

**TOP FIFTY REASONS THE LEOPARD IS NOT ENDANGERED
IN THE COUNTRIES WHERE IT IS CURRENTLY LISTED AS THREATENED**

In July 2016, animal rights organizations submitted a petition to reclassify or “uplist” the African leopard (*Panthera pardus*) from “threatened” to “endangered” under the Endangered Species Act (ESA).¹ Leopard are already listed as endangered in North, West, and parts of Central and East Africa, but in 1982, the Fish and Wildlife Service (FWS) downlisted the species in Southern and parts of Central and East Africa. In this region, the FWS recognized that the leopard was sufficiently protected by national and international laws and was likely to benefit from sustainable use through regulated sport hunting.² In its determination, the FWS considered the views of range nations that supported the downlisting.³

In November 2016, the FWS found that an uplisting may be warranted due to habitat loss, overutilization, inadequate regulatory mechanisms, and other considerations.⁴ The FWS opened a 60-day status review. Four leopard range nations responded to the review and opposed uplisting of the leopard to endangered. Conservation Force and partner organizations including Dallas Safari Club, DSC Foundation, Houston Safari Club, Shikar-Safari Club International, Shikar-Safari International Foundation, African Professional Hunters Association, International Professional Hunters Association, and Professional Hunters Association of South Africa submitted a 38-page comment opposing the uplisting and supported by 124 attachments.⁵

Here, we summarize the points in our comment and the new developments and information which further demonstrate that the leopard is *not* endangered in the Southern African Development Community (SADC) countries, particularly those that depend on regulated sport hunting as a conservation tool.⁶ The leopard population and habitat is “healthiest” in this region. Threatened-listed leopard are better protected today than when they were downlisted in 1982. Uplisting would obstruct range nation conservation efforts and be detrimental to the leopard’s current continued survival.

The leopard’s habitat is secure in the SADC countries (ESA Factor A).

1. The leopard’s habitat in Southern and East Africa is extensive. A growing portion of it is protected from human intervention. Fully protected national parks in the SADC countries of Mozambique, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe alone cover over 409,000 km².⁷ This area is more than

¹ Available at docket FWS-HQ-ES-2016-0131 on <https://www.Regulations.gov>.

² FWS, Threatened Status for the Leopard in Southern Africa, 47 Fed. Reg. 4204-01 (Jan. 28, 1982), p. 4207.

³ Botswana, Malawi, Mozambique, Tanzania, and Zimbabwe responded in support of downlisting.

⁴ FWS, 90-Day Findings on Three Petitions, 81 Fed. Reg. 86315 (Nov. 30, 2016), p. 86317.

⁵ Available at http://docs.wixstatic.com/ugd/87ac64_eb9e31378e85417d9e04a36bafb467c7.pdf.

⁶ The SADC includes Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe. This analysis focuses on the countries that export sport-hunted leopard trophies: Mozambique, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe.

⁷ Republic of Mozambique, National Administration for Conservation Areas (ANAC), Comment on U.S. Endangered Species Act Review of the Leopard (Jan. 2017), p. 3; United Republic of Tanzania, Ministry of Natural Resources (MNRT) et al., Comment on ESA Status Review of the Africa Leopard (*Panthera pardus*) in Tanzania (2017), p. 3; IUCN/UN Protected Planet, Website, available at <http://protectedplanet.net>; South African National Parks, Website, available at <https://www.sanparks.org/about/>; Zimbabwe Parks and Wildlife Management Authority (ZPWMA), Enhancement and Non-Detrimental Findings for *Panthera leo* in Zimbabwe (Oct. 2016); Zambia, Country Presentation (Nov. 2015).

32,000 km² **larger** than in 1982, when the leopard was downlisted to threatened, due to the gazetting or expansion of national parks.⁸ This habitat provides “strongholds” in which the leopard is at minimal risk of anthropogenic mortality, and mitigates the primary threat of habitat loss to leopard in the SADC countries.⁹

2. The leopard’s range also covers protected areas dependent on sustainable use and regulated hunting like safari areas, communal land, and conservancies. In Southern and parts of East Africa, these areas are **substantially** larger than the national parks.¹⁰ For instance, Mozambique’s coutadas, community programs, Niassa Reserve buffer areas, and game farms are 1.5 times larger than the national parks/reserves.¹¹ South Africa’s game ranches are five times larger than the national parks and almost three times the size of national and provincial parks together.¹² Tanzania’s Game Reserves, Game Controlled Areas, Open Areas, Communal Wildlife Management Areas, and Forest Reserves are five times larger than the national parks.¹³ Zambia’s Game Management Areas and ranches are almost three times the size of the national parks.¹⁴ And Zimbabwe’s Safari Areas, CAMPFIRE Areas, Forest Areas, and private conservancies are almost four times larger.¹⁵ Although loss and degradation of habitat due to illegal logging, charcoal production, mining, agriculture, and livestock grazing occurs in the SADC countries (and other countries) and is the primary cause of declines in wildlife populations, hunting revenues incentivize protection of huge areas for the leopard and its prey base.¹⁶ That habitat is at risk makes the amount of protected and available habitat that much more important.

If the national parks of Botswana (44,788 km²) and Malawi (10,908 km²) are included, the leopard’s fully protected range increases to over 454,000 km².

⁸ Newly gazetted or expanded national parks include but are not limited to: Limpopo (10,000 km²) and Magoé (3,559 km²) in Mozambique; Bwabwata (6,277 km²), Khaudum (3,842 km²), and Mudumu (716 km²) in Namibia; Richtersveld (1,703 km²) in South Africa; and Lower Zambezi (4,092 km²) and Nsumbu (2,063 km²) in Zambia. Protected Planet.

⁹ L.H. Swanepoel et al., Survival Rates and Causes of Mortality of Leopards *Panthera pardus* in Southern Africa, *Oryx* (2014).

¹⁰ A 2007 study found 22% more habitat was protected for hunting (~1.4 million km²) than in national parks and non-use Protected Areas. P. Lindsey et al., Economic and Conservation Significance of the Trophy Hunting Industry in Sub-Saharan Africa, *134 Biological Conservation* 455 (2007), p. 457 (“financial incentives from trophy hunting effectively more than double the land area that is used for wildlife conservation, relative to what would be conserved relying on national parks alone”). The percentage is now likely much higher, given huge expansion in communal conservancies/Wildlife Management Areas and private conservancies/ranches. For instance, Namibia’s conservancies have tripled since 2004, from 35,000 to over 100,000 km².

¹¹ ANAC (2017), p. 3.

¹² PHASA, South Africa—The Economics of Hunting (2012), available at <http://www.phasa.co.za/general/economics-of-hunting.html>.

¹³ MNRT (2017), p. 2-3.

¹⁴ Ministry of Tourism and Arts/Department of National Parks and Wildlife (DNPW), Enhancement and Non-Detriment Findings for African Lion Sport Hunting in Zambia (May 2016), p. 33.

¹⁵ ZPWMA (2016); ZPWMA, Preliminary Non-Detriment Finding Assessment for Leopards in Zimbabwe (Dec. 2012), p. 19.

¹⁶ These areas are rarely counted in assessments of “protected areas” because sustainable use is permitted, and many sources only include “strictly protected” IUCN Categories I-IV (e.g., national parks and reserves) and not Category VI, referring to “Protected area[s] with sustainable use of natural resources.” E.g., A.P. Jacobsen et al., Leopard (*Panthera pardus*) Status, Distribution, and the Research Efforts Across Its Range, *PeerJ* 4:e1974 (May 4, 2016).

3. Moreover, the leopard's range is greater now than in 1982 because of the rise of community wildlife management. In the past twenty years, the SADC countries maintaining the world's largest leopard populations have developed community-based natural resource management (CBNRM) programs to link improved rural livelihoods with increased wildlife populations. These programs expand available habitat and reduce conflicts by creating positive conservation incentives.¹⁷ Communal areas protect almost 475,000 km² of habitat across Mozambique, Namibia (Conservancies), Tanzania (Communal Wildlife Management Areas), Zambia (Game Management Areas (GMAs)), and Zimbabwe (Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)).¹⁸
4. In addition to expanding habitat on communal lands, the devolution of wildlife management authority has increased private ownership of wildlife, especially in South Africa, where over 200,000 km² of game ranches have recovered listed species like the bontebok.¹⁹ Similarly, Zimbabwe's conservancies were former cattle ranches that were converted to wildlife. Two examples, Savé Valley and Bubye Valley Conservancies, protect over 6,670 km², and have staff biologists and secure leopard populations.²⁰
5. The leopard's secure range is further expanding in Trans-Frontier Conservation Areas (TFCAs). These are "large ecological regions that straddle the boundaries of two or more countries encompassing one or more Protected Areas and multiple resource use areas ... founded with the aim of collaboratively managing shared natural and cultural resources."²¹ In the SADC, six TFCAs are in place under treaties, six are developing through Memoranda of Understanding, and six are in the planning stages.²² TFCAs did not exist in 1982, when the FWS downlisted the leopard, but "[a]t least 12 million hectares of new land has been designated for conservation" since TFCAs began.²³ This political, legal, and conservation commitment is an example of mitigation of the risk of habitat loss and degradation and is one of many reasons the leopard is not endangered in the SADC.

¹⁷ IUCN, Informing Decisions on Trophy Hunting, Case Study 5 (Apr. 2016), p. 13, available at https://www.iucn.org/downloads/iucn_informingdecisionsontrophyhuntingv1.pdf.

¹⁸ MNRT (2017), p. 2; DNPW (2016), p. 16; Republic of Mozambique, Non-Detriment Findings for *Panthera leo* (Africa Lion) Sport Hunting in Mozambique (Oct. 2016), p. 15; Namibian Assn. of CBNRM Support Organizations (NACSO), The State of Community Conservation in Namibia: A Review of Communal Conservancies, Community Forests, and Other CBNRM Initiatives (2015), p. 10; R. Naidoo et al., Complementary Benefits of Tourism and Hunting to Communal Conservancies in Namibia, 30 Conservation Biology (Jan. 8, 2016); M. Nkwame, 17 New Wildlife Areas Establishment in Offing, Daily News (July 2, 2015); WWF-Tanzania, Tanzania's Wildlife Management Areas (2012/2013), p. 11; USAID, Tanzania Wildlife Management Areas, Final Evaluation Report (July 15, 2013), p. 12.

¹⁹ PHASA (2012), p. 6-7.

²⁰ IUCN (2016), Case Study 4, p. 12; ZPWMA & Zimbabwe Professional Hunters & Guides Assn., Workshop Report: Leopard Management in Zimbabwe (Mar. 2016), p. 10-15; see also P.J. Funston et al., Insights into the Management of Large Carnivores for Profitable Wildlife-Based Land Uses in African Savannas, PLoS ONE 8(3) (Mar. 20, 2013), available at <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0059044>.

²¹ SADC, TFCAs, available at <http://www.sadc.int/themes/natural-resources/transfrontier-conservation-areas/>; see also SADC, Transfrontier Conservation Areas (2016), p. 1.

²² SADC (2016), p. 4-39; World Bank, Conservation and Development in Mozambique, Lessons from the Transfrontier Conservation Areas Program and New Perspectives for the MozBio Program (2015).

²³ J. Hanks & W. Myburgh, The Evolution and Progression of Transfrontier Conservation Areas in the Southern African Development Community, Ch. 9, p. 15.

6. The 2016 IUCN *Red List* does not find the leopard to be “endangered” throughout its range. It assesses the species as “vulnerable.” Moreover, in Southern and East Africa, the relevant subspecies (*Panthera pardus pardus*) is assessed to be “potentially vulnerable”—a **question**, not a conclusion. The *Red List* recognizes leopard populations in Southern Africa as the “healthiest.”²⁴
7. According to the *Red List*, the leopard’s extant range has declined but still exceeds 8.5 million km², with between 4.3 million and 6.3 million km² of range available in Southern and East Africa. This estimate is 2.6 to 3.8 times **larger** than the range available for the threatened-listed African lion.²⁵ Most decline in the leopard’s range has occurred **in areas where the species is already listed as endangered**.²⁶ ESA Factor A does not support an uplisting for the threatened-listed populations.
8. The source on which the petition relies is not the best available information as it compares “historic” habitat, defined as **1750**, to current habitat. Approximately 270 years is far too long of a time lapse to provide a fair point of comparison and does not provide a useful model for the present.²⁷
9. The leopard’s current secure habitat can be threatened by over-regulation and trade bans that reduce the benefits and incentives for landholders (including governments) to maintain the land for wildlife.²⁸ It is no accident that the countries where the leopard has no value have declining leopard populations and habitat, while the leopard is “healthiest” in the SADC countries where it is threatened-listed, and valued as a tourist-hunted game animal.²⁹ The petitioned uplisting would act as a disincentive and be detrimental to the species.
10. The SADC countries have expressed concern that uplisting will diminish habitat and result in habitat conversion for livestock grazing and subsistence farming. In response to the status review, the wildlife authorities of Tanzania pointed out:

Leopard is among valuable trophy species that attract the majority of trophy hunters to Tanzania and, therefore, its contribution to survival of the trophy hunting industry cannot be understated (Wildlife Division Database). The protection of leopard habitats and strong holds is incentivized by financial returns realized through trophy hunting. It can, therefore, be predicted that the move to ban hunting of the species will likely create disincentives for Government and local communities to protect the leopard and its natural habitat ...

²⁴ A.B. Stein et al., *Panthera pardus*, IUCN Red List (2016).

²⁵ H. Bauer et al, *Panthera leo*, IUCN Red List (2015 rev. 2016) (extant range for lion estimated at 1,654,375 km²). It would be inconsistent to list the lion as threatened, but then up-list a species with higher population estimates and greater variation in range and prey base.

²⁶ IUCN Red List (2016).

²⁷ Jacobsen et al. (2016), p. 3; ANAC (2016), p. 5 (“In particular the Jacobson et al. (2016) assessment seems to be of little value because it is discussing ‘historic’ range loss, and it defines ‘historic’ as 1750! So it is difficult to see how that helps advise practical conservation, but it makes for sensational numbers about extensive range loss. As discussed in point 12 in Mozambique more than 74% of mainland is still covered by natural habitats.”).

²⁸ Lindsey et al. (2012), p. 7.

²⁹ E.g., IUCN Red List (2016); FWS, General Advice on Import of Sport-Hunted Trophies of Leopards (*Panthera pardus*) from the Republic of Mozambique for the Calendar Year 2015 (Sept. 28, 2015), p. 2 ¶ 2 (“In sub-Saharan Africa, for example, the leopard is still numerous and even thriving in some areas, while in North Africa the species is on the verge of extinction.”).

Listing the leopard as endangered under the US Endangered Species Act will have detrimental impact not only to the economy of Tanzania, but also to conservation of biodiversity and wellbeing of communities living around protected areas ... [Since the FWS closed import of elephant trophies from Tanzania,] Concessions ... totaling more than 73,000 km² have been returned to the Wildlife Division in 2016 by several hunting operators, that without clients cannot afford anymore the costs of maintaining these vast areas in a wild and pristine condition. The number is growing as we are writing this response. These 73,000 km² cannot be transformed into photo tourism areas as they are mostly pristine wilderness with no infrastructure. Without operating or anti-poaching funds from the Safari Operators, the habitat is already disappearing and in short order, this land will be occupied by livestock, people, and snares.

The crucial contributions of Safari operators to conservation in Tanzania are under threat.³⁰

This is an avoidable threat, as long as the FWS continued to acknowledge that tourist sport hunting of leopard secures necessary habitat and prey base.

The leopard is sustainably utilized for recreational purposes and is not excessively utilized for scientific or commercial purposes in the SADC countries (ESA Factor B).

11. The leopard was initially ESA-listed due to concern for the “drastic” legal commercial trade in leopard skins. For instance, “in 1968 and 1969 alone, over 17,000 leopard hides were imported into the United States.”³¹ The U.S. trade immediately stopped with ESA listing, and the legal international commercial trade in skins ceased when the leopard was listed on Appendix I of CITES in 1975. That trade is not of concern today.
12. The leopard is well protected by listing on Appendix I, which prohibits commercial trade. This listing also prohibits legal non-commercial trade unless the exporting and importing countries each find the trade is not detrimental to the survival of the species.³²
13. Trade in hunting trophies is further limited by CITES Res. Conf. 10.14, which sets a maximum annual export quota for each country requesting trade in sport-hunted leopard trophies.³³ Compliance with the quotas is overseen by the CITES Secretariat, Animals Committee, Standing Committee, and Parties. Decisions taken at the last Conference of the Parties in October 2016 have requested range nations

³⁰ MNRT (2017), p. 10-11.

³¹ FWS, Proposed Threatened Status for the Leopard in Sub-Saharan Africa, 45 Fed. Reg. 19007 (Mar. 24, 1980), p. 19008 (leopard listed “primarily because of overutilization for commercial purposes and modification of habitat”).

³¹ FWS (1980), p. 19008; Dep’t of Interior, News Release, Leopard in Southern Africa Reclassified to “Threatened” Species (Jan. 29, 1982).

³² Convention on International Trade in Endangered Species of Wild Fauna and Flora, art. III.

³³ The leopard was listed when CITES went into force, and the listing “was not wholly based on documented scientific data.” FWS (2015), p. 4 ¶ 15. The series of resolutions culminating in 10.14 were adopted by the CITES Parties at the request of range states, to establish and control the trade in sport-hunting trophies. The Parties agreed to maximum export quotas and have reviewed and revised those quotas over time. E.g., Review of Resolution Conf. 6.9, Doc. 7.28 (1989); Trade in Leopard Skins, CoP5 Doc. 5.23 (1985); Draft Resolution from Zambia, Trade in Leopard Trophies, CoP5 Doc. 5.23.1 (1985); Summary, 1st Session of Committee I 5 Oct. 2004, CoP13 Com. I Rep. 1 (Rev. 1) (2004); Summary Record of the Second Session of Committee I 5 June 2007, CoP14 Com. I Rep. 2 (Rev. 1) (2007).

review their current leopard quotas.³⁴ The review is in progress and several nations are improving their monitoring and quota-setting, which further ensures the non-detriment of offtakes and exports, and demonstrates the adequacy of this regulatory mechanism. In short, this trade is highly regulated, and that regulation is both sufficient and responsive. The risk of overutilization having a population-level effect on the species does not exist given this system.

14. Further, the number of trophies in trade is well below the quotas approved by the CITES Parties. The petition substantially overstates trade by citing to a “gross imports” output, which reflects the highest reported quantity of imports and exports.³⁵ Even at this highest possible level, annual trade represents only 1,019 sport-hunted trophies of leopard—less than 39% of the approved export quota (2,648). A more conservative, yet still overstated analysis, estimates the **total** number of leopard (bodies, skins, trophies, and live animals) in international trade at 659-855 per year.³⁶ This result is one-third lower than the Petition’s estimates, and represents only 25% to 32% of the total approved export quota.
15. Actual leopard offtakes are even lower than this conservative estimate. Hunting offtakes reported by Mozambique (60 in 2015), South Africa (36 in 2015), and Tanzania (139 in 2015) are far below the trade database estimates, and only half of each country’s respective CITES export quota, or less: ~50% for Mozambique (120 leopard trophies), ~24% for South Africa (150), and ~28% for Tanzania (500).³⁷
16. The leopard is further protected by FWS implementation of CITES. In compliance with the Convention, and each year since 1982, the FWS’ Division of Scientific Authority (DSA) has made a finding that the import of sport-hunted trophies is not detrimental to the leopard’s survival in the wild before allowing those imports. The DSA has had no difficulty making these findings, using the “best available scientific and management information” and “best available biological information.”³⁸ The second listing factor,

³⁴ CoP17, Decs. 17.114-17.117, Quota for Leopard Hunting Trophies (2017) (“Parties, which have quotas, established under Res. 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 review and the basis for the determination that the quota is not detrimental, with the Animals Committee at its 30th meeting.”). Note that even non-SADC countries with threatened-listed leopard populations are reviewing the status of their export quotas. At the most recent Animals Committee meeting (July 2016), Uganda noted that it has commissioned a report on the status of the leopard and is implementing a national Large Carnivores Action Plan (2015), with support of the Wildlife Conservation Society. It has developed sustainable hunting procedures, carefully enforces its quota, and only sets a national offtake quota of 10 leopard. Kenya noted that the country does not export leopard trophies; however, Kenya employs a management strategy for large carnivores and, since 2014, has new wildlife legislation to even more effectively protect at-risk species.

³⁵ The *Guide to Using the CITES Trade Database* counsels against using “gross imports” to estimate international trade levels, as the petition does, because this format calculates the highest number of items that could possibly have been traded. In this way, “gross imports” is substantially overstated. Available at https://trade.cites.org/cites_trade_guidelines/en-CITES_Trade_Database_Guide.pdf.

³⁶ Conservation Force prepared an independent assessment of the level of trade in leopard parts and products using the recommended “Comparative Tabulation” format. Note, however, Comparative Tabulation is still an overstated estimate because of differences in how exporting and importing countries report trade figures.

³⁷ ANAC (2017), p. 5; South Africa Department of Environmental Affairs (DEA), pers. comm.; MNRT (2017), p. 8.

³⁸ FWS, Importation of Leopard Trophies (June 10, 1982), p. 1; FWS, General Advice on Imports of Sport-Hunted Trophies of Leopards (*Panthera pardus*) from Seven Range States for the Calendar Year 2016 (Apr. 14, 2016), p. 1-11.

overutilization, **cannot** be satisfied here because the DSA has repeatedly confirmed the trade in sport-hunted trophies is **not** detrimental and is therefore sustainable.

17. Illegal commercial trade in leopard parts occurs primarily in the North and West African countries in which the species is listed as endangered.³⁹ The SADC countries indicate that illegal commercial trade in leopard parts is low.⁴⁰ The species is valued more as regulated trophy trade than for illegal products in those countries. The one possible exception is South Africa, where leopard skins are valued for use in religious practices and may be illegally harvest. However, that illegal use is being controlled by the South African government in partnership with NGOs like Panthera, which distributed 14,000 synthetic leopard skins to reduce reliance on wild leopard skins.⁴¹
18. Isolated cases of poaching or overharvest are not significant at the population level and do not have a population-level negative effect. They are not sufficient to endanger the leopard, which can recover quickly from isolated declines due to high fecundity and its ability to inhabit a diverse range of habitat and subsist on an “extremely catholic” prey base including everything from insects to small mammals, large ungulates, and domestic livestock and pets.⁴² This all adds to the species resilience and tolerance of utilization.

Existing regulatory mechanisms are more than adequate to ensure utilization is sustainable and the leopard is properly managed in the SADC countries (ESA Factor D).

19. Sport hunting in the SADC countries is regulated and monitored by robust national conservation laws and CITES processes. These laws and regulations have been enacted since the leopard was downlisted in 1982, which indicates these regulatory mechanisms are much more than adequate to protect the species. For instance, the conservation laws of Namibia, South Africa, and Zimbabwe were enacted in the 1990s or 2000s—more recently than the leopard was downlisted. The CITES Secretariat rates each country’s laws as “Category I”—the same category as the ESA.⁴³

³⁹ The sources cited by the FWS’s 90-Day Finding largely focus on West and North Africa—where the leopard is already listed as endangered. Only two sources come from Southern Africa. In one, the leopard was caught in a bushmeat snare, but that poaching was not clearly related to commercial trade in leopard parts. The only relevant source from the SADC discusses poaching in South Africa, which may be related to a religious practice in that country and is not considered widespread.

⁴⁰ ANAC (2017), p. 8; MNRT (2017), p. 6; ZPWMA (2012), p. 9.

⁴¹ Public education has also been prioritized to reduce use and possible poaching of real leopard skins. However, it should be noted that the age of many of the skins used in religious practices is unknown. C. Torchia, In South Africa, Conservationists Offer Fake Leopard Hides, Associated Press (Jan. 28, 2017), <http://www.sfgate.com/news/crime/article/In-South-Africa-conservationists-offer-fake-10890867.php>.

⁴² K. Nowell & P. Jackson, Status Survey and Conservation Action Plan for Wild Cats (IUCN 1996), p. 25, 28 (“Martin & deMeulenaer (1988) simulated the effects of high harvests on leopards ... their model also indicated that even very high offtakes ... had produced only a slight decline ... [t]hey considered leopard to be generally resilient to harvest up to a critical threshold, which varies with density.”); FWS (2015), p. 2 ¶ 7; IUCN Red List (2016); C. Owen et al., Copulatory Parameters and Reproductive Success of Wild Leopards in South Africa, 91 Journal of Mammalogy 1178-87 (Oct. 15 2010), available at <https://academic.oup.com/jmammal/article/91/5/1178/901082>.

⁴³ CITES Secretariat, National Laws for Implementation of the Convention, CoP17 Doc. 22 & Annex 3 (2016), available at <https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-22-A3-R1.pdf>.

20. These regulatory mechanisms are more than adequate to protect the species and are constantly being reviewed and updated accordingly. Although Namibia's Conservation Ordinance and the conservancy amendment were enacted in the mid-1990s, the Ordinance has been amended, most recently in 2017, to respond to emerging management issues. This amendment increases the penalties for poaching of specially protected species.⁴⁴ South Africa also adopted its governing law, the National Environmental Management Act, in the late 1990s and has updated its regulations governing Threatened or Protected Species and CITES Implementation in 2007 and 2010. In 2017, South Africa published draft Norms and Standards governing leopard hunting for public comment.⁴⁵ Zimbabwe enacted its fundamental Parks and Wildlife Act, Ch. 20:14, which devolved use rights to communal land holders (the basis for current CBNRM programs) in 1996.⁴⁶ Since then, it has developed regulations to implement an age-based off-take policy.⁴⁷ The FWS has previously concluded that these countries maintain strong regulation of wildlife management and enforcement.⁴⁸
21. Mozambique, Tanzania, and Zambia have each adopted new conservation laws/regulations in the last two years. In 2014 and 2017, Mozambique adopted and amended a Conservation Law to increase the penalties for poaching, streamline natural resource management, and codify sharing of hunting fees and the conditions for gazetting new Community Conservation Areas. These amendments modernize the country's wildlife policies and reflect a heavy emphasis on law enforcement and anti-poaching. It is expected that Mozambique's laws will now be rated "Category I" by the CITES Secretariat.⁴⁹
22. Tanzania updated its Conservation Act in 2009, its Wildlife Management Area regulations in 2013, and its Tourist Hunting regulations as recently as 2015 and 2017. Among other things, Tanzania increased the benefits-sharing for communities in Wildlife Management Areas and set a minimum size for lawful leopard trophy exports. To ensure sufficient anti-poaching resources, Tanzania reinstated the Selous revenue retention system, which retains 50% of revenues from hunting in the Reserve to management and law enforcement within the Reserve.⁵⁰ The CITES Secretariat is also expected to assess Tanzania's legislation as Category I.⁵¹ Like Mozambique, Zambia updated its wildlife law in 2015 and transferred the former wildlife authority to a government department supported by a dedicated wildlife fund. In 2016, several Statutory Instruments, including one governing the hunting of Big Cats, were drafted.⁵²

⁴⁴ The Conservation Ordinance and conservancy amendment are available at <http://www.ecolex.org/details/legislation/nature-conservation-ordinance-1975-no-4-of-1975-lex-faoc018007/> and <http://www.lac.org.na/laws/pdf/natureconservation.pdf>; the amendment was published in Namibia's *Government Gazette No. 6344* on June 28, 2017.

⁴⁵ South Africa, DEA, Regulations Governing Wildlife, available at <https://www.environment.gov.za/legislation/actsregulations>.

⁴⁶ Available at <http://www.ecolex.org/details/legislation/parks-and-wild-life-act-chapter-2014-lex-faoc008942/>.

⁴⁷ Statement at the most recent Animals Committee (July 2017).

⁴⁸ FWS (2016). It is inconsistent with the DSA's repeated findings to now find these mechanisms inadequate.

⁴⁹ ANAC (2017), p. 7; ANAC (2016), p. 20; ANAC, National Ivory and Rhino Action Plan Progress Report (2017), available at <https://cites.org/sites/default/files/eng/com/sc/69/E-SC69-29-03-A-12.pdf>.

⁵⁰ MNRT (2017), p. 8-9.

⁵¹ MNRT (2017), p. 8-9; TAWA (2016), p. 48.

⁵² DNPW (2016), p. 5-8, 10-12, 26, 32, 43-44.

These legislative improvements support the SADC countries in effectively managing, protecting, and benefiting from wildlife like leopard.

23. Moreover, the development of CBNRM programs must be considered as a new regulatory mechanism that did not exist in 1982, but which now provides valuable habitat for leopard and prey. Communities are empowered to benefit from wildlife by the adoption of laws and regulations giving them use rights to game on their lands. This innovation has paved the way for recovering wildlife populations in areas formerly devoted to agriculture or grazing. CBNRM programs reflect the SADC countries' commitment to linking the recovery of game populations to rural development and poverty reduction.⁵³
24. Range nations have also adopted management plans for the leopard and felid species, like Tanzania's *Lion and Leopard Conservation Action Plan*. The SADC countries adaptively manage leopard hunting with careful quota-setting, monitoring, and reporting.⁵⁴ They have recently adopted regulations and policies to further ensure the sustainability of leopard offtakes. For example, as recommended by the CITES Conference of the Parties, range nations are updating their non-detriment findings for leopard exports.⁵⁵ South Africa adopted a zero quota when its Scientific Authority determined it did not have sufficient information to assess the severity of threats facing the leopard. Leopard hunting has been suspended for two years while the Scientific and Management Authorities have gathered data for an informed NDF. This exemplifies adaptive and responsive management, and is evidence that the range nations' regulatory mechanisms are more than adequate and no uplisting is required.⁵⁶
25. Another example: The Ministry of Environment and the Professional Hunters Association of Namibia are collaborating to update the national census of leopard populations since the last comprehensive census was undertaken in 2010-2011. One-hundred camera traps have been set, covering 1,226 km² at 50 select sites. Over one million images have been collected so far, and the census is still on-going. The results will provide a scientific estimate of Namibia's leopard population trend, and provide the basis for quota-setting and revising Namibia's CITES export quota.⁵⁷
26. As another example: Tanzania is implementing a Lion and Leopard Conservation Action Plan and in the process of planning a workshop to update its leopard population information and export quota.⁵⁸ The country has greatly reduced poaching through implementing a national anti-poaching strategy and a strategy for expanding Community Wildlife Management Areas, intended to increase the incentives

⁵³ TAWA (2016); R. Cooney et al., *The Baby and the Bathwater: Trophy Hunting, Conservation and Rural Livelihoods*, 249 *FAO Unasylva* 3-15 (2017/1), available at <http://www.fao.org/publications/card/en/c/b9ab7023-3045-4d6b-b782-87907ef6b7c7/>; IUCN (2016), *Case Study 5*, p. 13; SADC, *Natural Resources and Sustainable Use Webpage*, available at <http://www.sadc.int/themes/natural-resources/>.

⁵⁴ E.g., MNRT (2017), p. 8-9; ANAC (2017), p. 5-6; DNPW (2016); ZPWMA (2012), p. 10-11; ZPWMA/ZPHGA (2016), p. 4-8 (practices include NDFs, intensive monitoring of offtakes, reporting, etc.); *Staatskoerant/Government Gazette*, NDF for Leopard (*Panthera pardus*), South Africa (Sept. 10, 2015).

⁵⁵ ZPWMA (2012), p. 20.

⁵⁶ *Staatskoerant/Government Gazette*, NDF for Leopard (*Panthera pardus*), South Africa (Sept. 10, 2015).

⁵⁷ Ministry of Environment and Tourism and Namibia Professional Hunters Association (2017).

⁵⁸ MNRT, *National Strategy to Combat Poaching and Illegal Wildlife Trade* (Oct. 30, 2014); Tanzania Wildlife Research Institute (TAWIRI), *Tanzania Carnivore Conservation Action Plan* (2009), containing C. Packer et al., *Tanzania Lion and Leopard Conservation Action Plan*.

for rural communities to tolerate dangerous game like leopard. The Tanzania Wildlife Authority was formed in 2016 as an independently funded wildlife management/conservation authority and is now responsible for implementing these plans.⁵⁹

27. As another example, in 2012, Zimbabwe held its first workshop on leopard hunting, and has held two more in 2016 and 2017 to review and revise offtake and export quotas. As a result of these workshops, Zimbabwe reduced the total quota allocation and limited the allocation to properties over a minimum size.⁶⁰ It also adopted a preliminary age limit for exportable trophies. Zimbabwe is updating its 2012 non-detriment finding and continuing an intensive leopard and trophy monitoring program which has been in place since 2009.⁶¹
28. The petition's cited source, a 2015 analysis of national legislation enacted to combat wildlife trafficking, is not informative for assessing the adequacy of regulatory measures to control legal, non-commercial trade, and is already outdated given the laws and regulations enacted in 2014, 2015, 2016, and 2017. Trafficking in leopard parts is not considered to be a significant problem in the SADC countries in which the leopard is listed as threatened.⁶² The petition's sources primary relate to West African countries in which the leopard is already listed as endangered.
29. Finally, leopard in the SADC countries are adequately protected by the ESA threatened listing and 4(d) special rule. Under the special rule, "all prohibitions of § 17.31," the same prohibitions that apply to endangered-listed species, apply to leopard. The only exception is that a sport-hunted leopard trophy "legally taken ... may be imported without a Threatened Species permit" as long as all CITES obligations are met.⁶³ Put differently, leopard trophies may only be imported once the hunter receives an import permit, which is issued only if the DSA has issued a non-detriment finding, and the hunter receives an export permit from the country of origin. This system ensures sustainable offtakes monitored by both the country of origin and the FWS (country of import). Uplisting offers no benefits for leopard because the species does not need any further protection.⁶⁴

No other natural or man-made factor poses a risk of endangerment to the species (ESA Factor E)—in fact, regulated sport hunting and national policies in the SADC countries are reducing the incidence of human-leopard conflict.

30. The IUCN *Red List* notes a 24% increase in ungulate species (leopard prey base) in Southern Africa. The strength of the leopard's broad prey base is confirmed by ungulate/large mammal surveys submitted to the FWS (by commenters and SADC countries) which observed stable or increasing populations of

⁵⁹ TAWA (2016), p. 33-34.

⁶⁰ ZPWMA (2012), p. 11; ZPWMA/ZPHGA (2016), p. 26, 45-47.

⁶¹ Zimbabwe made this point when it intervened at the

⁶² ANAC (2017), p. 5-8; MNRT (2017); ZPWMA/ZPHGA (2016), p. .

⁶³ 50 C.F.R. § 17.40(f).

⁶⁴ FWS (2015), p. 10.

duiker, eland, impala, kudu, warthog, zebra, and other prey species.⁶⁵ This healthy prey base helps to sustain the healthy leopard population in the SADC.

31. In the countries facing the highest levels of bushmeat poaching and prey base depletion, the leopard is **already** listed as endangered,⁶⁶ and therefore uplisting the species will not have any effect on loss of prey base.
32. A leopard's diet is extremely broad, and leopard may prey on livestock, dogs, or even people. For this reason, leopard represent a significant threat to rural villagers.⁶⁷ Concern over human-leopard conflict was one of the initial reasons for listing the species. However, one primary reason for downlisting the leopard in 1982 was to reduce conflict and increase local tolerance by creating value for leopard as a game animal.⁶⁸ Regulated sport hunting continues to generate crucial funding, improve livelihoods, and compensate those injured by leopard or other dangerous species.⁶⁹ Among other things, CBNRM programs require sharing of hunting fees with communities, which connects the conservation of game species to improved rural livelihoods. In addition to government payments, hunting generates jobs, financial or in-kind contributions, consolation payments, and distribution of hunted meat (please see points 43-49 below).
33. National laws and operator policies specifically aim to reduce conflict by compensation. Tanzania, for instance, enacted consolation regulations under which the government will compensate a farmer or family impacted by dangerous wildlife like leopard.⁷⁰ Hunting operators have also adopted policies by which they will compensate for lost livestock, bodily injury, or death caused by leopard, lion, elephant, buffalo, and other game.⁷¹ Giving rural communities the security of compensation incentivizes better tolerance of these species. It both encourages people to live alongside leopard, and to accept higher numbers of leopard on the land.⁷²

⁶⁵ IUCN Red List (2016); Ministry of Arts and Tourism, Large Mammal Survey (2015); DPNW (2016), p. 39-43; TAWA (2016), p. 38-39; Friends of Hwange Trust, Hwange Game Count (2016), available at <http://friendsofhwange.com/hwange-game-count-2016/>; NACSO (2015), p. 35-37.

⁶⁶ IUCN Red List (2016).

⁶⁷ E.g., B.M. Kissui, Livestock Predation by Lions, Leopards, Spotted Hyenas, and Their Vulnerability to Retaliatory Killing in the Maasai Steppe, Tanzania, 1-11 Animal Conservation (2008). Note, this article was written before Tanzania enacted comprehensive and responsive consolation regulations.

⁶⁸ FWS (1980), p. 19010; FWS (1982), p. 4204, 4206.

⁶⁹ L.H. Swanepoel et al., The Relative Importance of Trophy Harvest and Retaliatory Killing of Large Carnivores: South African Leopards as a Case Study, 44(2) South African Journal of Wildlife Research 115 (Oct. 2014), p. 119.

⁷⁰ Tanzania, Wildlife Conservation (Dangerous Animals Damage Consolation) Regulations (2011).

⁷¹ M. Boguslawski, Tanzania Operators Summary Report (2016).

⁷² Research has shown that trophy hunting revenues and benefits like game meat and infrastructure projects can incentivize tolerance for leopard among local ranchers or herders and rural residents. E.g., IUCN (2016); Cooney et al. (2017/1); N. Leader-Williams & J.M. Hutton, Does Extractive Use Provide Opportunities to Offset Conflicts between People and Wildlife? In: R. Woodroffe et al. (eds.), People and Wildlife: Conflict or Coexistence? (2005); P.A. Lindsey et al., Determinants of Persistence and Tolerance of Carnivores on Namibian Ranches: Implications for Conservation on Southern African Private Lands, PLoS ONE 8(1) (2013); Lindsey et al. (2012); A.B. Stein et al., Farm Management and Ecosystem Analyses of Leopard Conservation in North-Central Namibia, 13 Animal Conserv. 419 (2011); P.A. Lindsey et al., Attitudes of Ranchers Towards African Wild Dogs *Lycaon pictus*, Conservation Implications on Private

34. As another example, in Zimbabwe, operators have also adopted compensation policies. In CAMPFIRE Areas, operators share revenue, employ local community members, and otherwise contribute to the districts and wards with community projects.⁷³ Linking sustainable use to improved livelihoods greatly reduced problem animal control (PAC) in these areas: from 2011 to 2015, leopard hunts in CAMPFIRE Areas generated almost \$500,000 for the communities, and there were zero reported PAC offtakes.⁷⁴

The leopard cannot be uplisted after “taking into account” the views and conservation efforts of SADC countries, as an endangered listing would obstruct their programs for the leopard and other species and reduce the funding, anti-poaching, and community incentives generated from sport hunting.

35. Section 4(b)(1) of the ESA directs the FWS to “tak[e] into account ... those efforts ... being made by any ... foreign nation ... to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction...”⁷⁵ Many of the SADC countries rely on regulated sport hunting to generate funds for wildlife management and enforcement, to share the burden of anti-poaching with the private sector, and to incentivize rural community tolerance of the leopard and other dangerous game.

Revenue Benefits

36. Information from the leopard range nations demonstrates the benefits of their hunting programs. For example, most operating budget revenue for Tanzania’s and Zimbabwe’s wildlife authorities derives from sport-hunting fees.⁷⁶ Two-thirds of the revenue in Namibia’s Game Products Trust Fund (used to fund management surveys and anti-poaching, among other things) comes from hunting concessions, which “demonstrates the important role legal hunting plays in conservation.”⁷⁷ In Mozambique, 60% of hunting revenues are used by the conservation authority to fund operations and anti-poaching, and 20% are directed to local communities.⁷⁸

Land, 125 *Biological Conservation* 113 (2005); A. Loveridge, C. Packer, A. Dutton, *Science and Recreational Hunting of Lions*, in B. Dickson et al. (eds.), *Recreational Hunting, Conservation and Rural Livelihoods: Science and Practice* (2009).

⁷³ CAMPFIRE Assn., *The Role of Trophy Hunting of Elephant in Support of the Zimbabwe CAMPFIRE Program* (Dec. 2016), p. 1, 22-25, available at <http://campfirezimbabwe.org/index.php/downloads>. Note that even operators that do not lease CAMPFIRE Areas maintain community programs, like Buby Valley and Savé Valley Conservancies and operators leasing Safari Area concessions outside Hwange.

⁷⁴ ZPWMA/ZPHGA (2016), p. 28-43.

⁷⁵ 16 USC § 1533(b)(A)(a)(1). Section 8 of the ESA also encourages “international cooperation.” 16 USC §§ 1537 & 1531(a)(5).

⁷⁶ TAWA (2016), p. 47-48, 60-61; Zimbabwe Parks and Wildlife Management Authority, *Legal Trade, Conservation, and Rural Livelihoods: A Zimbabwean Perspective*, Presentation at the Workshop on CITES and Livelihoods (Nov. 23-25, 2016), p. 10.

⁷⁷ GPTF Fund Management Office, *Report on the Activities of the GPTF: 2012-2016* (Sept. 2016), p. 4-7.

⁷⁸ ANAC (2016); ANAC (2017), p. 10-11.

Hunting fees have contributed over \$65 million to wildlife management in these four countries in the period 2013-2015.⁷⁹ The revenues from leopard hunting have been a critical component of the total.⁸⁰ (Unfortunately, this total has been declining due to the FWS suspension of elephant and lion trophy imports.)

- 37. Sport-hunting revenues fund most government enforcement; for example, in Tanzania, approximately 80% of ordinary government anti-poaching is funded through hunting revenues.⁸¹
- 38. Hunting revenues also offset the costs of policing national parks, which typically are not met through entrance fees.⁸²

Anti-Poaching Benefits

- 39. Hunting operators also provide boots on the ground through their own scout teams. They contribute rations, petrol, equipment, and training to government rangers and community scouts, and they may pay salaries for community scouts. These efforts increase anti-poaching coverage and reduce financial pressure on the national wildlife authority by shifting those costs to the private sector.⁸³

⁷⁹ Sport Hunting Revenues to the Wildlife Authority (USD)

	2013	2014	2015
Mozambique	\$735,568.00	\$615,457.00	\$721,178.00
Namibia**	\$638,505.39	\$777,908.22	\$995,010.11
Tanzania	\$16,723,425.00	\$16,277,373.00	\$12,971,815.00
Zimbabwe	\$5,423,995.00	\$5,072,493.00	\$3,256,698.00
	\$23,521,493.39	\$22,743,231.22	\$17,944,701.11
** Only the contribution to the GPTF is included			

Note that revenues declined in 2015 and 2016, due to the FWS suspension of elephant trophy imports from Tanzania and Zimbabwe, and the de facto suspension of elephant trophy imports of Zambia and lion trophy imports from all range nations.

⁸⁰ Lindsey et al. (2007), p. 458 (leopard and lion generated ~20% of hunting income for Tanzania’s wildlife authority); Lindsey et al. (2012), p. 3-6, 8; Southwick Assocs., The Economic Contributions of Hunting-Related Tourism in Eastern and Southern Africa (Nov. 2015), p. 50; A. Jorge, Costs and Benefits of the Presence of Leopards to the Sport-Hunting Industry and Local Communities in the Niassa National Reserve, Mozambique, 00 Conservation Biology (June 2013) Naidoo (2016); ZPWMA (2016) (trophy fees for leopard comprised over 6% of all fees in 2014, and over 8% in 2015); MNRT (2017) (“Approximately US\$ 1,400,000 (9%) out of an average US\$ 15,400,000.00 that is generated annually for Wildlife Division/TAWA is earned directly from leopard trophy fees”).

⁸¹ Tanzania, Country Presentation (Nov. 2015).

⁸² IUCN (2016), Case Study 6, p. 14; TAWA (2016); MNRT (2017).

⁸³ TAWA (2016), p. 16-17 (safari operators “contributed and are contributing substantially to Tanzania’s enhanced anti-poaching efforts ... [by providing] funding, equipment, and technical expertise for repairs, transportation, and critical funding for government game scouts as well as their own anti-poaching patrols ... Hunting companies’ anti-poaching teams acting in collaboration with the [T]WD’s Anti-Poaching Units, remove snares, prevent illegal logging, and arrest poachers in a coordinated and continuous effort.”); see also Conservation Imperative, Custodians of the Wilderness: Tanzania (Jan. 13, 2016), available at <http://theconservationimperative.com/?p=227>; Conservation Imperative, The Fate of the African Lion: Bubby Valley Conservancy (Aug. 4, 2015), available at <https://vimeo.com/135337181>; Conservation Imperative, Can Hunters Be Conservationists (Coutada 9 Mozambique) (May 1, 2016),

40. For example, in Tanzania, individual operator anti-poaching expenditures are enormous: a sample of 27 operators in 74 concessions contributed more than \$6.7 million for anti-poaching in the 2013-2015 period. These contributions included light aircraft to facilitate anti-poaching patrols; vehicles, GPS, and satellite phones to improve ranger coverage and communications; training for village game scouts and government rangers; rewards for information about suspected poachers; and much more.⁸⁴ The operators' efforts extend the range of year-round surveillance and resulted in 7,170 patrol days, 1,409 poachers arrested, 6,233 snares and gin traps removed, 171 firearms and 1,557 rounds of ammunition collected, 704 vehicles confiscated, and 1,118 other weapons confiscated (results from 11 operating companies reporting).⁸⁵
41. In Mozambique, operators are reducing poaching and rehabilitating wildlife areas depleted during the 15-year civil war (1977-1992). A few examples: One operator is implementing an anti-poaching plan at a cost of over \$100,000 annually. The result has been thirty-fold growth in buffalo, sable, antelope, and other prey. A second operator maintains 40-50 game scouts pursuant to a written anti-poaching plan. Since 2003, scout teams have removed thousands of gin traps, caught on average 150 poachers, and seized numerous rifles. A third operator, on the border with South Africa, is part of the Greater Limpopo TFCA and helped develop the TFCA's anti-poaching strategy. This is crucial collaboration that prevents poachers from killing animals in one country and fleeing across the border.⁸⁶
42. In Zimbabwe, the Dande Anti-Poaching Unit (DAPU) in the Mbire District has been incredibly successful in reducing poaching and growing wildlife populations in the area. In 2015, they collected over 2,300 snares. Through concerted efforts and community engagement, they collected only 1,479 snares in 2016. DAPU maintains 22 company scouts and 18 community scouts, and is wholly funded by hunting revenue and client donations.⁸⁷

CBNRM Benefits

43. Regulated sport hunting in the SADC countries benefits rural communities through revenue-sharing, operator contributions to community projects, employment, and game meat distributions. "In parts of Zambia, Zimbabwe, Botswana, Namibia, and Tanzania, revenues from trophy hunting have resulted in improved attitudes towards wildlife among communities, increased involvement of communities in CBNRM programs, requests to have land included in wildlife management projects, and in some cases increasing wildlife populations."⁸⁸ These programs did not exist in 1982, and the leopard is better off now than when it was initially downlisted due to the incentives generated by CBNRM.

available at <http://theconservationimperative.com/?p=264>; Conservation Imperative, Custodians of Wilderness: Zambezi Valley, Zimbabwe (May 5, 2016), available at <http://theconservationimperative.com/?p=271>; Conservation Imperative, The Fate of the African Lion: Zambia (Aug. 5, 2015), available at <http://theconservationimperative.com/?p=118>.

⁸⁴ Boguslawski (2016).

⁸⁵ Boguslawski (2016).

⁸⁶ Conservation Imperative, Can Hunters Be Conservationists (Coutada 9 Mozambique) (May 1, 2016), available at <http://theconservationimperative.com/?p=264>; Southern African Wildlife College, Community Development with Sabie Game Park (2013).

⁸⁷ DAPU, Year-End Report (2016); DAPU, Year-End Report (2015); Chiefs, EU in Wildlife Talks, The Herald (Apr. 2, 2016), available at <http://www.herald.co.zw/chiefs-eu-in-wildlife-talks/>.

⁸⁸ Lindsey et al. (2007), p. 463-64.

44. In Namibia, safari hunting revenues are essential to keeping communal conservancies operating. Fifty-two conservancies maintain hunting concessions and employ 158 full-time and 109 part-time staff. In 2015, they generated over N\$ 45 million (US\$ 3.33 million).⁸⁹ This revenue, and the existence of these conservancies, has helped Namibia's leopard population expand.⁹⁰ There is a clear link between the use and expanding leopard populations, as the leopard is a key species for hunting in Namibia.⁹¹
45. By law in Tanzania, hunting operators must provide \$5,000 in community assistance per year and per concession. Most operators provide far more voluntarily.⁹² From 2013-2015, a sample of 27 operators contributed over \$3.13 million in community investment and created over 1,200 permanent jobs and thousands of seasonal jobs in remote areas of the country lacking other means of employment.⁹³
46. In Zambia, operators lease concessions from communities in Game Management Areas. They make concession lease payments as well as share 50%+ of animal fees. They provide additional support for infrastructure projects as well. A small sample of four operators invested over \$100,000 in community projects in 2015 and contributed an estimated \$75,000+ in game meat to villages.⁹⁴ During the two-year moratorium on leopard and lion hunting, Zambia's wildlife authority received "lots of complaints from local communities" and human-wildlife conflicts increased, because communities did not receive the tolerance-inducing benefits from sport hunting.⁹⁵
47. In Zimbabwe, CAMPFIRE operates on the basic principle that people are more tolerant of the negative effects of living with wildlife if wildlife has value for them. According to the wildlife authority, "hunting contributes to the conservation [of leopard and other game] via the financial revenue generated, which is ploughed back into conservation of the resource and empowers local communities to invest in their own rural development programs." Operators share revenues pursuant to concession agreements, and contribute game meat and infrastructure projects. "These revenues are used to support a variety of social services that benefit a large proportion of the local community." The revenue level turns on the extent of the local game populations and habitat. Under CAMPFIRE, communities benefit most if their game populations are thriving, which benefits both rural people and wildlife.⁹⁶

⁸⁹ NACSO (2015), p. 51.

⁹⁰ A.B. Stein et al., *Namibia Large Carnivore Atlas* (2012), p. 5 (reflecting 144% growth between 2004 and 2012 at the low end of the estimate (from 5,436 to 13,356 leopard), and 114% growth at the high end of the estimate (from 10,610 to 22,706 leopard)).

⁹¹ Naidoo (2016).

⁹² Tanzania, *Wildlife Conservation (Tourist Hunting) Regulations* (2016) (16)(4).

⁹³ Boguslawski (2016). A 2012 study predicted "restrictions on lion hunting could potentially reduce the tolerance of communities in some areas ... [and] the funds available for ... community outreach." This prediction is occurring, and the impact is even worse because more than one species is subject to bans or trade barriers. Lindsey et al. (2012), p. 7-8 (also noting that the leopard was even more important than the lion "in financial terms").

⁹⁴ M. Boguslawski, *Zambia Operators Summary Report* (2017); DNPW (2016), p. 27-28, 33-34, 57; see also P.A. White & J.L. Belant, *Provisioning of Game Meat to Rural Communities as a Benefit of Sport-Hunting in Zambia*, *PLoS ONE* 10(2) (Feb. 18, 2015).

⁹⁵ N. Onishi, *A Hunting Ban Saps a Village's Livelihood*, *The New York Times* (Sept. 12, 2015), available at http://www.nytimes.com/2015/09/13/world/a-hunting-ban-saps-a-villages-livelihood.html?_r=0.

⁹⁶ DAPU (2015); M. Pieters *Safaris, Sustainable Use Benefiting Communities*, Blog (Nov. 18, 2015) (contributing over \$200,000 annually "straight to the producer communities for community developmental projects"; in 2013-2014, for example, these funds were used for building or repairing five teachers' houses, ten classrooms, and four offices, obtaining school supplies, rehabilitating water infrastructure, constructing feeder roads, obtaining and repairing

Range Nation Views

48. The SACD countries that responded to the status review emphasized the importance of sport hunting to their leopard conservation efforts. For example, Mozambique described the benefits of regulated sport hunting, including generation of approximately \$2.1 million in revenue to the wildlife authority and more than \$3 million in anti-poaching, community, and block development during 2013 through 2015. Moreover:

An analysis of the Safari Operator's s Annual Activities Reports shows the following benefits that sport-hunting provides to large carnivores, their habitat and their prey (ANAC 2016):

- a) [D]irect revenues e.g., jobs for local people. Safari Hunting Companies employed more than 800 people in 2015 of which about 40% were seasonal workers. Among these people there were also the anti-poaching teams.
- b) Meat is provided to the local communities. Although is difficult to assess the quantity, it is an important source of protein and increase the tolerance of communities toward wildlife and their understanding of legal regulated harvesting.
- c) [A]ssignment of monetary value to large dangerous carnivores and thus, increased incentive for rural people to tolerate lions outside of National Parks[.]
- d) [I]ncreased financial and logistical support for anti-poaching[.]
- e) [P]rotection of native prey species through decreased bush-meat poaching, Thousands of snares are removed annually by the anti-poaching teams of the hunting operators.
- f) [P]rotection of large carnivores' habitat against land conversion and unsustainable resource extraction e.g., logging and mining[.]
- g) [D]ecreased livestock presence, overgrazing and associated desertification.
- h) [D]ecreased exposure of large carnivores and their prey to domestic diseases from livestock[.]⁹⁷

49. Similarly, Tanzania's wildlife authority explained that sport hunting generates crucial funding for wildlife management and enforcement of protected areas, and incentives for "conservation of biodiversity and wellbeing of communities living around protected areas." Among other things:

Funds generated from tourist safari hunting benefit [species] in Tanzania by:

- Paying for conservation programs;
- Paying for anti-poaching programs, personnel, and equipment;
- Providing direct contributions from safari operators to anti-poaching patrols and scouts, and providing early detection and reporting of poaching incidents, all of which benefits the government by shifting these costs to the private sector;
- Increasing habitat and reducing lion-human conflict by benefiting local communities through Tanzania's growing Wildlife Management Areas (WMAs), including by disbursing 75% of the block fee and 70% of the permit fee to WMAs once it is paid by the concessionaire; and

heavy equipment, and funding traditional ceremonies); ZPWMA, Legal Trade, Conservation, and Rural Livelihoods: A Zimbabwean Perspective, Presentation at the Workshop on CITES and Livelihoods (Nov. 23-25, 2016), p. 11-22; CAMPFIRE Association (2016); ZPWMA (2016), p. 396-403.

⁹⁷ ANAC (2017), p. 10; ANAC (2016), p. 7-8.

- Justifying the preservation of most wildlife habitat and helping fund its management.⁹⁸

50. Botswana, Mozambique, Tanzania, and Zimbabwe have each opposed the proposed uplisting and confirmed the leopard is not endangered within their jurisdictions. Range nations are in the best position to monitor, protect, and manage their leopard populations,⁹⁹ and Section 4(b)(1) mandates the FWS heavily weight the range nations' information in a listing determination under Section 4. In general, SADC nations are tired of the imposition of trade bans or "stricter domestic measures," and it is time the FWS listens to their concerns. The only impact of an uplisting will be to restrict the import of sport-hunted trophies into the U.S. But as the FWS acknowledged in 1982, after taking into account the views of range nations, "sport-hunting will benefit the species as a whole."¹⁰⁰

CONCLUSION

The leopard's threatened status should be confirmed because none of the listing factors are met. The leopard is doing even better in the SADC countries now than when it was downlisted in 1982: its habitat is larger and more secure; strictly-protected habitat is reinforced by sustainable use areas like safari areas, communal land, and private ranches or conservancies; utilization is controlled and monitored, which has been repeatedly confirmed by the FWS DSA's yearly non-detriment findings; adequate and up-to-date laws and management plans protect the species; and management of the species is constantly being adapted to address identified risks. This is clear in the on-going review of export quotas, adoption of age limits on offtakes, workshops to assess threat mitigation, and more. The species has benefited from game status by reduced conflicts with humans and livestock. The CBNRM policies that incentivize greater conservation and tolerance by rural communities were all adopted since 1982. It would be inconsistent, and cut against the available information, to uplist a species that is better protected now than when it was downlisted to threatened.

Put simply, in the SADC countries, the leopard is not endangered. The IUCN does not assess it as any more than vulnerable (if even that). The range nations do not consider the leopard to be or want it to be listed as endangered. As in 1982, the best available information demonstrates that regulated hunting benefits the leopard, its prey, rural communities, and private land holders in the countries that depend on hunting as a conservation tool. The correlation is empirically proven: in the SADC countries, wildlife populations (including leopard) are generally stable or increasing, habitat is secure, poaching is controlled, and conflicts are manageable and mitigated.

⁹⁸ TAWA (2016); MNRT (2017), p. 10-12.

⁹⁹ Convention on International Trade in Endangered Species of Wild Fauna and Flora, preamble.

¹⁰⁰ FWS (1982), p. 4209.