats are ongoing (Stein *et al.* 2016:3). In addition, according to Tanzania (CITES 2018c:5): 4–15 leopards are killed annually through the control of problem animals; incidental snaring or poaching is worth noting and may be under-reported; prey abundance does not appear to be an issue; and habitat loss is not a significant threat. According to the IUCN/SSC Cat Specialist Group (2017:126–127), however, prey species depletion, as well as habitat loss and agricultural conversion, may in fact be significant leopard conservation threats. The significance of hostility towards leopards by local tribes, as well as the illegal harvest of female leopards, may also be under-appreciated. Additional information about all leopard conservation threats in Tanzania is indicated.

Until recently, given the absence of substantial baseline data, leopard species accounts typically did not include precise national population size estimates, for example: Jacobson *et al.* (2016, Supplement to Document 1, p. 26), Stein *et al.* (2016:8–10), and IUCN/SSC Cat Specialist Group (2017:56). As an example for leopard management purposes, however, Tanzania presents a qualitative assessment of leopard abundance based on camera traps at 23 sites. Leopards were assessed as abundant at three sites and as common or fairly common at nine sites (CITES 2018c:4). Leopard population density estimates are also available for four sites in Tanzania. Based on these values, Tanzania calculated overall densities, extrapolated those values to the surface areas of lands inside and outside of protected areas, and estimated a total population size of 19,673 leopards in that country (CITES 2018c:5). While this value is less than previous estimates (> 30K leopards, see IUCN/SSC Cat Specialist Group 2017:56), it would not be categorized by the Red List as a very small or restricted population. According to the IUCN Red List assessment however, while healthy leopard populations may occur outside of human dominated areas, widespread habitat loss and prey loss inside protected areas are likely to have caused leopard declines of > 30% over the past three leopard generations (ca. 22 years) in sub-Saharan Africa, perhaps suggesting that a more endangered assessment is indicated (Stein *et al.* 2016:9–10).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (James John Liautaud ; Key Largo, FL) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Tanzania.
2. The purpose of the proposed import is personal use. The leopard was/will be taken from the wild at: Tanzania, Hunting Blocks: Kilombero Game Controlled Area- Mlimba; during a hunt scheduled for September 20- October 7, 2019.

B. Tanzania Information:

3. Conservation activities in Tanzania are managed in accordance with four general principles: responsibility principle, precautionary principle, adaptive management principle, and participatory principle (CITES 2018c:11). Furthermore, leopards are the beneficiary of several protective measures and are sustainably utilized under a regulated trophy hunting system (CITES 2018c:6–7; see below). Leopards are also the beneficiary of an extensive network of protected areas that encompass about 23.9 % of their range (Jacobson *et al.* 2016, Supplemental Table 5; CITES 2018c:3). These activities and measures provide a strong protective framework for the species in Tanzania.

4. Leopard hunting in Tanzania is regulated by three legislative measures (CITES 2018c:6): Wildlife Conservation Act No. 5 of 2009, Wildlife Conservation (Tourist Hunting) Regulations of 2015, and CITES Implementation Regulations of 2005. These measures implement several general procedures (quota control system), including: (i) Allocating a quota for each licensed hunting operator; (ii) Authorizing hunting of male leopards; (iii) Hunting supervised and verified by game scouts; (iv) Verified leopard harvests that are recorded on official quota control sheets; (v) Actual exports are supported by CITES Export Permits; and (vi) Export documents that are verified by wildlife inspectors at exit points (CITES 2018c:6). Leopard harvests are also subject to a minimum body length requirement of 130 cm (tip of the nose to the base of the tail (CITES 2018c:7). The implementation of these measures by Tanzania enhances leopard conservation in that country.

5. Tanzania also manages its leopard population in accordance with the Tanzania Carnivore Conservation Action Plan (TAWIRI 2009). This plan summarizes current information about leopard distribution, abundance, conservation threats, information needs, conservation needs, and research priorities. Based on these preliminary results, the group of species and subject matter experts identified several immediate leopard information needs, including: (i) information on anthropogenic threats targeting conflict hotspots; (ii) research on effectiveness of mitigation strategies; (iii) status in representative areas; (iv) addressing gaps in knowledge of distribution; (v) movement of leopards in parks and between game reserves; (vi) GIS resource maps; and (vii) threats posed by trade in skins and parts (TAWIRI 2009:98–99). At the national level, biodiversity is managed within the context of the National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 (Tanzania 2015). Within the context of the Convention on Biological Diversity, this plan calls for the characterization and conservation of biodiversity – including the leopard and its habitat – at various levels, including: ecosystems, species, and protected areas. Together, these two plans guide the activities of leopard researchers and managers.

6. According to Tanzania, the leopard management program has been subject to monitoring at both the national and regional levels through questionnaires, camera-traps, call-ups and spoor counts (CITES 2018c:8). Presently, camera traps and spoor counts are being utilized as monitoring tools. These results inform the decisions of leopard managers with regard to the calculation of estimated leopard population sizes, characterization of human-leopard conflicts, confirmation of distribution outside of protected areas, and quantification of non-trophy hunting killings of leopards.

7. There are three general categories of areas in Tanzania where big game hunting is permitted (Tanzania Wildlife Management Authority; TAWA 2018; Tanzania Tourist Board 2018): (i) Game Reserves are areas which are declared for the purpose of conservation, including both consumptive and non-consumptive uses. Licensed tourist hunting and licensed non-consumptive tourist activities are permitted. (ii) Game Controlled Areas are areas declared for conservation of wildlife outside of village lands where activities detrimental to wildlife are prohibited, for example, residence and livestock grazing. (iii) Wildlife Management Areas are areas set aside for community-based wildlife conservation within village lands, but excluding protected areas. There are currently 63 Game Controlled Areas/Open Areas where hunting is permitted (CITES 2018c:3).

8. Tourist hunting is regulated by a block and quota system (CITES 2018c:7). Hunting blocks are areas within Game Reserves, Game Controlled Areas, or Open Areas and are allocated to a licensed hunting operator subject to an application process. For the period 2018–2022, there are 56 hunting blocks available and applicants can be allocated up to five hunting blocks (Vemma 2017). Applicants are required to demonstrate technical capability and financial stability. Successful applicants are subject to an annual performance review (Vemma 2017).

9. Quotas are set at the national level on an annual basis under the direction of the Wildlife Division (CITES 2018c:2). Leopard quotas are set annually by a Committee comprised of experts from the Wildlife Division, Tanzania Wildlife Management Authority (TAWA), Tanzania Wildlife Research Institute (TAWIRI), which is the CITES Scientific Authority in Tanzania, and some selected renown biologists from academic institutions (CITES 2018c:7). Quotas are based on available biological and management information, including: species distribution, natural history, recruitment rate, and population estimates (CITES 2018c:7). This information is generated by researchers, agency staffs, and concession operators.

10. Tanzania justifies the continuation of the present quota in accordance with the following circumstances (CITES 2018c:7): (i) observed conservation status of leopards in that country (large and widely distributed population; see: CITES 2018c:3 & 5); (ii) improvement in population monitoring (see: CITES 2018c:4 & 8); (iii) scientific assessment of the harvest regime (see: CITES 2018c:9); and (iv) contribution of trophy hunting revenues to leopard conservation and the livelihoods of local communities (CITES 2018c:9–11). Based on these circumstances, according to Tanzania, the present quota should be continued.

11. According to Tanzania (CITES 2018c:12–13):

Upon considering all the factors illustrated in this document and in accordance with Article IV of CITES and CITES Resolution Conf.16.7, the Scientific Authority of Tanzania has advised the Management Authority that the low level of off-take generated by safari hunting is not detrimental to the survival of the leopard in Tanzania and enhances its survival 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 rural communities.

It concludes by indicating that the quota for leopard in Tanzania found in Resolution Conf. 10.14(Rev. CoP16) is sustainable and at levels which are non-detrimental to the survival of the species in the wild.

C. CITES Export Quota Program

12. Within the context of CITES, Tanzania initially had an approved export quota of 60 individuals (1983–1997; CITES 1983; CITES 2018a,b). That value – however, according to the United Republic of Tanzania – was not based on actual scientific data (CITES 2002:2). Given the absence of scientific data at that time, the quota was justified instead in large measure by trophy hunting considerations. Based on several additional factors, the leopard quota was increased in 1997 to 250: (i) more than 90% of Tanzania was considered to be excellent leopard habitat; (ii) leopard hunting was limited to that by tourists and for control purposes; (iii) 301–645 leopards were harvested annually for leopard control purposes with no apparent negative effect on the population; and (iv) there was no evidence of illegal trade (CITES 2002:2; UNEP 2018). By 2003, when the quota was increased for a third time, limited scientific data were available, including: (i) total population size (ca. 39,000 leopards); (ii) estimated annual harvest (390 individuals); and (iii) estimated potential safe harvest (5%; 1,827 individuals; CITES 2002:3). Although this quota has been increased, actual hunting trophy exports have been less than the corresponding quota. Since 2008, according to UNEP-WCMC (2018), reported gross exports have averaged 188 trophies annually and 44 skins annually (total = 232 leopards; about 46% of the annual quota) *versus* the annual quota of 500.

13. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

14. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Tanzania:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Tanzania, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

15. The Animals Committee adopted this recommendation (CITES 2018e:6).

16. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

17. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

18. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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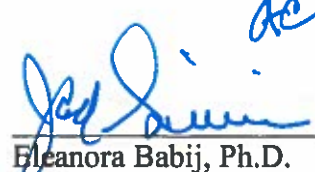
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DSA BIOLOGIST:

 10/2/19

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 53306D

Date Received by DSA: September 2, 2019

DMA Contact: Stephanie Whitley

Applicant: Steven J. Tisdale
Wolforth, TX

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Tanzania)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae; Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This range wide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Since the last IUCN Assessment in 2008, leopard populations have declined in Tanzania especially in central part of the country (IUCN/SSC Cat Specialist Group 2017:34). Leopards are found throughout the Serengeti-Ngorogoro Crater system, and to the south and west of this area, but are thought to be absent from Lake Victoria's southeastern boundary to Central Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately

76% of the countryside of Tanzania, or about 672,100 km² (Jacobson *et al.* 2016, Supplemental Table 5). The Tanzania Wildlife Research Institute (TAWIRI) plans to conduct additional leopard surveys during 2018–2019 (CITES 2018c:3).

Range wide, the main conservation threats to leopards are habitat loss and fragmentation, reduced prey base, conflict with livestock and game farming, and trophy hunting if poorly managed (Stein *et al.* 2016:13). In Tanzania, the key threats to leopard conservation are direct persecution in retaliation for livestock losses and accidental capture in snares set for other animals (CITES 2018c:5). These threats are ongoing (Stein *et al.* 2016:3). In addition, according to Tanzania (CITES 2018c:5): 4–15 leopards are killed annually through the control of problem animals; incidental snaring or poaching is worth noting and may be under-reported; prey abundance does not appear to be an issue; and habitat loss is not a significant threat. According to the IUCN/SSC Cat Specialist Group (2017:126–127), however, prey species depletion, as well as habitat loss and agricultural conversion, may in fact be significant leopard conservation threats. The significance of hostility towards leopards by local tribes, as well as the illegal harvest of female leopards, may also be under-appreciated. Additional information about all leopard conservation threats in Tanzania is indicated.

Until recently, given the absence of substantial baseline data, leopard species accounts typically did not include precise national population size estimates, for example: Jacobson *et al.* (2016, Supplement to Document 1, p. 26), Stein *et al.* (2016:8–10), and IUCN/SSC Cat Specialist Group (2017:56). As an example for leopard management purposes, however, Tanzania presents a qualitative assessment of leopard abundance based on camera traps at 23 sites. Leopards were assessed as abundant at three sites and as common or fairly common at nine sites (CITES 2018c:4). Leopard population density estimates are also available for four sites in Tanzania. Based on these values, Tanzania calculated overall densities, extrapolated those values to the surface areas of lands inside and outside of protected areas, and estimated a total population size of 19,673 leopards in that country (CITES 2018c:5). While this value is less than previous estimates (> 30K leopards, see IUCN/SSC Cat Specialist Group 2017:56), it would not be categorized by the Red List as a very small or restricted population. According to the IUCN Red List assessment however, while healthy leopard populations may occur outside of human dominated areas, widespread habitat loss and prey loss inside protected areas are likely to have caused leopard declines of > 30% over the past three leopard generations (ca. 22 years) in sub-Saharan Africa, perhaps suggesting that a more endangered assessment is indicated (Stein *et al.* 2016:9–10).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Steven J. Tisdale ; Wolforth, TX) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Tanzania.
2. The purpose of the proposed import is personal use. The leopard was/will be taken from the wild at: Tanzania, Selous game Reserve, Morogoro Q6, with Pori Trackers; during a hunt scheduled for July 28, 2019.

B. Tanzania Information:

3. Conservation activities in Tanzania are managed in accordance with four general principles: responsibility principle, precautionary principle, adaptive management principle, and participatory principle (CITES 2018c:11). Furthermore, leopards are the beneficiary of several protective measures and are sustainably utilized under a regulated trophy hunting system (CITES 2018c:6–7; see below). Leopards are also the beneficiary of an extensive network of protected areas that encompass about 23.9 % of their range (Jacobson *et al.* 2016, Supplemental Table 5; CITES 2018c:3). These activities and measures provide a strong protective framework for the species in Tanzania.

4. Leopard hunting in Tanzania is regulated by three legislative measures (CITES 2018c:6): Wildlife Conservation Act No. 5 of 2009, Wildlife Conservation (Tourist Hunting) Regulations of 2015, and CITES Implementation Regulations of 2005. These measures implement several general procedures (quota control system), including: (i) Allocating a quota for each licensed hunting operator; (ii) Authorizing hunting of male leopards; (iii) Hunting supervised and verified by game scouts; (iv) Verified leopard harvests that are recorded on official quota control sheets; (v) Actual exports are supported by CITES Export Permits; and (vi) Export documents that are verified by wildlife inspectors at exit points (CITES 2018c:6). Leopard harvests are also subject to a minimum body length requirement of 130 cm (tip of the nose to the base of the tail (CITES 2018c:7). The implementation of these measures by Tanzania enhances leopard conservation in that country.

5. Tanzania also manages its leopard population in accordance with the Tanzania Carnivore Conservation Action Plan (TAWIRI 2009). This plan summarizes current information about leopard distribution, abundance, conservation threats, information needs, conservation needs, and research priorities. Based on these preliminary results, the group of species and subject matter experts identified several immediate leopard information needs, including: (i) information on anthropogenic threats targeting conflict hotspots; (ii) research on effectiveness of mitigation strategies; (iii) status in representative areas; (iv) addressing gaps in knowledge of distribution; (v) movement of leopards in parks and between game reserves; (vi) GIS resource maps; and (vii) threats posed by trade in skins and parts (TAWIRI 2009:98–99). At the national level, biodiversity is managed within the context of the National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 (Tanzania 2015). Within the context of the Convention on Biological Diversity, this plan calls for the characterization and conservation of biodiversity – including the leopard and its habitat – at various levels, including: ecosystems, species, and protected areas. Together, these two plans guide the activities of leopard researchers and managers.

6. According to Tanzania, the leopard management program has been subject to monitoring at both the national and regional levels through questionnaires, camera-traps, call-ups and spoor counts (CITES 2018c:8). Presently, camera traps and spoor counts are being utilized as monitoring tools. These results inform the decisions of leopard managers with regard to the calculation of estimated leopard population sizes, characterization of human-leopard conflicts, confirmation of distribution outside of protected areas, and quantification of non-trophy hunting killings of leopards.

7. There are three general categories of areas in Tanzania where big game hunting is permitted (Tanzania Wildlife Management Authority; TAWA 2018; Tanzania Tourist Board 2018): (i) Game Reserves are areas which are declared for the purpose of conservation, including both consumptive and non-consumptive uses. Licensed tourist hunting and licensed non-consumptive tourist activities are permitted. (ii) Game Controlled Areas are areas declared for conservation of wildlife outside of village lands where activities detrimental to wildlife are prohibited, for example, residence and livestock grazing. (iii) Wildlife Management Areas are areas set aside for community-based wildlife conservation within village lands, but excluding protected areas. There are currently 63 Game Controlled Areas/Open Areas where hunting is permitted (CITES 2018c:3).
8. Tourist hunting is regulated by a block and quota system (CITES 2018c:7). Hunting blocks are areas within Game Reserves, Game Controlled Areas, or Open Areas and are allocated to a licensed hunting operator subject to an application process. For the period 2018–2022, there are 56 hunting blocks available and applicants can be allocated up to five hunting blocks (Vemma 2017). Applicants are required to demonstrate technical capability and financial stability. Successful applicants are subject to an annual performance review (Vemma 2017).
9. Quotas are set at the national level on an annual basis under the direction of the Wildlife Division (CITES 2018c:2). Leopard quotas are set annually by a Committee comprised of experts from the Wildlife Division, Tanzania Wildlife Management Authority (TAWA), Tanzania Wildlife Research Institute (TAWIRI), which is the CITES Scientific Authority in Tanzania, and some selected renowned biologists from academic institutions (CITES 2018c:7). Quotas are based on available biological and management information, including: species distribution, natural history, recruitment rate, and population estimates (CITES 2018c:7). This information is generated by researchers, agency staffs, and concession operators.
10. Tanzania justifies the continuation of the present quota in accordance with the following circumstances (CITES 2018c:7): (i) observed conservation status of leopards in that country (large and widely distributed population; see: CITES 2018c:3 & 5); (ii) improvement in population monitoring (see: CITES 2018c:4 & 8); (iii) scientific assessment of the harvest regime (see: CITES 2018c:9); and (iv) contribution of trophy hunting revenues to leopard conservation and the livelihoods of local communities (CITES 2018c:9–11). Based on these circumstances, according to Tanzania, the present quota should be continued.
11. According to Tanzania (CITES 2018c:12–13):

Upon considering all the factors illustrated in this document and in accordance with Article IV of CITES and CITES Resolution Conf.16.7, the Scientific Authority of Tanzania has advised the Management Authority that the low level of off-take generated by safari hunting is not detrimental to the survival of the leopard in Tanzania and enhances its survival 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 rural communities.

It concludes by indicating that the quota for leopard in Tanzania found in Resolution Conf. 10.14 (Rev. CoP16) is sustainable and at levels which are non-detrimental to the survival of the species in the wild.

C. CITES Export Quota Program

12. Within the context of CITES, Tanzania initially had an approved export quota of 60 individuals (1983–1997; CITES 1983; CITES 2018a,b). That value – however, according to the United Republic of Tanzania – was not based on actual scientific data (CITES 2002:2). Given the absence of scientific data at that time, the quota was justified instead in large measure by trophy hunting considerations. Based on several additional factors, the leopard quota was increased in 1997 to 250: (i) more than 90% of Tanzania was considered to be excellent leopard habitat; (ii) leopard hunting was limited to that by tourists and for control purposes; (iii) 301–645 leopards were harvested annually for leopard control purposes with no apparent negative effect on the population; and (iv) there was no evidence of illegal trade (CITES 2002:2; UNEP 2018). By 2003, when the quota was increased for a third time, limited scientific data were available, including: (i) total population size (ca. 39,000 leopards); (ii) estimated annual harvest (390 individuals); and (iii) estimated potential safe harvest (5%; 1,827 individuals; CITES 2002:3). Although this quota has been increased, actual hunting trophy exports have been less than the corresponding quota. Since 2008, according to UNEP-WCMC (2018), reported gross exports have averaged 188 trophies annually and 44 skins annually (total = 232 leopards; about 46% of the annual quota) *versus* the annual quota of 500.

13. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

14. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Tanzania:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Tanzania, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

15. The Animals Committee adopted this recommendation (CITES 2018e:6).

16. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

17. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

18. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 54265D

Date Received by DSA: September 12, 2019

DMA Contact: Robert Williams

Applicant: Arthur French
Montara, CA

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Tanzania)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae; Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is **unknown**. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Braczkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; “In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya”). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This range wide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Since the last IUCN Assessment in 2008, leopard populations have declined in Tanzania especially in central part of the country (IUCN/SSC Cat Specialist Group 2017:34). Leopards are found throughout the Serengeti-Ngorogoro Crater system, and to the south and west of this area, but are thought to be absent from Lake Victoria's southeastern boundary to Central Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately

76% of the countryside of Tanzania, or about 672,100 km² (Jacobson *et al.* 2016, Supplemental Table 5). The Tanzania Wildlife Research Institute (TAWIRI) plans to conduct additional leopard surveys during 2018–2019 (CITES 2018c:3).

Range wide, the main conservation threats to leopards are habitat loss and fragmentation, reduced prey base, conflict with livestock and game farming, and trophy hunting if poorly managed (Stein *et al.* 2016:13). In Tanzania, the key threats to leopard conservation are direct persecution in retaliation for livestock losses and accidental capture in snares set for other animals (CITES 2018c:5). These threats are ongoing (Stein *et al.* 2016:3). In addition, according to Tanzania (CITES 2018c:5): 4–15 leopards are killed annually through the control of problem animals; incidental snaring or poaching is worth noting and may be under-reported; prey abundance does not appear to be an issue; and habitat loss is not a significant threat. According to the IUCN/SSC Cat Specialist Group (2017:126–127), however, prey species depletion, as well as habitat loss and agricultural conversion, may in fact be significant leopard conservation threats. The significance of hostility towards leopards by local tribes, as well as the illegal harvest of female leopards, may also be under-appreciated. Additional information about all leopard conservation threats in Tanzania is indicated.

Until recently, given the absence of substantial baseline data, leopard species accounts typically did not include precise national population size estimates, for example: Jacobson *et al.* (2016, Supplement to Document 1, p. 26), Stein *et al.* (2016:8–10), and IUCN/SSC Cat Specialist Group (2017:56). As an example for leopard management purposes, however, Tanzania presents a qualitative assessment of leopard abundance based on camera traps at 23 sites. Leopards were assessed as abundant at three sites and as common or fairly common at nine sites (CITES 2018c:4). Leopard population density estimates are also available for four sites in Tanzania. Based on these values, Tanzania calculated overall densities, extrapolated those values to the surface areas of lands inside and outside of protected areas, and estimated a total population size of 19,673 leopards in that country (CITES 2018c:5). While this value is less than previous estimates (> 30K leopards, see IUCN/SSC Cat Specialist Group 2017:56), it would not be categorized by the Red List as a very small or restricted population. According to the IUCN Red List assessment however, while healthy leopard populations may occur outside of human dominated areas, widespread habitat loss and prey loss inside protected areas are likely to have caused leopard declines of > 30% over the past three leopard generations (ca. 22 years) in sub-Saharan Africa, perhaps suggesting that a more endangered assessment is indicated (Stein *et al.* 2016:9–10).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Arthur French ; Montara, CA) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Tanzania.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at: Tanzania, Uyumbu WMA with African Buffalo Safari Trackers; during a hunt scheduled for October 18, 2018.

B. Tanzania Information:

3. Conservation activities in Tanzania are managed in accordance with four general principles: responsibility principle, precautionary principle, adaptive management principle, and participatory principle (CITES 2018c:11). Furthermore, leopards are the beneficiary of several protective measures and are sustainably utilized under a regulated trophy hunting system (CITES 2018c:6–7; see below). Leopards are also the beneficiary of an extensive network of protected areas that encompass about 23.9 % of their range (Jacobson *et al.* 2016, Supplemental Table 5; CITES 2018c:3). These activities and measures provide a strong protective framework for the species in Tanzania.

4. Leopard hunting in Tanzania is regulated by three legislative measures (CITES 2018c:6): Wildlife Conservation Act No. 5 of 2009, Wildlife Conservation (Tourist Hunting) Regulations of 2015, and CITES Implementation Regulations of 2005. These measures implement several general procedures (quota control system), including: (i) Allocating a quota for each licensed hunting operator; (ii) Authorizing hunting of male leopards; (iii) Hunting supervised and verified by game scouts; (iv) Verified leopard harvests that are recorded on official quota control sheets; (v) Actual exports are supported by CITES Export Permits; and (vi) Export documents that are verified by wildlife inspectors at exit points (CITES 2018c:6). Leopard harvests are also subject to a minimum body length requirement of 130 cm (tip of the nose to the base of the tail (CITES 2018c:7). The implementation of these measures by Tanzania enhances leopard conservation in that country.

5. Tanzania also manages its leopard population in accordance with the Tanzania Carnivore Conservation Action Plan (TAWIRI 2009). This plan summarizes current information about leopard distribution, abundance, conservation threats, information needs, conservation needs, and research priorities. Based on these preliminary results, the group of species and subject matter experts identified several immediate leopard information needs, including: (i) information on anthropogenic threats targeting conflict hotspots; (ii) research on effectiveness of mitigation strategies; (iii) status in representative areas; (iv) addressing gaps in knowledge of distribution; (v) movement of leopards in parks and between game reserves; (vi) GIS resource maps; and (vii) threats posed by trade in skins and parts (TAWIRI 2009:98–99). At the national level, biodiversity is managed within the context of the National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 (Tanzania 2015). Within the context of the Convention on Biological Diversity, this plan calls for the characterization and conservation of biodiversity – including the leopard and its habitat – at various levels, including: ecosystems, species, and protected areas. Together, these two plans guide the activities of leopard researchers and managers.

6. According to Tanzania, the leopard management program has been subject to monitoring at both the national and regional levels through questionnaires, camera-traps, call-ups and spoor counts (CITES 2018c:8). Presently, camera traps and spoor counts are being utilized as monitoring tools. These results inform the decisions of leopard managers with regard to the calculation of estimated leopard population sizes, characterization of human-leopard conflicts, confirmation of distribution outside of protected areas, and quantification of non-trophy hunting killings of leopards.

7. There are three general categories of areas in Tanzania where big game hunting is permitted (Tanzania Wildlife Management Authority; TAWA 2018; Tanzania Tourist Board 2018): (i) Game Reserves are areas which are declared for the purpose of conservation, including both consumptive and non-consumptive uses. Licensed tourist hunting and licensed non-consumptive tourist activities are permitted. (ii) Game Controlled Areas are areas declared for conservation of wildlife outside of village lands where activities detrimental to wildlife are prohibited, for example, residence and livestock grazing. (iii) Wildlife Management Areas are areas set aside for community-based wildlife conservation within village lands, but excluding protected areas. There are currently 63 Game Controlled Areas/Open Areas where hunting is permitted (CITES 2018c:3).
8. Tourist hunting is regulated by a block and quota system (CITES 2018c:7). Hunting blocks are areas within Game Reserves, Game Controlled Areas, or Open Areas and are allocated to a licensed hunting operator subject to an application process. For the period 2018–2022, there are 56 hunting blocks available and applicants can be allocated up to five hunting blocks (Vemma 2017). Applicants are required to demonstrate technical capability and financial stability. Successful applicants are subject to an annual performance review (Vemma 2017).
9. Quotas are set at the national level on an annual basis under the direction of the Wildlife Division (CITES 2018c:2). Leopard quotas are set annually by a Committee comprised of experts from the Wildlife Division, Tanzania Wildlife Management Authority (TAWA), Tanzania Wildlife Research Institute (TAWIRI), which is the CITES Scientific Authority in Tanzania, and some selected renowned biologists from academic institutions (CITES 2018c:7). Quotas are based on available biological and management information, including: species distribution, natural history, recruitment rate, and population estimates (CITES 2018c:7). This information is generated by researchers, agency staffs, and concession operators.
10. Tanzania justifies the continuation of the present quota in accordance with the following circumstances (CITES 2018c:7): (i) observed conservation status of leopards in that country (large and widely distributed population; see: CITES 2018c:3 & 5); (ii) improvement in population monitoring (see: CITES 2018c:4 & 8); (iii) scientific assessment of the harvest regime (see: CITES 2018c:9); and (iv) contribution of trophy hunting revenues to leopard conservation and the livelihoods of local communities (CITES 2018c:9–11). Based on these circumstances, according to Tanzania, the present quota should be continued.
11. According to Tanzania (CITES 2018c:12–13):

Upon considering all the factors illustrated in this document and in accordance with Article IV of CITES and CITES Resolution Conf.16.7, the Scientific Authority of Tanzania has advised the Management Authority that the low level of off-take generated by safari hunting is not detrimental to the survival of the leopard in Tanzania and enhances its survival 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 rural communities.

It concludes by indicating that the quota for leopard in Tanzania found in Resolution Conf. 10.14(Rev. CoP16) is sustainable and at levels which are non-detrimental to the survival of the species in the wild.

C. CITES Export Quota Program

12. Within the context of CITES, Tanzania initially had an approved export quota of 60 individuals (1983–1997; CITES 1983; CITES 2018a,b). That value – however, according to the United Republic of Tanzania – was not based on actual scientific data (CITES 2002:2). Given the absence of scientific data at that time, the quota was justified instead in large measure by trophy hunting considerations. Based on several additional factors, the leopard quota was increased in 1997 to 250: (i) more than 90% of Tanzania was considered to be excellent leopard habitat; (ii) leopard hunting was limited to that by tourists and for control purposes; (iii) 301–645 leopards were harvested annually for leopard control purposes with no apparent negative effect on the population; and (iv) there was no evidence of illegal trade (CITES 2002:2; UNEP 2018). By 2003, when the quota was increased for a third time, limited scientific data were available, including: (i) total population size (ca. 39,000 leopards); (ii) estimated annual harvest (390 individuals); and (iii) estimated potential safe harvest (5%; 1,827 individuals; CITES 2002:3). Although this quota has been increased, actual hunting trophy exports have been less than the corresponding quota. Since 2008, according to UNEP-WCMC (2018), reported gross exports have averaged 188 trophies annually and 44 skins annually (total = 232 leopards; about 46% of the annual quota) *versus* the annual quota of 500.

13. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

14. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Tanzania:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Tanzania, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

15. The Animals Committee adopted this recommendation (CITES 2018e:6).

16. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

17. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

18. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

* * * * *

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Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)
Record of Advice on Import Permit Application

Application Number: 54640D

Date Received by DSA: September 18, 2019

DMA Contact: Stephanie Whitley

Applicant: Samuel Edward Noble
Scottsboro, AL

Specimens and Species: Leopard (*Panthera pardus*)

Wild (Tanzania)

One (1) personal sport-hunted trophy
(life-sized mount; skin, skull, and claws)

Recipient: Self

Type of Permit: Appendix I Import (CITES)

ADVICE

After reviewing the above permit application, we find that the proposed import is likely to be for purposes that are not detrimental to the survival of the species.

Background:

The leopard (*Panthera pardus*) has one of the largest geographic ranges of any terrestrial mammal in the world and ranges from southern Africa, through the Middle East, to eastern Asia from South Africa to eastern China and Russian Federation (Stein *et al.* 2016). The African leopard (*P. p. pardus*) is one of about nine leopard subspecies and occurs primarily in sub-Saharan regions (Jacobson *et al.* 2016). A habitat generalist, the leopard – all subspecies considered – occupies mesic woodlands, grassland savannas, and forests (Hunt 2011). Trees are an essential habitat component. Leopards are solitary, nocturnal, and territorial (Hunt 2011). Home ranges are about 13–35 km² (Hunt 2011). Ambush predators, leopards prey primarily on

medium-sized ungulates, especially deer (Family Cervidae; Hanssen *et al.* 2017). They also scavenge prey taken by other carnivores. These carcasses are often cached in trees beyond the reach of smaller, more numerous predators (Stein *et al.* 2016). Adult leopards have few natural predators (Hunt 2011). The total population size of the leopard is unknown. In southern Africa, a regional range loss of approximately 21% has been reported (Stein *et al.* 2016). Given their larger body size, males are more desirable and thus more susceptible than females to being harvested by trophy hunters (Brackzkowski *et al.* 2015). In general, the current population trend is declining due to harvest and habitat loss and fragmentation (Stein *et al.* 2016).

In 1975, the leopard as *Panthera pardus* was included in CITES Appendix I (UNEP 2018). In accordance with Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use*, there are numerical limits to the quantity of trophies and skins from some sub-Saharan countries that have been approved by the CITES Parties that can be traded annually (CITES 2013).

In 1970, the leopard as *Panthera pardus* with (three subspecies) was listed as Endangered on the *United States' List of Endangered Foreign Fish and Wildlife*, the precursor to the Endangered Species Act of 1973, as amended (Service 1970). This listing was revised in 1972 with the three subspecies being deleted as separate listings and all leopard subspecies included with the species listing (*Panthera pardus*; Service 1972). This listing was modified in 1982 when certain populations were classified as Threatened (Service 1982; "In Africa, in the wild, south of, and including, the following countries: Gabon, Congo, Zaire, Uganda, Kenya"). The leopard currently is subject to a 90-day status review (Service 2016, 2017, 2018).

In 2016, the African leopard as *Panthera pardus ssp. pardus* was categorized as Vulnerable A2cd (ver 3.1) by the IUCN Red List (Stein *et al.* 2016). This range wide finding was based on loss of habitat and prey, and exploitation. These conservation threats are not well understood, have not ceased, and are likely to continue (Stein *et al.* 2016).

The leopard is part of a joint initiative by the Convention on Migratory Species (CMS) and CITES: Joint CMS-CITES African Carnivores Initiative (CMS 2017a,b). Recognizing the potential benefits of working together, the two organizations have agreed to conduct joint activities addressing shared species and issues of common interest. In this regard, the two organizations have prioritized actions on the leopard, as well as the African lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and wild dog (*Lycaon pictus*). The conservation threats to be addressed include: habitat loss and fragmentation, conflict with humans, depletion of the prey base, and unsustainable or illegal trade practices. Specific joint actions are being developed and will be implemented over the next several years (CMS 2017a). These actions include cooperative conservation programs for carnivores in the several range States, as well as specific conservation activities (e.g., illegal trade analyses, biological monitoring, and capacity building).

Since the last IUCN Assessment in 2008, leopard populations have declined in Tanzania especially in central part of the country (IUCN/SSC Cat Specialist Group 2017:34). Leopards are found throughout the Serengeti-Ngorogoro Crater system, and to the south and west of this area, but are thought to be absent from Lake Victoria's southeastern boundary to Central Tanzania (Stein *et al.* 2016). The current range of leopards in Tanzania covers approximately

76% of the countryside of Tanzania, or about 672,100 km² (Jacobson *et al.* 2016, Supplemental Table 5). The Tanzania Wildlife Research Institute (TAWIRI) plans to conduct additional leopard surveys during 2018–2019 (CITES 2018c:3).

Range wide, the main conservation threats to leopards are habitat loss and fragmentation, reduced prey base, conflict with livestock and game farming, and trophy hunting if poorly managed (Stein *et al.* 2016:13). In Tanzania, the key threats to leopard conservation are direct persecution in retaliation for livestock losses and accidental capture in snares set for other animals (CITES 2018c:5). These threats are ongoing (Stein *et al.* 2016:3). In addition, according to Tanzania (CITES 2018c:5): 4–15 leopards are killed annually through the control of problem animals; incidental snaring or poaching is worth noting and may be under-reported; prey abundance does not appear to be an issue; and habitat loss is not a significant threat. According to the IUCN/SSC Cat Specialist Group (2017:126–127), however, prey species depletion, as well as habitat loss and agricultural conversion, may in fact be significant leopard conservation threats. The significance of hostility towards leopards by local tribes, as well as the illegal harvest of female leopards, may also be under-appreciated. Additional information about all leopard conservation threats in Tanzania is indicated.

Until recently, given the absence of substantial baseline data, leopard species accounts typically did not include precise national population size estimates, for example: Jacobson *et al.* (2016, Supplement to Document 1, p. 26), Stein *et al.* (2016:8–10), and IUCN/SSC Cat Specialist Group (2017:56). As an example for leopard management purposes, however, Tanzania presents a qualitative assessment of leopard abundance based on camera traps at 23 sites. Leopards were assessed as abundant at three sites and as common or fairly common at nine sites (CITES 2018c:4). Leopard population density estimates are also available for four sites in Tanzania. Based on these values, Tanzania calculated overall densities, extrapolated those values to the surface areas of lands inside and outside of protected areas, and estimated a total population size of 19,673 leopards in that country (CITES 2018c:5). While this value is less than previous estimates (> 30K leopards, see IUCN/SSC Cat Specialist Group 2017:56), it would not be categorized by the Red List as a very small or restricted population. According to the IUCN Red List assessment however, while healthy leopard populations may occur outside of human dominated areas, widespread habitat loss and prey loss inside protected areas are likely to have caused leopard declines of > 30% over the past three leopard generations (ca. 22 years) in sub-Saharan Africa, perhaps suggesting that a more endangered assessment is indicated (Stein *et al.* 2016:9–10).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Samuel Edward Noble ; Scottsboro, AL) requests authorization to import one leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Tanzania.
2. The purpose of the proposed import is personal use. The leopard was taken from the wild at: Tanzania, Selous Game Reserve Lu 5 with Allan Vincent of Tanganyika Game Fishing and Photo Safari Ltd; during a hunt scheduled for August 21, 2019.

B. Tanzania Information:

3. Conservation activities in Tanzania are managed in accordance with four general principles: responsibility principle, precautionary principle, adaptive management principle, and participatory principle (CITES 2018c:11). Furthermore, leopards are the beneficiary of several protective measures and are sustainably utilized under a regulated trophy hunting system (CITES 2018c:6–7; see below). Leopards are also the beneficiary of an extensive network of protected areas that encompass about 23.9 % of their range (Jacobson *et al.* 2016, Supplemental Table 5; CITES 2018c:3). These activities and measures provide a strong protective framework for the species in Tanzania.

4. Leopard hunting in Tanzania is regulated by three legislative measures (CITES 2018c:6): Wildlife Conservation Act No. 5 of 2009, Wildlife Conservation (Tourist Hunting) Regulations of 2015, and CITES Implementation Regulations of 2005. These measures implement several general procedures (quota control system), including: (i) Allocating a quota for each licensed hunting operator; (ii) Authorizing hunting of male leopards; (iii) Hunting supervised and verified by game scouts; (iv) Verified leopard harvests that are recorded on official quota control sheets; (v) Actual exports are supported by CITES Export Permits; and (vi) Export documents that are verified by wildlife inspectors at exit points (CITES 2018c:6). Leopard harvests are also subject to a minimum body length requirement of 130 cm (tip of the nose to the base of the tail (CITES 2018c:7). The implementation of these measures by Tanzania enhances leopard conservation in that country.

5. Tanzania also manages its leopard population in accordance with the Tanzania Carnivore Conservation Action Plan (TAWIRI 2009). This plan summarizes current information about leopard distribution, abundance, conservation threats, information needs, conservation needs, and research priorities. Based on these preliminary results, the group of species and subject matter experts identified several immediate leopard information needs, including: (i) information on anthropogenic threats targeting conflict hotspots; (ii) research on effectiveness of mitigation strategies; (iii) status in representative areas; (iv) addressing gaps in knowledge of distribution; (v) movement of leopards in parks and between game reserves; (vi) GIS resource maps; and (vii) threats posed by trade in skins and parts (TAWIRI 2009:98–99). At the national level, biodiversity is managed within the context of the National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 (Tanzania 2015). Within the context of the Convention on Biological Diversity, this plan calls for the characterization and conservation of biodiversity – including the leopard and its habitat – at various levels, including: ecosystems, species, and protected areas. Together, these two plans guide the activities of leopard researchers and managers.

6. According to Tanzania, the leopard management program has been subject to monitoring at both the national and regional levels through questionnaires, camera-traps, call-ups and spoor counts (CITES 2018c:8). Presently, camera traps and spoor counts are being utilized as monitoring tools. These results inform the decisions of leopard managers with regard to the calculation of estimated leopard population sizes, characterization of human-leopard conflicts, confirmation of distribution outside of protected areas, and quantification of non-trophy hunting killings of leopards.

7. There are three general categories of areas in Tanzania where big game hunting is permitted (Tanzania Wildlife Management Authority; TAWA 2018; Tanzania Tourist Board 2018): (i) Game Reserves are areas which are declared for the purpose of conservation, including both consumptive and non-consumptive uses. Licensed tourist hunting and licensed non-consumptive tourist activities are permitted. (ii) Game Controlled Areas are areas declared for conservation of wildlife outside of village lands where activities detrimental to wildlife are prohibited, for example, residence and livestock grazing. (iii) Wildlife Management Areas are areas set aside for community-based wildlife conservation within village lands, but excluding protected areas. There are currently 63 Game Controlled Areas/Open Areas where hunting is permitted (CITES 2018c:3).
8. Tourist hunting is regulated by a block and quota system (CITES 2018c:7). Hunting blocks are areas within Game Reserves, Game Controlled Areas, or Open Areas and are allocated to a licensed hunting operator subject to an application process. For the period 2018–2022, there are 56 hunting blocks available and applicants can be allocated up to five hunting blocks (Vemma 2017). Applicants are required to demonstrate technical capability and financial stability. Successful applicants are subject to an annual performance review (Vemma 2017).
9. Quotas are set at the national level on an annual basis under the direction of the Wildlife Division (CITES 2018c:2). Leopard quotas are set annually by a Committee comprised of experts from the Wildlife Division, Tanzania Wildlife Management Authority (TAWA), Tanzania Wildlife Research Institute (TAWIRI), which is the CITES Scientific Authority in Tanzania, and some selected renown biologists from academic institutions (CITES 2018c:7). Quotas are based on available biological and management information, including: species distribution, natural history, recruitment rate, and population estimates (CITES 2018c:7). This information is generated by researchers, agency staffs, and concession operators.
10. Tanzania justifies the continuation of the present quota in accordance with the following circumstances (CITES 2018c:7): (i) observed conservation status of leopards in that country (large and widely distributed population; see: CITES 2018c:3 & 5); (ii) improvement in population monitoring (see: CITES 2018c:4 & 8); (iii) scientific assessment of the harvest regime (see: CITES 2018c:9); and (iv) contribution of trophy hunting revenues to leopard conservation and the livelihoods of local communities (CITES 2018c:9–11). Based on these circumstances, according to Tanzania, the present quota should be continued.
11. According to Tanzania (CITES 2018c:12–13):

Upon considering all the factors illustrated in this document and in accordance with Article IV of CITES and CITES Resolution Conf.16.7, the Scientific Authority of Tanzania has advised the Management Authority that the low level of off-take generated by safari hunting is not detrimental to the survival of the leopard in Tanzania and enhances its survival 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 rural communities.

It concludes by indicating that the quota for leopard in Tanzania found in Resolution Conf. 10.14 (Rev. CoP16) is sustainable and at levels which are non-detrimental to the survival of the species in the wild.

C. CITES Export Quota Program

12. Within the context of CITES, Tanzania initially had an approved export quota of 60 individuals (1983–1997; CITES 1983; CITES 2018a,b). That value – however, according to the United Republic of Tanzania – was not based on actual scientific data (CITES 2002:2). Given the absence of scientific data at that time, the quota was justified instead in large measure by trophy hunting considerations. Based on several additional factors, the leopard quota was increased in 1997 to 250: (i) more than 90% of Tanzania was considered to be excellent leopard habitat; (ii) leopard hunting was limited to that by tourists and for control purposes; (iii) 301–645 leopards were harvested annually for leopard control purposes with no apparent negative effect on the population; and (iv) there was no evidence of illegal trade (CITES 2002:2; UNEP 2018). By 2003, when the quota was increased for a third time, limited scientific data were available, including: (i) total population size (ca. 39,000 leopards); (ii) estimated annual harvest (390 individuals); and (iii) estimated potential safe harvest (5%; 1,827 individuals; CITES 2002:3). Although this quota has been increased, actual hunting trophy exports have been less than the corresponding quota. Since 2008, according to UNEP-WCMC (2018), reported gross exports have averaged 188 trophies annually and 44 skins annually (total = 232 leopards; about 46% of the annual quota) *versus* the annual quota of 500.

13. Given that leopard export quotas are developed using various methods, the Parties at CoP17 adopted four interrelated decision on Quotas for leopard hunting trophies (see AC29 Doc. 16; CITES 2017a,b). According to Decision 17.114:

Parties, which have quotas, established under Resolution Conf. 10.14 (Rev. CoP16) on *Quotas for leopard hunting trophies and skins for personal use* are requested to review these quotas, and consider whether these quotas are still set at levels which are non-detrimental to the survival of the species in the wild, and to share the outcomes of the review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting (July 2018).

14. The results of these reviews were considered by the Animals Committee at AC30 (CITES 2018d). During this time, a working group reviewed information submitted by leopard range states and made recommendations concerning quotas for 12 African countries to the Animals Committee. For Tanzania:

“The WC recommends to the Animals Committee to inform the Standing Committee that it considers that the quotas for Leopards for Tanzania, as mentioned in Resolution Conf. 10.14 (Rev. CoP16), are set at levels which are non-detrimental to the survival of the species in the wild.”

15. The Animals Committee adopted this recommendation (CITES 2018e:6).

16. At the 70th meeting of the Standing Committee (SC70; Sochi, October 2018), the Chair of the Animals Committee submitted a document SC70 Doc. 55 on *Quotas for leopard hunting trophies (Panthera pardus): Report of the Animals Committee*. In the document, the Animals Committee informed the Standing Committee of the above recommendation. The Standing Committee noted the evaluation of the Animals Committee concerning the quotas for Zambia in Resolution Conf. 10.14 (Rev. CoP16) and invited the Secretariat to propose to the Conference of the Parties draft amendments to Resolution Conf. 9.21 (Rev. CoP13) on *Interpretation and application of quotas for species included in Appendix I* concerning approaches to review quotas for Appendix-I species, taking into consideration the recommendations of the Animals Committee in paragraph 5 f) of document SC70 Doc. 55 and opportunities to provide assistance to range States (CITES 2018d). These results were taken up by the 18th meeting of the Conference of the Parties in Geneva, Switzerland, August 17 – 28, 2019, under document CoP18 Doc. 46 on *Quotas for Leopard Hunting Trophies*.

17. Based on the discussions regarding Doc. 46 at CoP18, the Chair of Committee I established a working group to consider the revision of Resolution Conf. 9.21 (Rev. CoP11) in Annex 2 and draft decisions 18.AA to 18.HH in Annex 3 to document CoP18 Doc. 46. The working group, chaired by the United Kingdom of Great Britain and Northern Ireland, also included Botswana, the Central African Republic, Chad, Ethiopia, the European Union, Finland, Germany, Israel, Liberia, Malawi, Namibia, Senegal, South Africa, Spain, Uganda, the United States of America, and Zimbabwe; United Nations Environment Programme (UNEP); International Council for Game and Wildlife Conservation; International Union for Conservation of Nature (IUCN); and Cheetah Conservation Fund, Conservation Force, Dallas Safari Club, European Federation of Associations for Hunting and Conservation, Human Society International, International Professional Hunters Association, IWMC-World Conservation Trust, Safari Club International, San Diego Zoo Global, World Wildlife Fund and Zoological Society of London (CITES 2019).

18. Therefore, based on the above information, we find that the current harvest levels are sustainable. As such, we advise that this import is likely to be for purposes that are not detrimental to the survival of the species.

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