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:	84172D
Date Received by DSA:	October 5, 2020
DMA Contact:	Miguel Richardson
Applicant:	Timothy Jan Dayka Clovis, California
Specimens and Species:	1.0 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 km^2 (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 2020). 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, 2020).

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.* 2020). 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.* 2020).

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 Bubye 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 km^2 (2016: Supp. Table 5), which is similar to ZPWMA's estimate of 145,000 km^2 (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*. (2020:5) 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.* 2020:9).

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.* 2020).

BASIS FOR ADVICE

A. Applicant Information:

1. The applicant (Timothy Jan Dayka, Clovis, California) requests authorization to import one male leopard (*Panthera pardus pardus*) personal, sport-hunted trophy from Zimbabwe.

2. The purpose of the proposed import is personal use. The leopard was taken from the wild at/near: Matabeleland North, Deka Pool, Zimbabwe, during a hunt on June 28, 2019, with Professional Hunter Derek Adams [P.H. License No. 004] and with Outfitter HHK Safaris. The hunt was documented through Zimbabwe permit/license: (i) Hunting Return Form-TRAS2 #81869 (copy submitted); (ii) Leopard Trophy Export Tag ZW-045/500/2019-PAR (copy submitted).

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 km^2 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 Minster 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. <u>CITES Export Quota Program</u>

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 increases 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 (2020), 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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