BEFORE THE UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

THE HUMANE SOCIETY OF THE UNITED STATES,

HUMANE SOCIETY INTERNATIONAL,

CENTER FOR BIOLOGICAL DIVERSITY,

INTERNATIONAL FUND FOR ANIMAL WELFARE, AND

THE FUND FOR ANIMALS

– PETITIONERS –

PETITION TO LIST ALL *PANTHERA PARDUS* AS ENDANGERED AND TO IMMEDIATELY RESTRICT LEOPARD TROPHY IMPORTS

July 25, 2016

Drafted by:

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TABLE OF CONTENTS

NOTICE OF PETITION

Honorable Sally Jewell, Secretary
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Dear Secretary Jewell, Director Ashe, Assistant Director Arroyo, and Assistant Director Frazer:

Pursuant to Section 4(b) of the Endangered Species Act ("ESA"), 16 U.S.C. § 1533(b), Section 553(e) of the Administrative Procedure Act ("APA"), 5 U.S.C. § 553(e), and 50 C.F.R. § 424.14, Petitioners (The Humane Society of the United States, Humane Society International, Center for Biological Diversity, International Fund for Animal Welfare, and The Fund for Animals), hereby petition the Secretary of the Interior and the Director of the Fish and Wildlife Service ("FWS" or "the Service") to list all leopards (*Panthera pardus*) as Endangered.

Additionally, pursuant to the First Amendment of the United States Constitution[1] and the APA (5 U.S.C. § 553(e)), Petitioners hereby petition the Service to take immediate action to restrict imports of African leopards, by (1) suspending the issuance of CITES import permits for *Panthera pardus* trophies until the FWS non-detriment advice memorandum is reevaluated for each range country where trophy hunting occurs; and (2) rescinding the special rule pertaining to leopards from "southern Africa" (50 C.F.R. § 17.40(f)) to require ESA permits for all otherwise prohibited activities, consistent with 50 C.F.R. § 17.31(a).

[1] "Congress shall make no law ... abridging ... the right of the people ... to petition Government for a redress of grievances." U.S. CONST., amend. I. The Supreme Court has recognized that the right to petition is logically implicit in, and fundamental to, the very idea of a republican form of government. *United States v. Cruikshank*, 92 U.S. 542, 552 (1875); *United Mine Workers of America, Dist. 12 v. Illinois State Bar Ass'n*, 389 U.S. 217, 222 (1967); *Thomas v. Collins*, 323 U.S. 516, 530 (1945).

This petition presents substantial scientific and commercial information that leopards in Africa "south of and including…Gabon, Congo, Zaire, Uganda, Kenya" should be included in an Endangered listing for all *Panthera pardus*. 50 C.F.R. § 17.11 (listing leopards as Endangered in Asia and North and West Africa, but listing as Threatened leopards in Central, East, and Southern Africa).[2] *See also* 50 C.F.R. § 424.14(b)(1) ("substantial information" is "that amount of information that would lead a reasonable person to believe that the measure proposed in the Petition may be warranted"); 16 U.S.C. §1533(b)(3)(A) (The Secretary must make an initial finding on the petition "[t]o the maximum extent practicable, within 90 days after receiving the Petition"); *HSUS v. Pritzker*, 2014 WL 6946022 (D.D.C. 2014) (holding that conclusive evidence is not required to make a positive 90-day finding). Petitioners are confident that a status review of the species, as required by 16 U.S.C. § 1533(b)-(c), will support a finding that listing all *Panthera pardus* as Endangered is in fact warranted.

Further, as demonstrated herein, the Service must take immediate action to restrict the import of leopard hunting trophies to ensure that its regulations and practice comply with the ESA's statutory mandate to provide for the conservation of Endangered and Threatened species. *See* 16 U.S.C. § 1531(b), (c) (providing that federal agencies "shall utilize their authorities in furtherance of" the conservation purpose of the ESA); *Sierra Club v. Clark*, 755 F.2d 608 (8th Cir. 1985) (special rules must be designed and implemented to actually promote the conservation of the Threatened species).

This Petition is supported by expert declarations from renowned wildlife experts Dr. Jane Goodall and Dereck Joubert, and enclosed is a disc of the scientific references cited.

Respectfully submitted by:

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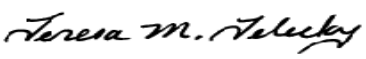
[2] This listing does not account for the fact that Zaire became the Democratic Republic of the Congo in 1997.



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EXECUTIVE SUMMARY

This Petition – submitted by The Humane Society of the United States, Humane Society International, Center for Biological Diversity, International Fund for Animal Welfare, and The Fund for Animals and supported by expert declarations from Dr. Jane Goodall and Dereck Joubert – demonstrates that the leopard (*Panthera pardus*) meets the statutory criteria for an Endangered listing under the ESA across its geographic range and requests reclassification for leopard populations listed as Threatened in 1982.

The ESA considers a species (including subspecies or distinct population segment) to be "Endangered" when it "is in danger of extinction throughout all or a significant portion of its range." 16 U.S.C. § 1532(6). The ESA requires the Service to list a species as either "Endangered" or "Threatened" based on the following five factors: (1) the present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; and (5) "other natural or manmade factors affecting its continued existence." *Id.* § 1533(a)(1)(A-E). The ESA requires the Secretary to determine within 90 days of receiving the Petition whether the Petition "presents substantial scientific or commercial information indicating that the petitioned action may be warranted." *Id.* § 1533(b)(3)(A). Such determination must be made solely on the basis of the "best scientific and commercial data available." *Id.* § 1533(b)(1)(A).

When a foreign species is listed as Endangered, protection under the ESA occurs by, *inter alia*, prohibiting imports unless they enhance the propagation or survival of the species or are for scientific purposes. *Id.* § 1533(b)(1)(A). Furthermore, Section 8 of the ESA provides for "International Cooperation" in the conservation of foreign, listed species, and listing a foreign species heightens global awareness about the importance of conserving the species.

This Petition seeks to increase protection for leopards in southern Africa, while maintaining the Endangered listing for leopards in all other areas of the species' range. Thus, this Petition describes the natural history and biology of the African leopard (*Panthera pardus pardus*) and the current status and distribution of this subspecies; it clearly shows that its range is in alarming and precipitous decline, including in southern Africa where leopards are currently listed as Threatened. The Petition reviews the threats to the continued existence of the African leopard, including loss of habitat and prey, excessive and unsustainable offtake for recreational purposes, high levels of poaching for commercial purposes, indiscriminant killing such as through snaring, and retaliatory killing by poison or firearms due to a perceived or actual treat to livestock and people. The Petition also demonstrates how Americans engaging in unsustainable trophy hunting and international trade of African leopards and their parts for hunting purposes are significantly and negatively impacting the conservation status of the African leopard. It then explains how existing laws and regulations are inadequate to address the numerous and interacting threats to the African leopard today.

The Petition requests that as FWS considers an uplisting of Threatened leopards to Endangered, the agency immediately take action to strictly scrutinize the import of leopard trophies by (1) suspending the issuance of CITES import permits for *Panthera pardus* trophies until the FWS non-detriment advice memorandum is reevaluated for each range country where trophy hunting occurs; and (2) rescinding the

special rule pertaining to leopards from southern Africa (50 C.F.R. § 17.40(f)) to require ESA permits for all otherwise prohibited activities, consistent with 50 C.F.R. § 17.31(a).

Status and Distribution

The IUCN Red List status of the leopard demonstrates the precipitous deterioration of the status of the leopard over the past 15 years: in 2002, the species was considered Least Concern; in 2008, Near Threatened; and in 2016, Vulnerable (Stein et al. 2016). The most recent IUCN Red List assessment lists persecution, habitat fragmentation, an increase in illegal wildlife trade, excessive take for ceremonial use of skins, prey base declines, and poorly managed trophy hunting as major threats to the survival of the species (Stein et al. 2016). Regarding African leopard populations specifically, the subpopulation of North Africa (which is currently listed as Endangered under the ESA) potentially qualifies as Critically Endangered due to very small and declining number of mature individuals; since the previous IUCN assessment in 2008, leopards likely have become extinct in Morocco and Algeria (Stein et al. 2016). In sub-Saharan Africa, the leopard population has declined by >30% in the past three generations, potentially qualifying the sub-Saharan population of the subspecies as Vulnerable (Stein et al. 2016); this decline was caused by a 21% loss of leopard habitat in sub-Saharan Africa over the past 25 years, and 59% decline in prey loss in protected areas. At the regional level within sub-Saharan Africa, Stein et al. (2016) infer a >50% loss of leopard populations in East and West Africa, due to leopard prey reduction by 52% and 85% in those regions, respectively. In southern Africa, populations in Angola, Zambia, Mozambique, Zimbabwe and South Africa appear to be decreasing (Stein et al. 2016). In addition to habitat loss and loss of prey base, Stein et al. (2016) recognize two other major threats to leopards in sub-Saharan Africa: conflict with farmers over actual or potential killing of domesticated livestock or farmed wild animals (game farming or game ranching); and poorly managed trophy hunting, especially when it is concentrated geographically and when it targets individuals in their prime, who are territorial and reproductively active.

Regarding the total population size for the African leopard subspecies across its range, according to the 2008 IUCN assessment (Henschel et al.), "there are no reliable continent-wide estimates of population size in Africa, and the most commonly cited estimate of over 700,000 leopards in Africa (Martin and de Meulenaer 1988) *is flawed*" (emphasis added). The most recent publication on leopard status and distribution (Jacobson et al. 2016) stated, "Earlier Africa-wide assessments of population size (Myers, 1976; Eaton, 1977; Martin & De Meulenaer, 1988; Shoemaker, 1993) employed questionable population models based on scant field data and were widely criticized as being unrealistic (Hamilton, 1981; Jackson, 1989; Norton,1990; Bailey, 1993)" (p. 2). The current ESA Threatened listing – which dates to 1982 – is based on outdated information and must be reviewed in light of the substantial evidence indicating a significant decline in populations over the last three decades.

Present and Threatened Destruction, Modification, Curtailment of Habitat or Range

African populations of the leopard have experienced significant and ongoing loss of habitat. The most recently published scientific assessment of the status and distribution of the species (Jacobson et al. 2016a) found that *P. pardus pardus*, the African leopard, has lost 48-67% of its historical range. In North Africa, *P. pardus pardus* has lost 93.9-99% of its historic range; in West Africa, the range loss is 86-95%;

in Central Africa, the range loss is 45-66%; in East Africa, the range loss is 40-60%; and in Southern Africa, the range loss is 28-51% (Jacobson et al. 2016a). Jacobson et al. (2016a) state, "even for this relatively widespread subspecies, there is still substantial cause for concern across large portions of its range." The subspecies existed historically in 47 range States, but exists in only 38 today, and thus has been extirpated from nine countries: Mauritania, Togo, and Tunisia; Gambia, Lesotho, and Morocco (possibly extinct); and Algeria, Burundi, and Mali (possibly present) (Jacobson et al. 2016a).

The most recent IUCN assessment of the leopard (Stein et al. 2016) agrees largely with the findings of Jacobson et al. (2016a) with regard to range loss over the past three leopard generations (22.3 years); they estimated a 61% range loss for the species across its range (from 21,953,435 km^2 in the 2008 IUCN assessment to 8,515,935 km^2 in the 2016 assessment); a 21% range loss in sub-Saharan Africa; a 97% range loss in North Africa; a "dramatically reduced" range in West Africa; "substantial range declines" in West, Central, and East Africa; and a 21% range loss in southern Africa. Stein et al. (2016) attributes the range declines in West, Central, and East Africa to habitat loss and fragmentation which threaten the survival of leopards because they "require large, contiguous habitats with low human impacts to reproduce successfully" (Stein et al. 2016). Other factors contributing to range loss in Africa are prey reductions due to the illegal and unsustainable bushmeat trade, illegal harvest of skins, and human-leopard conflict and retaliation for livestock depredation.

Overutilization for Commercial, Recreational, or Scientific Purposes

The original analysis presented in this petition shows that between 2005 and 2014 (the most recent years for which complete data are available), 35,421 leopard specimens (leopards, dead or alive, and their parts and derivatives, the equivalent of at least 12,791 leopards), were traded internationally. Of these 12,791 leopards traded internationally, 10,191 of these specimens were hunting trophies.

The U.S. is the top importer of leopard specimens sourced from the wild (accounting for 45% of the total trade), and the vast majority of leopard specimens imported to the U.S. are hunting trophies. From 2005-2014, Americans imported African leopards and their products equivalent to 5,575 individuals, including bodies (14), live specimens (26), skins (741), and trophies (4,794). This amount is equivalent to approximately 44% of the global imports in leopards during this period.

Most leopards imported into the U.S. were exported from Zimbabwe (1,745 total: 1,489 trophies and 256 skins, 31% of total imports) and the United Republic of Tanzania (1,270 total: 1,118 trophies and 152 skins, 23% of total imports), with South Africa (900 total: 729 trophies, 163 skins and 8 bodies, 16% of total imports), Namibia (654 total: 646 trophies, 5 skins, 3 bodies, 12% of total imports), Zambia (468 total: 466 trophies and two skins, 8% of total imports), Mozambique (238 total: 133 trophies and 105 skins, 4% of total imports), and Botswana (196 total: 191 trophies and 5 skins, 4% of total imports) also playing major roles in exports.

Since the 1982 Threatened listing was put in place relaxing requirements for leopard trophy imports from southern Africa, there has been a dramatic increase in the number of leopard trophies imported, with numbers steadily rising throughout the 1990's and peaking in 2009, when 657 trophies were imported. The number of leopard trophy imports has remained over 300 per year since 1999, despite prior commitments from FWS to only allow "very few" leopard trophies into the country.

Poorly managed trophy hunting is considered a major threat to the survival of leopards in sub-Saharan Africa, especially when it is geographically concentrated and targets individuals in their prime, who are territorial and reproductively active (Stein et al. 2016). Recent studies have demonstrated that trophy hunting caused leopard population declines in South Africa (Balme et al. 2009, Pitman et al. 2015), Mozambique (Jorge 2012), Tanzania (Packer et al. 2009), and Zambia (Packer et al. 2010). Concern about unsustainable leopard trophy hunting has resulted in South Africa banning the export of leopard trophies in 2016; Botswana banning all trophy hunting, including of leopard, beginning in 2014; and Zambia banning leopard hunting in 2013 (Stein et al. 2016).

Leopards also continue to be poached for commercial trade, and a trend can be seen in China exporting for commercial purposes an average of 413 leopard "derivatives" to the U.S. each year during 2006-2010, which abruptly ceased in 2011, and then the trend reappeared under a different but similar wildlife term: "medicine"; an average of 110 "medicine" products derived from leopards being exported for commercial purposes from China (2012-2013) and then Hong Kong (2014).

There is a large-scale illegal trade in leopard skins for "cultural regalia" in southern Africa, with an estimated 4,500-7,000 leopards killed annually to fulfill demand for skins by followers of one church alone (the Nazareth Baptist (Shembe) Church) (Stein et al. 2016, citing to Balme unpublished data).

Inadequacy of Existing Regulatory Mechanisms

Pursuant to Fish and Wildlife Service regulations, *Panthera pardus* is currently listed as Endangered across its range, with the exception of 18 countries in southern Africa where the species is listed as Threatened. 50 C.F.R. § 17.11. This differential geographic listing does not comport with FWS policy or statutory mandate, and the best available science – presented in this Petition – demonstrates that leopards in southern Africa, like leopards in Asia and northern Africa, are "in danger of extinction" in this significant portion of the species' range. 16 U.S.C. § 1532(6).

All leopards were originally listed as Endangered, initially to restrict the leopard fur trade (with over 17,000 leopard hides imported into the United States from 1968-1969). 45 Fed. Reg. 19007 (March 24, 1980). But in 1980, at the urging of trophy hunters, FWS proposed to reduce protections for leopards in most of Africa (even though the agency did not explain whether or why it thought that leopards in southern Africa were both "distinct" and "significant" such that the region constitutes a listable distinct population segment). *See* 61 Fed. Reg. 4722 (Feb. 7, 1996); 16 U.S.C. § 1532(16). And today, FWS still has not conducted an analysis of whether leopards in southern Africa can lawfully be listed as a distinct population segment. Similarly, since 1982 when it finalized the Threatened listing for African leopards, FWS has not conducted the mandatory five-year review for such listing, resulting in an antiquated listing that is not based on the best available science.

In addition to the lack of scientific support for the original listing, the implementation of this listing is woefully inadequate to promote leopard conservation, endangering the survival of leopards in southern Africa. Currently, leopard trophies can be imported into the U.S. without an ESA permit, provided that the requirements of the Convention on International Trade in Endangered Species (CITES) are met.

Currently, CITES has established export quotas for twelve African countries for leopard skins traded for personal and hunting trophy purposes, totalling 2,648 leopards per year. These quotas have dramatically

increased over time, with the number of leopards rising five-fold – from 460 in 1983 to 2,648 in 2016 – and the number of countries with export quotas rose from seven in 1983 to twelve in 2016.

These quotas have no scientific basis and are not routinely reviewed to ensure that are not detrimental to the survival of the species. Indeed, the basis for the original and subsequent CITES export quotas for leopards is a model by Martin and de Meulenar (1988) that has been dismissed by modern leopard scientists as over-simplified as it was based on a correlation between rainfall and leopard numbers in savannah habitats of East Africa and used to predict leopard numbers across their entire sub-Saharan Africa range (Braczkowski et al. 2015b).

Other Natural or Manmade Factors Affecting the Survival of the African Leopard in the Wild

African leopards are also in danger of extinction due to other manmade factors. Leopard population densities are directly related to biomass of medium and large-sized wild herbivores, the main leopard prey (Stein et al. 2016). However, populations of such herbivores have been severely depleted by the unsustainable bushmeat trade which is considered to be a major threat to the survival of the African leopard (Stein et al. 2016). According to Stein et al. (2016), Craigie et al. (2010) found an estimated 59% average decline in leopard prey populations in 78 protected areas in West, East, and Southern Africa between 1970 and 2005 due to commercialized bushmeat trade. Bushmeat hunting in the Congo Basin for local and commercial use has reduced the wild prey base, resulting in lower leopard densities and even the disappearance of leopards from some places (Henschel 2008, 2009). Leopard range is largely reduced in human-populated areas in the Democratic Republic of the Congo due illegal hunting and bushmeat trade (Stein et al. 2016). Bushmeat poaching in Mozambique and Zambia has severely reduced leopard prey inside and outside of protected areas (Stein et al. 2016).

Conflict with farmers who own domestic or wild game (game ranching) is a major threat to the survival of the African leopard (Ray et al. 2005, Henschel 2008, Stein et al. 2016). About 60-70% of Africa's human population relies on agriculture and livestock for their livelihoods, and the human population of Africa is expected to more than double by 2050 (Stein et al. 2016); thus, the future will likely see increasing numbers of people using increasing amounts of land in conflict with decreasing numbers of leopards. Currently, many sub-Saharan African countries allow farmers to kill predators considered to be a threat to life or property without first obtaining a permit; it is likely that a large number of leopards are killed but not reported; and the total number of leopards killed due to conflict is unknown (Stein et al. 2016). And indiscriminate killing, such as the poisoning of carcasses aimed at attracting and killing carnivores of any and all types, and the use of snares to kill other species, is also a threat to the survival of leopards (Henschel 2008, Jorge 2012).

Conclusion

This Petition demonstrates that leopards in southern Africa are in danger of extinction and must be listed as Endangered along with leopards across the remainder of the species' range. Given the precarious plight of the African leopard, and due to the legal deficiencies in existing law, the Petition also asks FWS to take immediate action to restrict the import of African leopard hunting trophies to the U.S.

I. Introduction

Pursuant to Fish and Wildlife Service ("FWS" or "the Service") regulations, *Panthera pardus* is currently listed as Endangered across its range, with the exception of 18 countries in southern Africa where the species is listed as Threatened. 50 C.F.R. § 17.11. This differential geographic listing does not comport with FWS policy or the Endangered Species Act's (ESA) statutory mandate, and the best available science – presented in this Petition – demonstrates that leopards in southern Africa are "in danger of extinction" in this significant portion of the species' range. 16 U.S.C. § 1532(6).

Leopards in Asia and northern Africa are in danger of extinction and clearly meet the statutory definition of Endangered, as acknowledged by FWS; however, the Service's decades old regulation listing leopards in southern Africa as a Threatened species is not supported by science – indeed, such listing and the management decisions flowing therefrom are based almost entirely on unpublished reports from biased sources that have been discredited by the scientific community (as detailed in Section IV(D), *infra*). *See* 50 C.F.R. § 17.11.

This Petition describes the natural history and biology of the African leopard (*Panthera pardus pardus*) and the current status and distribution of this subspecies (with a particular focus on the sub-Saharan African countries where leopards are currently listed as Threatened).[3] The evidence clearly shows that leopards in this part of the species' range are in alarming and precipitous decline. The Petition evaluates the threats to the continued existence of the African leopard, including loss of habitat and prey, excessive and unsustainable offtake for recreational purposes, high levels of poaching and illegal trade for commercial and ceremonial purposes, indiscriminant killing such as through snaring, and retaliatory killing by poison or firearms due to a perceived or actual treat to livestock and people. The Petition also demonstrates how Americans engaging in unsustainable trophy hunting and international trade of African leopards and their parts for hunting trophies are significantly and negatively impacting the conservation status of the African leopard. It then explains how existing laws and regulations are inadequate to address the numerous and interacting threats to the African leopard today, all of which requires FWS to expand the Endangered listing of *Panthera pardus* to include all animals throughout the entirety of the species' range.

The Petition also requests that as the Service evaluates an uplisting of Threatened leopards, the Service immediately take action to restrict the import of leopard specimens by (1) suspending the issuance of CITES import permits for *Panthera pardus* trophies until the FWS non-detriment advice memorandum is reevaluated for each range country where trophy hunting occurs; and (2) rescinding the special rule pertaining to leopards from southern Africa (50 C.F.R. § 17.40(f)) to require ESA permits for all otherwise prohibited activities, consistent with 50 C.F.R. § 17.31(a).

[3] Notably, because the boundary line that FWS drew "south of and including…Gabon, Congo, Zaire, Uganda, Kenya" does not have any biological basis, much of the published literature refers to the African leopard subspecies as a whole or to specific countries within the subspecies' continental range. To the extent possible, this Petition focuses on the science pertaining to leopards in the range countries where the Threatened listing applies (which encompass the vast majority of the species' range on the African continent).

II. Status and Distribution

The leopard is the most wide-ranging species of wild cats. The species' historic range extended from the Cape of Good Hope in South Africa through the Middle East and Southeast Asia to the Amur Peninsula in Russia (Nowell and Jackson 1996). According to the International Union for Conservation of Nature (IUCN), there are nine extant leopard subspecies, though the species' taxonomy is currently under review by the IUCN SSC Cat Specialist Group: *Panthera pardus pardus* (Africa), *Panthera pardus nimr* (Arabia), *Panthera pardus saxicolor* (Central Asia), *Panthera pardus melas* (Java), *Panthera pardus kotiya* (Sri Lanka), *Panthera pardus fusca* (Indian sub-continent), *Panthera pardus delacourii* (southeast Asia into southern China), *Panthera pardus japonensis* (northern China), and *Panthera pardus orientalis* (Russian Far East, Korean peninsula and north-eastern China).

A new IUCN status review of *Panthera pardus* was just released (Stein et al. 2016) and classifies the species as Vulnerable (demonstrating that the species is more imperilled than it was in 2008, when the last IUCN assessment classified the species as Near Threatened, Henschel et al. 2008). The 2016 status review also continues to recognize that three Asian subspecies of leopards are Critically Endangered (*P. p. orientalis, P. p. nimr*, and *P. p. melas*), and two subspecies are Endangered (*P. p. kotiya* and *P. p. saxicolor*).

The IUCN Red List status of the leopard demonstrates the precipitous deterioration of the status of the leopard over the past 15 years: in 2002, the species was considered Least Concern; in 2008, Near Threatened; and in 2016, Vulnerable (Stein et al. 2016). The most recent IUCN Red List assessment lists persecution, habitat fragmentation, an increase in illegal wildlife trade, excessive take for ceremonial use of skins, prey base declines, and poorly managed trophy hunting as major threats to the survival of the species (Stein et al. 2016).

Regarding African leopard populations specifically, the subpopulation of North Africa potentially qualifies as Critically Endangered due to very small and declining number of mature individuals; since the previous IUCN assessment in 2008, leopards likely have become extinct in Morocco and Algeria (Stein et al. 2016). In sub-Saharan Africa, the leopard population has declined by >30% in the past three generations, potentially qualifying the sub-Saharan population of the subspecies as Vulnerable (Stein et al. 2016); this decline was caused by a 21% loss of leopard habitat in sub-Saharan Africa over the past 25 years, and 59% decline in prey loss in protected areas. At the regional level within sub-Saharan Africa, Stein et al. (2016) infer a >50% loss of leopard populations in East and West Africa, due to leopard prey reduction by 52% and 85% in those regions, respectively. In southern Africa, populations in Angola, Zambia, Mozambique, Zimbabwe, and South Africa appear to be decreasing (Stein et al. 2016). In addition to habitat loss and loss of prey base, Stein et al. (2016) recognize two other major threats to leopards in sub-Saharan Africa: conflict with farmers over real or potential killing of domesticated livestock or farmed wild animals (game farming or game ranching); and poorly managed trophy hunting especially when it is concentrated geographically and when it targets individuals in their prime, who are territorial and reproductively active.

Regarding the total population size for the African leopard subspecies, according to the 2008 IUCN assessment (Henschel et al. 2008), "there are no reliable continent-wide estimates of population size in

Africa, and the most commonly cited estimate of over 700,000 leopards in Africa (Martin and de Meulenaer 1988) *is flawed*" (emphasis added). Similarly, the 2016 IUCN assessment states that "reliable data on Leopard population trends are missing from large portions of their range" but that "Leopards are declining throughout most of their range" and "populations have become reduced and isolated, and they are now extirpated from large portions of their historic range." (Stein et al. 2016).

The most recent scientific publication on leopard status and distribution (Jacobson et al. 2016a) stated, "Earlier Africa-wide assessments of population size (Myers, 1976; Eaton, 1977; Martin & De Meulenaer, 1988; Shoemaker, 1993) employed questionable population models based on scant field data and were widely criticized as being unrealistic (Hamilton, 1981; Jackson, 1989; Norton,1990; Bailey, 1993)" (p. 2). Jacobson et al. (2016a) did not provide an African leopard population size estimate saying, "Lack of empirical field data on distribution status and population size has prevented a range-wide population estimate" (p. 2).

However, recent estimates and trends are available (**Table 1**) for some of the 18 range countries where leopards are currently listed as Threatened, an area that encompasses the vast majority of the species' current range on the African continent (**Figure 1**).

Table 1. Recent estimates of leopard population sizes and trends in countries where the population is listed as ESA Threatened.

Country	Recent Estimated Leopard Population Size, Status and/or Trend
Angola	Stein et al. (2016) state that Angola has declining but healthy leopard populations outside of areas with increased human development and intensive conflict with humans. However, Jacobson et al. (2016b) state that there are no recent publications regarding the presence of leopards in Angola and, while there are likely many leopards, there are no scientific data.
Botswana	Botswana's 2003 Predator Strategy estimated between 4,404 and 6,830 leopards existed in the country (Jacobson et al. 2016b) where there is a continuous leopard population in the North and West" (Stein et al. 2016).
Burundi	Jacobson et al. (2016b) consider the leopard to be "possibly present" in Burundi but much of the country is converted to agriculture with high human population densities and low wild prey densities.
Republic of the Congo	Leopards are present in many protected areas but they are threatened by the illegal leopard skin trade which is supplied by specialized leopard hunters, particularly in northeast Congo (Jacobson et al. 2016b).
Democratic Republic of the Congo	The leopard is "likely still widespread" in the Democratic Republic of the Congo but there is little recent information on leopards and densities are unknown (Jacobson et al. 2016b). A large and growing human population has diminished leopard prey populations through excessive and unsustainable bushmeat harvesting practices (Jacobson et al. 2016b). Stein et al. (2016) state that leopard range has already been reduced due to bushmeat hunting.
Gabon	Henschel (2010) estimated Gabon's leopard population to be 5,910 animals. Leopards are "found throughout the country with small absent pockets in the southeast and southwest" (Stein et al. 2016). Jacobson et al. (2016b) said that the country likely still supports significant leopard populations, with populations in virtually all protected areas; however, intensive bushmeat hunting has caused leopards to disappear from some areas (Jacobson et al. 2016b).

Country	Recent Estimated Leopard Population Size, Status and/or Trend
Kenya	Jacobson et al. (2016b) consider the leopard to be widely distributed in Kenya, but threats include poisoning by local herders near Amboseli, human-wildlife conflict near Hell's Gate and Ruma, and some isolated cases of "trophy poaching." Stein et al. (2016) considers the distribution of leopards in East Africa, including Kenya, to have been reduced; however, leopards are found throughout the west, central and southern portions of Kenya (Stein et al. 2016).
Lesotho	Jacobson et al. (2016b) and Stein et al. (2016) consider the leopard in Lesotho to be "possibly extinct."
Malawi	Jacobson et al. (2016b) consider the leopard in Malawi to be present in some areas; however, no recent scientific publications on the size and trend of the population are available.
Mozambique	Stein et al. (2016) state that Mozambique has a declining but healthy leopard populations outside of areas with increased human development and intensive human-leopard conflict. Jacobson et al. (2016b) note that the Mozambican Civil War (1977 to 1992) depleted wildlife around the country; however, while leopards are found in many places, their populations are poorly monitored and largely unknown. Jorge (2012) studied the leopard population of Niassa National Reserve and found leopard densities there were comparable with those in Central and Southern Africa; however, trophy hunting offtake combined with illegal offtake was unsustainable.
Namibia	Stein et al. (2016) stated that leopards inhabit most of the country with the exception of the highly populated northern region, the arid southeast farmlands and the desert coast. According to Jacobson et al. (2016b), the Ministry of Environment and Tourism updated their Large Carnivore Atlas in 2010 with the results indicating that leopards are the most widely distributed large carnivore in Namibia, although absent from 30% of their historic range in the country, with a population size of 14,154 (range of 13,356 - 22,706) (according to Stein et al. 2011), which is an increase of 110% from 2004 when the previous Atlas was conducted. Leopard-human conflict and poorly managed trophy hunting are threats to the species in Namibia (Jacobson et al. 2016b).
Rwanda	Jacobson et al. (2016b) state that there are no recent publications regarding the status or presence of leopards in Rwanda and that a lot of the country has been converted to agriculture and has high human population densities.
South Africa	Leopards are found on borders with Namibia, Botswana, Zimbabwe and Mozambique, with dense populations in the Limpopo region, and they are also found in the Cape provinces (Stein et al. 2016). The population is decreasing from previous estimates especially in areas with human development and intensive human-leopard conflict (Stein et al. 2016). Swanepoel et al. (2014) estimated that there were 4,476 leopards in South Africa. According to Jacobson et al. (2016b), there is no national monitoring program for leopards and current trade and trophy hunting quotas may lead to population decline and possible extinction in certain areas. Indeed, recently Pitman et al. (2015) studied leopard offtake in Limpopo Province and found it to exceed that which is considered sustainable. South Africa banned export of leopards for 2016 as they did not have enough information to make a finding of non-detriment required under CITES for leopard exports.
Swaziland	There are no recent publications on the size or trend of the leopard population in Swaziland (Jacobson et al. 2016b).
Tanzania	Leopards remain widely distributed in Tanzania although only a few studies have established scientifically-based leopard densities or population trends (Jacobson et al. 2016b). The leopard population is declining and has been reduced in Tanzania

Country	Recent Estimated Leopard Population Size, Status and/or Trend
	(Jacobson et al. 2016b, Stein et al. 2016) driven, in part, by excessive offtake for trophy hunting (Packer et al. 2009, Jacobson et al. 2016b).
Uganda	Although apparently present in many areas (Jacobson et al. 2016b, Stein et al. 2016), the Uganda Wildlife Authority reported in 2010 that leopards are 'likely to have declined even more drastically [relative to other species of concern] because of their widespread presence outside protected areas' and estimated that the population may be lower than 150-200 individuals (Jacobson et al. 2016b).
Zambia	Zambia's leopard population has declined with leopards disappearing from areas with increased human development and in areas with high human-leopard conflict (Stein et al. 2016). Leopards are present in some National Parks and game management areas, but absent in others (Jacobson et al. 2016b). Zambia banned leopard hunting in 2013 and 2014, but reinstated it in 2015 and 2016 (Jacobson et al. 2016, supplemental document 1, country profiles).
Zimbabwe	Leopards exist in many conservation areas but no assessment of the national population exists (Jacobson et al. 2016b). Populations are declining and leopards are disappearing in areas with high human impact and human-leopard conflict (Stein et al. 2016). Williams et al. (2016b) extrapolated the results of a study of the impact of government land reform policies on the leopard population of Save Valley Conservancy to the remainder of the country, estimating Zimbabwe's leopard population size to be 626 at minimum and 6,716 at maximum in 2008, a decrease of 69% and 58%, respectively, compared to minimum and maximum population estimates from 2000.

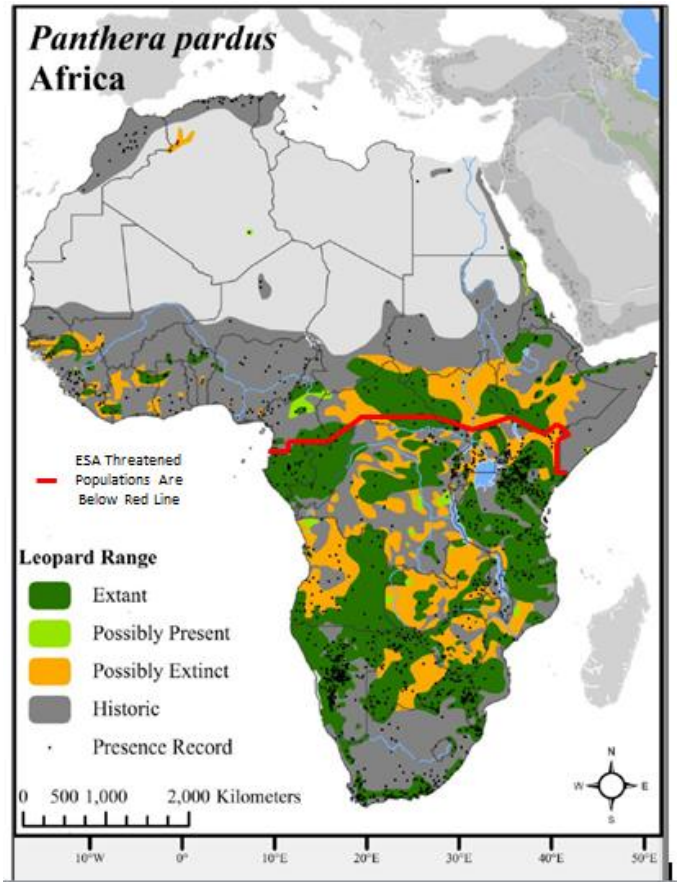
The most recently published scientific paper containing an assessment of the status and distribution of the species (Jacobson et al. 2016a) found that *P. pardus pardus*, the African leopard, has lost 48-67% of its range, from a historical range of 19,751,400 km^2 to between 6,613,000-10,219,200 km^2 today (Jacobson et al. 2016b) (**Figure 1**). Jacobson et al. (2016a) state, "even for this relatively widespread subspecies, there is still substantial cause for concern across large portions of its range." The African leopard subspecies existed historically in 47 range States, but exists in only 38 today, and thus has been extirpated from nine countries (Jacobson et al. 2016c): Mauritania, Togo, and Tunisia; Gambia, Lesotho, and Morocco (possibly extinct); and Algeria, Burundi, and Mali (possibly present) (Jacobson et al. 2016c). Regarding *Panthera pardus* as a whole, Jacobson et al. (2016a) state, "Contrary to the pervasive impression of the leopard as being one of the most widespread, adaptable and resilient carnivores, our calculated range loss of 63–75% exceeds the average range loss documented for the world's largest carnivores (53% for 17 species; Ripple et al., 2014)."

See also Declaration of Dr. Jane Goodall, ¶ 8 ("It is absolutely clear that leopards – like most wildlife in Africa – are at greater risk of extinction today than they were in 1982 when the U.S. Fish and Wildlife Service listed southern African leopards as Threatened. In the nearly six decades during which I have learned a great deal about wildlife in Tanzania and other African countries, the human population has more than doubled, resulting in rapidly vanishing wildlife habitat, wiping out forests and grasslands essential to sustain leopards and their prey. Large mammals – like leopards and chimpanzees – play essential roles in their ecosystems, and in order to preserve these magnificent animals in perpetuity it will require all nations to exercise their full power to promote the conservation of imperiled species."); Declaration of Dereck Joubert, ¶ 9 ("There is no reason to believe that the population trend for leopards is significantly different to those of other big cats in Africa, all of which indicate a 95% decline over the

past 50 years. Our own findings coincide with that hypothesis and in many areas I have surveyed, in particular where there is hunting, leopard have declined significantly. Territories have been disrupted and breeding has been suppressed. It is unlikely that there are more than 50,000 leopards in Africa today. Indeed, based on my experience over the last 30 years working with leopards, the population has significantly decreased in that time.").

The most recent IUCN assessment of the leopard (Stein et al. 2016) agrees largely with the findings of Jacobson et al. (2016a) with regard to range loss over the past three leopard generations (22.3 years); they estimated a 61% range loss for the species across its range (from 21,953,435 km^2 in the 2008 IUCN assessment to 8,515,935 km^2 in the 2016 assessment); a 21% range loss in sub-Saharan Africa; a 97% range loss in North Africa; a "dramatically reduced" range in West Africa; "substantial range declines" in West, Central, and East Africa; and a 21% range loss in southern Africa. Stein et al. (2016) attributes the range declines in West, Central, and East Africa to habitat loss and fragmentation which threaten the survival of leopards because they "require large, contiguous habitats with low human impacts to reproduce successfully" (Stein et al. 2016). Other factors contributing to range loss in Africa are prey reductions due to the illegal and unsustainable bushmeat trade, illegal harvest of skins, and human-leopard conflict and retaliation for livestock depredation.

Figure 1. Historic and present distribution of the leopard in Africa with red line demarcation between ESA Endangered and ESA Threatened populations.



Source: Jacobson et al. 2016d (ESA demarcation added).

III. Natural History and Biology

A. Species Description

The following account of the species is sourced from Stein and Hayssen (2013). The leopard is the smallest of the large cats in the genus *Panthera*, though there are variations in sizes of leopards across their range. Males are generally larger than females – for example, mean length of head and body for males in Namibia is 132 cm, and females 106.5 cm (based on two samples of each sex); weight of 47 males from India, Ivory Coast, Namibia and South Africa was 30.9-62.6 kg, and for 34 females 21.2-54.0 kg. Fur color varies from yellow to black and is soft and thick and leopards living in colder climates have longer hair. Spots occur on the muzzle and forehead and the whisker spots can be used to identify individuals. The spots become a rosette pattern from the neck and shoulders to the rump and tail. Irregular spots are found from the elbow and knee to the feet and along the ventral side of the torso. Eye color varies from yellow to blue. Leopards have well-developed musculature on the neck, forelimbs and chest and can drag a carcass more than double the leopard's body weight up a tree. They have five toes on the front feet and four on the back, with the first toe on the inside of the front used only for bringing down prey. Leopards can reach a maximum speed of 60 km per hour, make horizontal leaps of 6 m, and vertical leaps of 3 m.

B. Reproduction and Mortality

Leopards have a polygynous mating system; both sexes are territorial; males have a territory that includes territories of several females; both sexes defend their territories against individuals of the same sex although there is some overlap (Balme and Hunter 2013).

According to Stein and Hayssen (2013)'s description of *Panthera pardus* across its entire range, some populations have a distinctive mating season (e.g. November-December in Nepal) but leopards mate year-round in South Africa. Females attract males through scent marks and vocalizations. When mating, males associate with females for 1-4 days. Mean length of estrus is 5-13 days, gestation is 88-112 days, lactation occurs for 114-130 days, den emergence happens in 42 days, independence occurs at 13 months. The interbirth interval is 3.5-45 months, with most intervals 8-12 months. Females have four mammae and litter size is 1-6 with a mode of 2. Females first mate at 23-32 months, first births occur at 27-52 months, and males can first sire young at 1.5 years. Infanticide can occur when territorial males that likely sired the young are removed before cubs reach independence. Juveniles remain with their mothers for 12-18 months. Female young take over a portion of their mother's range, while young males disperse.

Lindsey and Chikerema-Mandisodza (2012) describes the reproduction of African leopard specifically (*Panthera pardus pardus*). The African leopard has a low reproductive rate and is long-lived. They reach sexual maturity at 3-4 years, have on average two cubs per litter, have a mean lifetime reproduction of 4.1 cubs/female, have an inter-birth interval of 25 months for successful litters, have a lifespan of 19 years for females and 14 years for males, have a generation time of 7 years, and have an adult sex ratio of 1.6 females/males. There is a 63% mortality of cubs prior to independence.

As described Braczkowski et al. (2015a), the African leopard subspecies (*Panthera pardus pardus*) is considered to be a solitary species (except for mothers and their cubs and males and females when

mating), but they live in a social system that is highly dependent on long-term relationships. When individuals are removed from a population and new immigrants enter the population this destabilizes the social system and leads to fighting and infanticide by new males. In populations where fathers remain present, cub survival and reproductive output of the population are higher than in populations where this is not the case. In addition, in stable populations female leopards give birth at a younger age, spend more time with dependent young, and produce more litters.

Longevity is 10-15 years in the wild; annual adult mortality averaged 19% in Kruger National Park of which 30% were old males, 17% old females, 17% prime males, 10% prime females; 64% died of starvation (Nowell and Jackson 1996).

C. Hunting and Feeding

According to Stein and Hayssen (2013), *Panthera pardus* consume a wide variety of animals of all types and sizes, from beetles to large antelopes. Preferred prey are 10-40 kg but they can feed on larger prey (>150 kg). In Africa, leopards prey on impala, springbok, duiker, nyala, and warthogs, and rodents. Females and cubs tend to prey on smaller animals. Leopards attack prey by stalking and pouncing – smaller prey are killed by a bite on the head or nape of the neck; larger prey by a bite on the throat. Once prey animals are killed, they are eaten on the spot, or dragged to trees, bushes or caves where they are cached. Leopards can be active at night or during the day (*i.e.*, in Kenya and South Africa, 66% of activity is nocturnal). Generally, leopard home range size varies according to prey availability with larger home ranges where prey availability is low. Females have smaller home range sizes than males (*e.g.*, in Tai National Park, Ivory Coast, males had a home range size of 32-46 km^2 and females 14-26 km^2).

IV. *Panthera pardus* is Endangered Across its Range Pursuant to the ESA Listing Criteria

The main threats to the survival of leopards across their range are habitat loss and fragmentation, conflict with humans, loss of prey, killing for the illegal trade in skins and parts and, for *P. pardus pardus*, unsustainable trophy hunting (Jacobson et al. 2016a). *See also* Stein et al. 2016 ("Evidence suggests that Leopard populations have been dramatically reduced due to continued persecution with increased human populations (Thorn et al. 2013, Selvan et al. 2014), habitat fragmentation (UN 2014), increased illegal wildlife trade (Datta et al. 2008), excessive harvesting for ceremonial use of skins (G. Balme pers. comm. 2015), prey base declines (Hatton et al. 2001, du Toit 2004, Fusari and Carpaneto 2006, Datta et al. 2008, Lindsey et al. 2014, Selvan et al. 2014) and poorly managed trophy hunting (Balme et al. 2009)"). Based on these threats, leopards in southern Africa must be included in the Endangered listing for *Panthera pardus*.

Notably, the IUCN concludes that "[m]ost of the factors driving Lion population declines (e.g., habitat loss and fragmentation, retaliatory killing due to conflict, poorly managed trophy hunting) also affect Leopards." (Stein et al. 2016). Just as the Service has recently taken action to prohibit the import of African lion trophies unless the ESA's enhancement standard is met (50 C.F.R. § 17.40(r)), the Service must take action to address the impact that Americans are having on the decline of the leopard.

A. Present or Threatened Destruction, Modification, or Curtailment of Habitat

African populations of the leopard have experienced significant and ongoing curtailment of range. As noted above, the most recently published assessment of the status and distribution of the species (Jacobson et al. 2016a) found that *P. pardus pardus*, the African leopard, has lost 48-67% of its range, from a historical range of 19,751,400 km^2 to between 6,613,000-10,219,200 km^2 today (Jacobson et al. 2016b) (**Figure 1**). In North Africa, *P. pardus pardus* has lost 93.9-99% of its historic range (from 605,300 km^2 historically to 5,800-37,000 km^2 today); in West Africa, the range loss is 86-95% (3,505,000 km^2 to 196,000-483,100 km^2); in Central Africa, the range loss is 45-66% (6,101,100 km^2 to 2,081,900-3,379,700 km^2); in East Africa, the range loss is 40-60% (3,626,300 km^2 to 1,457,200-2,003,300 km^2); and in Southern Africa, the range loss is 28-51% (5,913,800 km^2 to 2,872,200-4,270,800 km^2) (Jacobson et al. 2016b). Jacobson et al. (2016a) state, "even for this relatively widespread subspecies, there is still substantial cause for concern across large portions of its range." The subspecies existed historically in 47 range States, but exists in only 38 today, and thus has been extirpated from nine countries (Jacobson et al. 2016c): Mauritania, Togo, and Tunisia; Gambia, Lesotho, and Morocco (possibly extinct); and Algeria, Burundi, and Mali (possibly present) (Jacobson et al. 2016c).

The most recent IUCN assessment of the leopard (Stein et al. 2016) agrees largely with the findings of Jacobson et al. (2016) with regard to range loss over the past three leopard generations (22.3 years); they estimated a 61% range loss for the species across its range (from 21,953,435 km^2 in the 2008 IUCN assessment to 8,515,935 km^2 in the 2016 assessment); a 21% range loss in sub-Saharan Africa; a 97% range loss in North Africa; a "dramatically reduced" range in West Africa; "substantial range declines" in West, Central, and East Africa; and a 21% range loss in southern Africa. Stein et al. (2016) attributes the range declines in West, Central, and East Africa to habitat loss and fragmentation which threaten the survival of leopards because they "require large, contiguous habitats with low human impacts to reproduce successfully" (Stein et al. 2016). Other factors contributing to range loss in Africa are prey reductions due to the illegal and unsustainable bushmeat trade, illegal harvest of skins, and human-leopard conflict and retaliation for livestock depredation.

Contributing to this immense and ongoing loss of range is the collapse in prey species' populations due to commercial bushmeat harvest of herbivores which, in addition to outright habitat destruction, destroys the suitability of habitats for leopards whose density is dependent on the availability of prey (Stein et al. 2016). Thus, the African leopard is in danger of extinction due to habitat loss.

B. Overutilization for Commercial, Recreational, or Scientific Purposes

A valuable source of information on the utilization of leopards for commercial, recreational or scientific purposes is the Convention on International Trade in Endangered Species (CITES) Trade Database. The 182 CITES Parties are required to file annual reports with the CITES Secretariat on the import, export, re-export, and introduction from the sea of CITES-listed species. These reports are compiled into an electronic, searchable trade database, known as the CITES Trade Database, which is available to the public on the CITES website (www.cites.org).

This database can be used to determine the level of currently-legal international trade as well as the types and sources of leopards and their parts that are involved. In the context of CITES, international trade includes commercial trade as well as trade associated with breeding, circus or travelling exhibition, education, enforcement, trophy hunting, medicinal, personal use, reintroduction, scientific research, and for zoological exhibition. By examining the documented purposes of trade, the CITES trade database can be used to evaluate the reasons behind the movement of leopards and their parts across international borders by humans. The database also includes the source of African leopards and their parts in international trade, whether captive-bred, captive-born, illegal, pre-Convention, ranch-raised, or wild. While the CITES trade database is the principal source of information on international trade in leopards and their parts, it does not contain information on domestic use of leopards or their parts for commercial, recreational, or scientific purposes; nor does it account for poaching and illegal trade, except where illicit international trade has resulted in a seizure.

The leopard is clearly over-utilized for commercial and recreational purposes and must be listed as Endangered based on this criterion. The original analysis presented in this petition shows that between 2005 and 2014 (the most recent years for which complete data are available), 35,421 leopard specimens (leopards, dead or alive, and their parts and derivatives, the equivalent of at least 12,791 leopards), were traded internationally for all purposes (Annex 4, Table 1). This figure was derived by adding the figures for four types of specimens that likely represent one leopard each: bodies, skins, live, and trophies. Skulls and bones were not included in this calculation because after leopards are hunted, their skin is usually removed, leaving the skull and other bones and body parts; in this analysis, the skin or trophy is used to represent a leopard, not the skull or bones. The most commonly-traded items were derivatives (13,968), trophies (10,211), specimens (4,352), skulls (2,045) and skins (1,928) (Annex 4, Table 1). Other leopard specimens in trade include live animals (550), medicine (538), bones (405), claws (381), small leather products (287), and hair (238), as well as smaller numbers of bodies, bone pieces, carvings, cloth, feet, garments, hair products, large leather products, plates, skeletons, skin pieces, tails, and teeth (Annex 4, Table 1).

Global gross imports of African leopards reported as bodies, trophies, skins and live for the period of 2005 to 2014 total 12,791, including imports of 134 bodies, 549 live leopards, 1,916 skins, and 10,191 trophies (see **Table 2**).

Table 2. Gross Imports of *Panthera pardus* Bodies, Live, Skins, And Trophies, All Purposes, All Sources, 2005-2014.

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Totals
Bodies	7	0	9	10	22	19	24	24	9	11	**135**
Live	37	44	45	42	48	75	79	68	67	44	**549**
Skins	73	162	61	75	234	236	353	467	226	29	**1,916**
Trophies	1235	1134	1064	1291	1405	993	769	984	718	598	**10,191**
Totals	**1,352**	**1,340**	**1,179**	**1,418**	**1,709**	**1,323**	**1,225**	**1,543**	**1,020**	**682**	**12,791**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus*, all countries, all sources, all purposes, on 03/23/2016.

Of this trade from all sources, 19,909 leopard specimens, reported as being from a wild source – the equivalent of at least 11,959 leopards (adding bodies, live, skins, trophies) – were traded internationally for all purposes (Annex 4, Table 2). Wild sourced specimens accounted for 56.2% of specimens in trade (19,909 of 35,421) and 93.5% of leopards in trade (11,959 of 12,791). Of this trade, the U.S. imported 8,553 wild leopard specimens, the equivalent of at least 5,382 leopards (Annex 4, Table 3), which is 45% of wild leopards traded during the period. Indeed, the U.S. is the top importer of wild leopard specimens with other leading importers being France (1188 specimens representing at least 1,055 leopards), South Africa (1,224 specimens representing at least 839 leopards), Spain (823 specimens representing at least 614 leopards) and Germany (3,411 specimens representing at least 527 leopards) (Annex 4, Table 3). The top countries export of wild leopards and their parts were Zimbabwe (3,568 specimens representing at least 2,898 leopards), Tanzania (3,355 specimens representing at least 2,877 leopards), Namibia (4,308 specimens representing at least 1,796 leopards), and South Africa (2,805 specimens representing at least 1,601 leopards) (Annex 4, Table 5).

From 2005 through 2014, leopards and their parts from the following additional sources were traded internationally:

- 1,064 captive-bred[4] leopards and their parts, the equivalent of at least 510 leopards, including 8 bodies, 473 live, 18 skins, 554 specimens, and 11 trophies (Annex 4, Tables 6 and 7).
- 32 captive-born[5] leopards and their parts, the equivalent of at least 31 leopards, including 25 live, 1 skull, and 6 trophies (Annex 4, Table 8).
- 217 pre-convention[6] leopards and their parts, the equivalent of at least 127 leopards, including 101 skins, 13 skin pieces, 5 bodies, and 21 trophies (Annex 4, Table 9).
- 16 ranched[7] leopards and their parts, the equivalent of at least 10 leopards, including 8 live, 1 skin and 1 trophy (Annex 4, Table 10).
- 14,169.5 confiscated/seized[8] leopards and their parts, the equivalent of at least 219 leopards, including 180 trophies, 38 skins, 74 skin pieces, 28 teeth, 538 medicines, 12,906.5 derivatives, 269 small leather products, 14 claws, and 50 bones (Annex 4, Table 11).
- 91 unknown source[9] leopards and their parts, the equivalent of at least 15 leopards, including 25 derivatives, 35 specimens, 1 body, 6 live, and 18 skins (Annex 4, Table 12).

1. Trade for Commercial Purposes

Panthera pardus is listed on CITES Appendix I and international trade for primarily commercial purposes is not allowed under the treaty. Nonetheless, from 2005 to 2014, 3,522 African leopard specimens, the equivalent of at least 135 individual leopards, were traded internationally for commercial purposes (Annex 4, Table 13); this equates to 9.9% of the leopard specimens traded over this period (3,522 of 35,421) and 1% of leopards (135 of 12,791). The vast majority of these specimens were derivatives (2,683); others included medicine (331), and small leather products (266); but bodies (11),

[4] CITES source code C; none were traded under source code D. Information on the CITES Source Codes is in CoP16 Conf. 12.3 § I(i) (2002), *available at* https://cites.org/eng/res/12/12-03R16.php.
[5] CITES source code F.
[6] CITES source code O.
[7] CITES source code R.
[8] CITES source code I.
[9] CITES source code U.

skins (72), live specimens (39), trophies (13) and also skin pieces (69), feet (29), garments (14), teeth (14), skulls (8), carvings (7), claws (7), specimens (2), large leather products (1), and cloth (1) were also reported in trade (Annex 4, Table 13).

Of the leopard specimens internationally traded for commercial purposes, 3,358 (95%) were imported by the U.S (Annex 4, Table 14). However, upon closer inspection of FWS records, many of these were seized by the U.S. and reported in their annual report to the CITES Secretariat which is why they appear in the CITES Trade Database (Annex 4, Table 15). For example, from 2005-2014, a total of 2,482 leopard derivatives (2,151 or 80% of the total exported to the U.S. for commercial purposes) and medicine (331 or 100% of the total exported to the U.S. for commercial purposes) products were seized upon import into the U.S. These data further show that China exported, on average, 413 leopard "derivatives" to the U.S. each year during 2006-2010 for commercial purposes. This trade abruptly ceased in 2011, and then the trend reappeared under a different but similar wildlife term: "medicine"; an average of 110 "medicine" products derived from leopards being exported for commercial purposes from China (2012-2013) and then Hong Kong (2014) (Annex 4, Table 16).

However, substantial trade in leopard specimens for commercial purposes did not result in confiscations or seizures. For example, while 72 skins were internationally traded 2005-2014 (Annex 4, Table 13), only 9 were confiscated or seized as illegal imports during this period (Annex 4, Table 15). Similarly, of 8 bodies and 7 carvings so traded, none were seized; of 14 garments, 5 were seized; of 8 skulls, 1 was seized; of 14 teeth, 4 were seized; and of 13 trophies, none were seized.

Most leopard specimens traded internationally for commercial purposes and confiscated or seized globally, originated in China (Annex 4, Table 17). China is, by far, the country that exported the most leopard specimens for commercial purposes 2005-2014 (Annex 4, Table 18); as noted previously, most of these were derivatives and medicines that were imported by the U.S. and confiscated or seized.

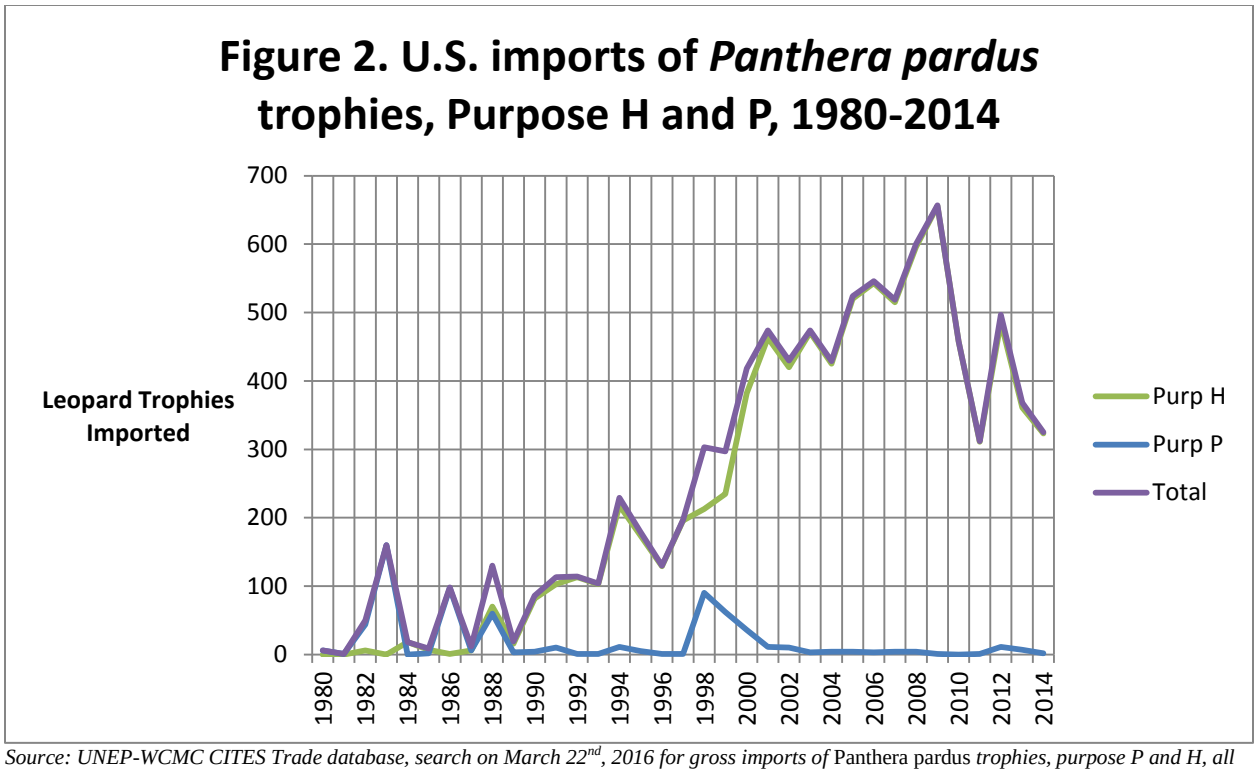
Leopards continue to be poached for commercial trade. Both skins and canine teeth are widely traded domestically in some Central and West African countries, and these are sold openly in villages and cities (Henschel 2008). Chapman and Balme (2010) found that leopard poaching occurs in the Zululand Rhino Reserve in northern KwaZulu-Natal province of South Africa and is increasing. They said, "There is evidence that targeted poaching for leopards is increasing in the region; the skins of 58 individuals were seized in the nearby Mkhuze district in 2004 and a further 91 skins were seized in the same area in 2009 (Hunter et al., in press)." (p. 119). According to Stein et al. (2016, citing to Balme unpublished data), "preliminary data suggest that the illegal trade in Leopard skins for cultural regalia is rampant in southern Africa. It is suggested that 4,500-7,000 Leopards area harvested annually to fuel the demand for Leopards skins by followers of the Nazareth Babtist (Shembe) Church only." Jorge (2012) found that the illegal off-take of leopards in Niassa National Reserve, Mozambique, was unsustainable and, when combined with off-take for trophy hunting, was negatively affecting leopard populations; skins are illegally traded locally for USD 83, an amount equivalent to one month's salary; poaching is driven by economic value of skins rather than human-leopard conflict which is low in the area; poachers killed an estimated 6-22% of the adult female population which may also have resulted in the death of cubs; poaching is a serious threat to conservation of leopards in the Reserve.

2. Trade for Recreational Purposes

Most leopards in trade are traded for hunting trophy purposes and leopards are clearly over-utilized for this purpose. From 2005 to 2014, 13,721 leopard specimens, representing at least 11,145 individual leopards, were traded for hunting trophy purposes (Annex 4, Table 19); this equates to 38.7% of the leopard specimens traded over this period (13,721 of 35,421) and 87.1% of individual leopards (11,145 of 12,791). The most common type of specimen traded for hunting trophy purposes was "trophies" (9,495) followed by "skulls" (1,974) and "skins" (1,564) (Annex 4, Table 19). Most leopard specimens traded internationally for hunting trophy purposes were imported by the U.S. (6,695 or 48.8%); no other country comes near to being as large an importer as the U.S.; the next nearest country is South Africa (1,113 or 8.1%) (Annex 4, Table 20). The top countries of export of leopard specimens for hunting trophy purposes were Zimbabwe (3,535 or 25.8%), Tanzania (3,088 or 22.5%), South Africa (2,291 or 16.7%), Namibia (1,917 or 14%) and Mozambique (1,009 or 7.4%) (Annex 4, Table 21); together these five countries export 60.5% of leopard specimens for hunting trophy purposes.

Leopard trophies are also traded internationally for personal purposes with 773 so traded from 2005 through 2014 (Annex 4, Table 22). France is, by far, the largest importer of leopard trophies for personal purposes, having imported 458 or 59.2%. Tanzania is, by far, the largest exporter of leopard trophies for personal purposes, having exported 303 or 39.1% (Annex 4, Table 23).

Regarding leopard trophy imports to the U.S., since 1982 there has been a dramatic increase in the number of leopard trophies imported, with numbers steadily rising throughout the 1990's and peaking in 2009, when 657 trophies were imported according to data from CITES trade database (see **Figure 2** below). The number of leopard trophy imports has remained over 300 per year since 1999, indicating the continuing trend of the U.S. being a major importer of leopard hunting trophies in this decade.



Source: UNEP-WCMC CITES Trade database, search on March 22nd, 2016 for gross imports of Panthera pardus *trophies, purpose P and H, all sources, between 1980 and 2014.*

Leopard trophy hunting has increased exponentially over the past thirty years (Palazy et al. 2011). African leopards are highly sought after by trophy hunters (Braczkowski et al 2015b). Trophy hunting organizations, such as Safari Club International, offer awards to members who kill leopards, such as the Africa Big Five Grand Slam award, the Dangerous Game of Africa Grand Slam award, or the Cats of the World Grand Slam award (Shield Political Research et al. 2015). Trophy hunters routinely target the biggest and strongest males, but removing these animals from the breeding pool unnaturally selects for smaller and weaker animals (Allendorf and Hard 2009). Further, a new study demonstrates that when trophy hunting is sanctioned, poaching activity increases, likely due to the perception that species authorized for hunting are of diminished value and the perception that legal killing increases the acceptability of poaching (Chapron and Treves 2016).

Generally, trophy hunting poses a threat to carnivores because their populations are difficult to monitor and for some species, like the African leopard, infanticide is exacerbated by removing males (Packer et al. 2009). Simulation models predict population declines from moderate levels of trophy hunting of infanticidal species (Packer et al. 2009), such as leopards. Balme et al. (2010) demonstrated the impact of trophy hunting on infanticide in a population of leopards in South Africa; high trophy hunting offtake resulted in particularly high male leopard mortality and high levels of male turnover; females cannot successfully raise cubs because of immigration into the population of new males; the consequences were low cub survival rates, delayed age at first parturition, reduced conception rates, and low annual litter production; the combined impact of high mortality and low reproductive output led to a negative population growth rate.

Trophy hunting of leopards contributes to substantial declines in populations across southern African range states, and therefore puts the African leopard in danger of extinction. Indeed, the 2016 IUCN

assessment specifically notes that "concern about unsustainable trophy hunting has lately increased" and cites studies concretely demonstrating that "trophy hunting was a key driver of Leopard population decline" (Stein et al. 2016).

a. Biological factors render leopards sensitive to over-harvesting

High male leopard turnover causes high rates of infanticide which are already naturally high in leopard populations (Braczkowski et al. 2015b). This, in turn, can cause rapid population declines (Balme et al. 2009, Braczkowski et al. 2015a). A review of eighteen studies of leopards in southern Africa found that adult and subadult leopards outside of protected areas experienced significantly lower survival rates (55% on average) than those in protected areas (88% on average) (Swanepoel et al. 2015). In protected areas, adult males had a 94% survival rate, compared to 59% outside of protected areas; for adult females, 86% versus 57%; for subadult males, 80% vs 48%; and subadult females 93% vs 18% (Swanepoel et al. 2015). The main causes of mortality outside of protected areas were trophy hunting, problem animal control and poaching for leopard skins (Swanepoel et al. 2015). Even in protected areas, juveniles 12 months old and younger had a significantly lower survival rate (39%) than adults and 52% of mortalities were due to infanticide (Swanepoel et al. 2015). Swanepoel et al. (2015) stated that sustainability of leopard populations in southern Africa is of concern because mortality rates exceeding 30% for solitary carnivores, like leopards, could lead to population declines. Furthermore, the high female mortality rates outside of protected areas, where a large proportion of suitable leopard habitat exists, may have severe demographic effects (Swanepoel et al. 2015).

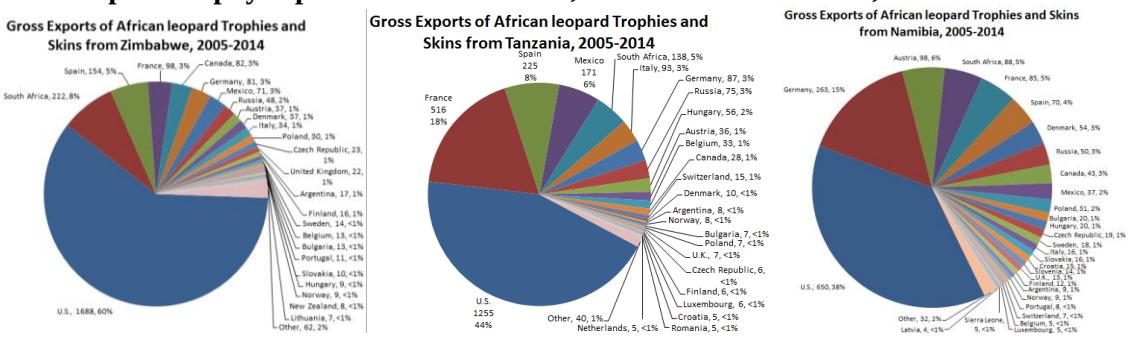
b. Lack of a scientific basis for export and hunting quotas

Leopard trophy hunting quotas have never been based on rigorous quantitative analysis in any African range country (Packer et al. 2010). Management of leopard hunting is hampered by lack of reliable population data and leopard hunting quotas are set arbitrarily and not based on science, which has led to population declines (Braczkowski et al. 2015b). Poorly managed trophy hunting is a significant cause of mortality in leopard populations (Braczkowski et al. 2015a).

While South Africa took action to protect leopards from export by trophy hunters in 2016, it is the only country with a CITES-established export quota that has issued a negative non-detriment finding assessment for the African leopard to date. Moreover, South Africa is not the main exporter of leopard trophies; Zimbabwe, Tanzania and Namibia are the top exporters. During 2005-2014, the U.S. imported 60% of gross leopard trophy exports from Zimbabwe, 44% of Tanzania's exports, and 38% of Namibia's exports (**Figure 3**).[10] Therefore, the U.S. has an important role to play in ensuring that international trade is not detrimental to the survival of *Panthera pardus*, in accordance with CITES.

[10] CITES, Trade Database,, *available at* http://trade.cites.org/ (gross export of leopard trophies for hunting trophy and personal purposes, and trophies for personal purpose).

Figure 3. Leopard trophy exports from Zimbabwe, Tanzania and Namibia, 2005-2014.



Given the fact that leopard trophy hunting quotas have never been based on rigorous quantitative analysis in any country (Packer et al. 2010), these and other leopard exporting countries cannot be said to be enhancing the survival of leopards through trophy hunting – indeed, in Tanzania (Packer et al. 2009), Mozambique (Jorge 2012) Zambia (Packer et al. 2010) and South Africa (Balme et al. 2009, Pitman et al. 2015), there are clear indications that leopard trophy hunting is unsustainable.

c. Female leopards are hunted

One of the most egregious practices associated with leopard trophy hunting – perhaps due to a relative lack in sexual dimorphism in the species – is the killing of female leopards. Killing of females is highly problematic as they are the key reproductive unit; also, killing of females with cubs means that those cubs will not reach adulthood. Trophy hunters may prefer male leopards because they are up to 60% larger than female leopards (Braczkowski et al. 2015b). Nonetheless, one study found that 87% of trophy hunters surveyed said they were willing to shoot females in order to get a trophy even though hunting females is illegal in most countries (Braczkowski et al. 2015b). For example, until this year, South Africa had no restrictions on leopard hunting by sex, age or size and was the only country allocated a CITES export quota that allows hunting of females; this is particularly concerning as a population viability analysis conducted for the South African leopard population demonstrated that the risk of extinction almost doubled when females were hunted (South Africa Department of Environmental Affairs 2015). Another study found that 28.6% of leopard trophies taken in the United Republic of Tanzania were females, even though only males could be legally hunted there and quotas are based on the assumption that only males are hunted (Spong et al. 2000). Since females most commonly die from starvation or due to old age or injuries, and when females are killed their cubs will die, offtake of females by trophy hunters is additive and more likely to adversely affect the population (Spong et al. 2000). Researchers have recommended that trophy hunting should be allowed only for males and that this should be strictly enforced (Braczkowski et al. 2015b). But even where such practice is prohibited, the prevalence of trophy hunting has led to illegal trophy hunting of females, such as in Mozambique (Jorge 2012).

d. Young males are removed from the population

Researchers have further recommended that trophy hunting should only be allowed for males over the age of seven as to allow them to reproduce successfully at least once and contribute their genes to the population (Braczkowski et al. 2015b). However, a study of photos on trophy hunting outfitters websites revealed a high frequency of animals killed between two and six years of age, who have territorial tenure and thus whose removal is likely to have cascading impacts (Braczkowski et al. 2015a). This is below the

recommended age minimum of seven years (Packer et al 2009), and it is likely that many younger animals or even females are killed each year (Braczkowski et al. 2015a). Jorge (2012) found that a high percentage of leopards killed for trophies in Niassa National Reserve, Mozambique, were under the recommended age of seven. Given that trophy hunters are highly motivated to obtain a kill, it is unreasonable to expect that an age limit will routinely be honored in the field.

e. Other factors making leopard hunting unsustainable

A study in Mozambique found that trophy hunting takes place in areas where leopard poaching also occurs and that the offtake from both combined were unsustainable and caused a decrease in leopard population density (Jorge 2012). Furthermore, in some areas of South Africa, especially in areas where leopard density is low, more leopards are killed by illegal retaliatory killing than by trophy hunting and offtake for this purpose should therefore be included in setting trophy hunting quotas (Swanepoel et al. 2015). Pitman et al. (2015) found that legal offtake for trophy hunting and legal offtake for problem animal control added together exceeded a sustainable level of offtake of the leopard population in Limpopo Province, South Africa, the most important habitat for leopard conservation in the country; although offtake for problem animal control exceed offtake for trophy hunting, the authorities do not take the former into account when issuing trophy hunting permits; in addition, illegal offtake is considered to be higher than these forms of legal offtake.

The use of dogs to hunt leopards in Zimbabwe, and a declining number of leopards killed by trophy hunters in Zimbabwe and Zambia (suggesting less availability in spite of insatiable demand), also raise concerns about management of trophy hunting (Packer et al. 2010). Hunting leopards with dogs masks continued population declines because the dogs increase the ability of the hunter to locate and kill leopards (Packer et al. 2009).

Therefore, leopard trophy hunting is a serious threat to the existence of the species in Africa, necessitating an uplisting to Endangered status of leopards in southern Africa (where the vast majority of leopard trophy hunting occurs). *See also* Declaration of Dr. Jane Goodall, ¶ 9-11 ("Given the precipitous decline of African leopards in recent decades, and because the threats to the continued existence of *Panthera pardus* and its habitat are significant, the United States must ensure that it is not contributing to the imperilment of this species and do all it can to promote the conservation of leopards in Africa. Trophy hunters sometimes defend this malicious slaughter by claiming that the money they pay for the pleasure of killing is what enables impoverished countries to pay for conservation of wildlife, but this argument has many flaws. The money paid to hunt a leopard or other trophy animal is often counted as profit by a hunting outfitter and does not usually end up in a conservation program. And as the founder of an organization that has worked for decades on community-based conservation in Africa, I can say confidently that putting a bounty on the heads of individual animals is counter-productive to promoting their protection."); Declaration of Dereck Joubert, ¶ 12-20 ("In my expert opinion, trophy hunting is a dire threat to the continued survival of the African leopard…. the activity undermines conservation, fuels corruption at the local levels in particular and often higher up, and causes the loss of the healthiest animals in the populations, animals that are key for reproduction and social cohesion of those species…. Each leopard that is shot as a trophy cannot be considered in isolation but as just the tip of the iceberg in a trickle down effect of destruction to the family and society of leopards he influences….[L]eopards across their African range are in danger of extinction and the U.S. Fish and Wildlife Service should strictly

regulate the import of hunting trophies and other leopard parts in order to not continue to contribute to the decline of this endangered species.").

3. Trade for Scientific Purposes

From 2005 through 2014, 4,813 leopard specimens (including bones, derivatives, hair, specimens and teeth), the equivalent of at least 12 leopards (bodies, live and skins), were traded internationally for scientific purposes (Annex 4, Table 24). In addition, several types of leopard specimens were traded for scientific purposes in units including weight, fluid volume and "flasks" (Annex 4, Table 24). Germany, U.K., U.S., and South Africa were major importers (Annex 4, Table 25) and Namibia and Russia were major exporters (Annex 4, Table 26) of leopard specimens for scientific purposes.

4. Trade for Other Purposes

From 2005 through 2014, leopards and their parts and products were traded internationally for other purposes including:

- 43 live leopards for "breeding in captivity"[11] (Annex 4, Table 26); South Africa (8), United Arab Emirates (7), Belgium (6), and Yemen (6) were the main exporters. The main importing countries were United Arab Emirates (16), Armenia (6), and Saudi Arabia (4) (Annex 4, Table 27).
- 712 leopards and their parts for "educational"[12] purposes (Annex 4, Table 27).
- 12 leopard parts for "law enforcement/judicial/forensic"[13] purposes (Annex 4, Table 28).
- 29 specimens for "medical"[14] purposes (Annex 4, Table 29).
- 14 live leopards for "reintroduction or introduction into the wild"[15] purposes (Annex 4, Table 30).
- 9,920.5 leopards and their parts, totaling at least 997 leopards, plus 2,435 g and 28.4082 kg of leopards and their parts, for "personal"[16] purposes including 773 trophies, 191 skins, 207 medicines, 26 bodies, 50 bones, and 8476 derivatives (Annex 4, Table 31). Export of trophies for personal purposes was discussed in Subsection 2) above. Most skins were exported by South Africa, Namibia and Zimbabwe; medicines were exported from China and Hong Kong; most derivatives were exported by China, Hong Kong, Cambodia, Malaysia, Singapore and Viet Nam; most bones were exported by China (Annex 4, Table 32). Most skins were imported by Austria, the U.S., and Australia; most medicines were imported by U.S. (and seized as noted earlier); most derivatives were imported to the U.S. (and seized as noted earlier) and New Zealand (Annex 4, Table 33).
- 168 leopards and their parts, totaling at least 129 leopards, for "circus and travelling exhibition" purposes including six bodies, 113 live, nine skins and one trophy; Russia (28) and Mexico (23) exported the largest number of live leopards for this purpose (Annex 4, Table 34).

[11] CITES Purpose Code B.
[12] CITES Purpose Code E.
[13] CITES Purpose Code L.
[14] CITES Purpose Code M.
[15] CITES Purpose Code N.
[16] CITES Purpose Code P.

- 181 live leopards and one trophy for "zoo" purposes; South Africa (18), France (15), Czech Republic (12) and Namibia (12) exported the largest numbers of live leopards for this purpose (Annex 4, Table 35).

5. International Trade from Sub-Saharan Africa Leopard Range States

This section provides details about the export of leopards and their parts and products by sub-Saharan Africa range States from 2005 through 2014 (including the 18 range states where leopards are listed as Threatened). The following sub-Saharan Africa leopard range States did not export leopards or their parts or products during this period:[17] **Angola**, Burkina Faso, Benin, Chad, Gambia, Guinea, Guinea-Bissau, Niger, **Rwanda**, and Somalia. Between 2005 and 2014, 25 sub-Saharan African countries exported leopards and their parts and products; the top ten countries of export are in **Table 3** – notably, only two countries where leopards are listed as Endangered are on this list (Central African Republic (CAR) and Ethiopia). Thus, given the major role that the U.S. plays as an importer of leopard parts, it is clear that the Threatened listing is facilitating trade in leopards from southern Africa, without appropriate scrutiny.

Table 3. Top Ten Countries of Export of *Panthera pardus*, 2005-2014.

Country of Export	Individual Leopards Exported (bodies, live, skins, trophies)	% of Global Exports (rounded to nearest whole percent)
Zimbabwe	2,947	23
Tanzania	2,923	23
Namibia	1,785	14
South Africa	1,579	12
Zambia	866	7
Mozambique	770	6
Botswana	394	3
CAR	330	3
Ethiopia	24	<1
DRC and Swaziland (tied)	12	<1

a. Botswana

Botswana exported African leopards and their products equivalent to 394 individuals between 2005 and 2014, including bodies (1), live (4), skins (16), and trophies (373) (Annex 4, Table 36). This amount is equivalent to 3% of the global exports in leopards during this period (394 of 12,791). All of these skins and the vast majority of the trophies (334 of 373) were wild-sourced and exported for hunting trophy purposes, 5 of the hunting trophy purpose trophies were reported as having been seized by the U.S. upon import, one of which originated in Mozambique. More than half (191 of 373) of the trophies and 5 of the skins were exported to the U.S. One trophy was reported as having been exported to South Africa for trophy hunting purposes but the source was reported as ranched. The remainder of the hunting trophies (33) were reported as wild-sourced and exported for personal purposes. Botswana also exported 4 live

[17] CITES Trade Database searched on 23 March 2016. As indicated in bold in the text, only two countries where leopards are listed as Threatened – Angola and Rwanda – did not export leopards or their parts from 2005-2014.

leopards that were reported as having been captive-bred to South Africa in 2010 for "circus and travelling exhibitions" purposes.

b. Cameroon

Cameroon exported one African leopard skin between 2005 and 2014, the equivalent of one individual (Annex 4, Table 37). This amount is equivalent to less than 1% of the global exports in leopards during this period. The skin was wild-sourced and exported to Germany for personal purposes.

c. Central African Republic

Central African Republic exported African leopards and their products equivalent to 330 individuals between 2005 and 2014, including skins (4), and trophies (326) (Annex 4, Table 38). This amount is equivalent to approximately 3% of the global exports in leopards during this period (330 of 12,791). All of these skins and the vast majority of the trophies (284 of 326) were wild-sourced and exported for hunting trophy purposes, with the remainder of the trophies (42) being wild-sourced but imported for personal purposes. 60% of the trophy exports (196) went to France, while two of the trophies were exported to the U.S.

d. Congo

Congo exported two African leopard skins between 2005 and 2014, the equivalent of two individuals (Annex 4, Table 39). This amount is equivalent to less than 1% of the global exports in leopards during this period. The skins were seized upon import to the U.K. and there was no purpose recorded.

e. Côte d'Ivoire

Côte d'Ivoire exported two African leopard skins between 2005 and 2014, the equivalent of two individuals (Annex 4, Table 40). This amount is equivalent to less than 1% of the global exports in leopards during this period. The skins were marked as being pre-convention and imported into France for personal purposes.

f. Democratic Republic of the Congo

The Democratic Republic of the Congo exported twelve leopard skins between 2005 and 2014, the equivalent of twelve individuals (Annex 4, Table 41). This amount is equivalent to less than 1% of the global exports in leopards during this period. Ten of the skins were reported as having been exported for personal purposes, with all except one of those wild-sourced. The remaining skin exported for personal purposes was seized upon import to the U.S. Another skin exported for commercial purposes to the U.S. was seized upon import to the U.S., while another skin was exported to an unknown country and no purpose or source was recorded.

g. Ethiopia

Ethiopia exported African leopards and their products equivalent to 24 individuals between 2005 and 2014, including skins (6), trophies (18), as well as skulls (4) (Annex 4, Table 42). This amount is equivalent to less than 1% of the global exports in leopards during this period. Five of the skins and 12 of the trophies were wild-sourced and exported for hunting trophy purposes, while another two trophies

were wild-sourced but one was exported for personal purposes and the other for commercial purposes. The remaining skin was seized upon import to Norway in 2014, and no purpose was recorded. The four remaining trophies were exported for personal purposes but were seized upon import into the United Arab Emirates (2) and Bahrain (2) in 2006. The four skulls were all wild-sourced and exported to Canada (3) and South Africa (1) for hunting trophy purposes.

h. Gabon

Gabon exported African leopards and their products equivalent to 10 individuals between 2005 and 2014, including live specimens (8) and skins (2) (Annex 4, Table 43). This amount is equivalent to less than 1% of the global exports in leopards during this period. The two skins were seized upon import to Hungary and had no purpose data, while the 8 live specimens were reported as having been captive-bred and imported into Tunisia for zoo purposes.

i. Ghana

Ghana exported one African leopard skin between 2005 and 2014, the equivalent of one individual (Annex 4, Table 44). This amount is equivalent to less than 1% of the global exports in leopards during this period. The skin was exported for personal purposes in 2005 but seized upon import to the U.S., with the origin of the specimen marked as unknown.

j. Kenya

Kenya exported African leopards and their products equivalent to 6 individuals between 2005 and 2014, including skins (4) and trophies (2) (Annex 4, Table 45). This amount is equivalent to less than 1% of the global exports in leopards during this period. The skins and trophies were all wild-sourced and exported for personal purposes, with one skin and two trophies exported to Australia, one skin exported to the U.K., and two skins exported to an unknown country.

k. Liberia

Liberia exported African leopards and their products equivalent to one individual between 2005 and 2014, as one skin (Annex 4, Table 46). This amount is equivalent to less than 1% of the global exports in leopards during this period.

l. Malawi

Malawi exported three African leopard skins between 2005 and 2014, the equivalent of three individuals (Annex 4, Table 47). This amount is equivalent to less than 1% of the global exports in leopards during this period. The skins were all wild-sourced and exported for personal purposes, with two skins exported to Sri Lanka, and one to the Netherlands.

m. Mali

Mali exported two live leopards and one skin between 2005 and 2014, the equivalent of three individuals (Annex 4, Table 48). This amount is equivalent to less than 1% of the global exports in leopards during this period.

n. Mozambique

Mozambique exported African leopards and their products equivalent to 770 individuals between 2005 and 2014, including bodies (1), skins (257), and trophies (512) (Annex 4, Table 49). This amount is equivalent to approximately 6% (770 of 12,791) of the global exports in leopards during this period. The one body as well as the vast majority of the skins (245) and trophies (461) were wild-sourced and exported for hunting trophy purposes. Major export destinations for trophies included the U.S. (133), South Africa (119), Spain (59), Portugal (43), and France (41). Major export destination countries for skins included the U.S. (105), South Africa (62), Spain (13), France (12), and Zimbabwe (11). Eight of the trophies exported for hunting trophy purposes were seized upon import into the U.S. between 2007 and 2012. Further, one skin with no purpose reported was seized upon import to Portugal. Six skins and 38 trophies, all wild-sourced, were exported for personal purposes, while two skins were marked as captive-bred and were exported for personal purposes. One skin and two trophies, all wild-sourced, were exported for commercial purposes; the skin was imported into the U.S. in 2013 and the trophies into South Africa and Zimbabwe.

o. Namibia

Namibia exported African leopards and their products equivalent to 1,785 individuals between 2005 and 2014, including bodies (25), live specimens (12), skins (83), and trophies (1,810) (Annex 4, Table 50). This amount is equivalent to approximately 14% of the global exports in leopards during this period (1,810 of 12,791). Major trophy export destination countries included the U.S. (645), Germany (259), Austria (92), France (84), South Africa (79), Spain (68), Russia (47), and Mexico (41). Twenty-three of the bodies, 58 of the skins, and 1,600 of the trophies exported were wild-sourced for hunting trophy purposes. One trophy exported for hunting trophy purposes to the U.S. was captive-bred, while another trophy exported for personal purposes to Germany was marked as pre-convention. Two of the bodies, 24 of the skins, and 94 of the trophies exported were wild-sourced for personal purposes. 645 (~39%) of the total number of trophies were exported to the U.S., 622 for hunting trophy purposes and wild-sourced and 23 that were seized upon import. In addition, one wild-sourced trophy was exported for commercial purposes to the U.S., while one skin exported for commercial purposes was seized upon import to the U.S. and another with no purpose recorded was seized upon import to the U.K. The 12 live specimens were wild-sourced leopards exported to Cuba for zoo purposes.

p. Nigeria

Nigeria exported 6 leopard skins between 2005 and 2014, the equivalent of six individuals (Annex 4, Table 51). This amount is equivalent to less than 1% of the global exports in leopards during this period. All of the skins exported were for personal purposes, and all of the exports were seized upon import to the U.S. (5) and Hungary (1).

q. Senegal

Senegal exported 18 specimens between 2005 and 2014 (Annex 4, Table 52).

r. Sierra Leone

Sierra Leone exported five derivatives between 2005 and 2014 (Annex 4, Table 53).

s. South Africa

South Africa exported African leopards and their products equivalent to 1,579 individuals between 2005 and 2014, including bodies (44), live specimens (56), skins (290), and trophies (1,189) (Annex 4, Table 54). This amount is equivalent to approximately 12% of the global exports in leopards during this period (1,579 of 12,791). Major trophy export destination countries included the U.S. (729), Spain (63), Mexico (53), Philippines (46), Russia (45), and France (35). Major skin export destination countries included the U.S. (163), Spain (29), and Canada (19). Major bodies export destination countries included Canada (11) and the U.S. (8), while major live specimen export destination countries included Egypt (12), Malawi (12), Gabon (10), and the United Arab Emirates (8). In total, the U.S. imported more than half (900) of the total African leopards and their products that are equivalent to individual animals exported from South Africa during the period examined.

South Africa exported 5 live leopards for breeding in captivity purposes that were captive-bred sourced during this period, as well as one live leopard, one skin and one trophy for educational purposes that were captive-bred. 17 wild-sourced leopards (8 trophies and 9 bodies) were exported from South Africa for educational purposes. For hunting trophy purposes, 1,532 leopards were exported (two captive-bred leopard trophies; two F1 (born in captivity F1 and subsequent) leopard trophies; 36 leopard trophies were seized upon import; two trophies marked as pre-convention specimens; one marked as having been sourced from a ranching operation; and of wild-source specimens, 30 bodies, 260 skins, and 1,199 trophies) from South Africa between 2005 and 2014. For purposes of reintroduction to the wild, 12 leopards were exported (4 live leopards sourced from a ranching operation and 8 live wild-sourced leopards) during the period examined. For personal purposes, 117 leopards were exported (2 captive-bred trophies, 19 pre-convention skins, 5 pre-convention trophies, 6 wild-source bodies, 15 wild-sourced skins, and 80 wild-sourced trophies) from South Africa during the period examined. For commercial purposes, 7 live leopards were exported for commercial purposes. For zoo purposes, 30 leopards were exported (22 captive-bred live leopards, one captive-bred trophy, 5 live leopards sourced from a ranching operation, and two live wild-sourced leopards) from South Africa during the period examined.

t. Sudan

Sudan exported African leopards and their products equivalent to 8 individuals between 2005 and 2014, including live specimens (7) and skins (1) (Annex 4, Table 55). This amount is equivalent to less than 1% of the global exports in leopards during this period. Six of the live leopards exported were wild-sourced and exported for zoo purposes (4 were exported to Syria and 2 to South Africa), and the remaining live specimen was wild-sourced and exported for personal purposes (to Saudi Arabia). The one skin exported was wild-sourced and exported for personal purposes.

u. Swaziland

Swaziland exported African leopards and their products equivalent to 12 individuals between 2005 and 2014, including live specimens (1) and skins (11) (Annex 4, Table 56). This amount is equivalent to less than 1% of the global exports in leopards during this period.

v. Togo

Togo exported one leopard skin that was seized upon import to Spain, with no purpose recorded, during the period examined, the equivalent of one individual (Annex 4, Table 57). This amount is equivalent to less than 1% of the global exports in leopards during this period.

w. The United Republic of Tanzania

The United Republic of Tanzania exported African leopards and their products equivalent to 2,923 individuals between 2005 and 2014, including bodies (5), live specimens (1), skins (462), and trophies (2,455) (Annex 4, Table 58). This amount is equivalent to approximately 23% of the global exports in leopards during this period (2,923 of 12,791). The leopard bodies were exported to Denmark (3), the U.K. (1) and Russia (1), while the one live specimen was exported to Nicaragua. Major skin export destination countries included the U.S. (152), France (79), South Africa (55), Spain (37), and Canada (27). Major trophy export destination countries included the U.S. (1,118), France (439), Spain (189), Mexico (181), South Africa (96), Italy (79), and Germany (73). In total, the U.S. imported approximately 43% (1,270) of the total African leopards and their products that are equivalent to individual animals exported from the United Republic of Tanzania during the period examined. Exports to France (518) comprised 17% of the total.

The United Republic of Tanzania exported one wild-sourced leopard skin for educational purposes during this period. For hunting trophy purposes, 2,609 leopards were exported (two captive-bred leopard trophies; 43 leopard trophies were seized upon import; 3 trophies marked as pre-convention specimens; and of wild-source specimens, 5 bodies, 447 skins, and 2,109 trophies) from the United Republic of Tanzania between 2005 and 2014. For personal purposes, 309 leopards were exported (6 wild-source skins and 303 wild-sourced trophies) from the United Republic of Tanzania during the period examined. For commercial purposes, 7 leopards were exported (4 skins and 3 leopard trophies) during the period examined.

x. Zambia

Zambia exported African leopards and their products equivalent to 866 individuals between 2005 and 2014, including bodies (1), skins (52), and trophies (813) (Annex 4, Table 59). This amount is equivalent to approximately 7% of the global exports in leopards during this period (866 of 12,791). The leopard body was exported to Denmark (1). Major skin export destination countries included South Africa (18), Canada (12), and the U.K. (9). Major trophy export destination countries included the U.S. (466), South Africa (55), Mexico (40), Spain (38), and France (25). In total, the U.S. imported approximately 54% (468) of the total African leopards and their products that are equivalent to individual animals exported from Zambia during the period examined. Exports to South Africa (73) comprised 8% of the total. For hunting trophy purposes, 823 leopards were exported (18 leopard trophies were seized upon import; of wild-source specimens, 1 body, 45 skins, and 777 trophies) from Zambia between 2005 and 2014. For personal purposes, 36 leopards were exported (11 wild-source skins and 25 wild-sourced trophies) from Zambia during the period examined.

y. Zimbabwe

Zimbabwe exported African leopards and their products equivalent to 2,947 individuals between 2005 and 2014, including bodies (12), live specimens (3), skins (490), and trophies (2,442) (Annex 4, Table 60). This amount is equivalent to approximately 23% of the global exports in leopards during this period (2,947 of 12,791). The leopard bodies were exported to Canada (6), South Korea (3), Hong Kong (1) and Sweden (1), while the three live leopards were exported to South Africa. Major skin export destination countries included the U.S. (256), South Africa (52) and Canada (43). Major trophy export destination countries included the U.S. (1,489), South Africa (170), Spain (138), France (86), Mexico (71) and Germany (67). In total, approximately 60% (1,745) of the total African leopards and their products that are equivalent to individual animals from Zimbabwe during the period examined were exported to the U.S. Exports to South Africa (225) comprised 8% of the total, while exports to Spain (138) comprised approximately 5% of the total.

Zimbabwe exported 5 leopard products equivalent to individual leopards for educational purposes (one wild-sourced leopard skin and 4 wild-sourced trophies) during this period. For hunting trophy purposes, a total of 2,840 leopards were exported (one captive-bred leopard trophy; two F1 (born in captivity F1 and subsequent) leopard trophies; 40 leopard trophies were seized upon import; 2 trophies marked as pre-convention specimens; and 2,795 wild-source specimens (8 bodies, 457 skins, and 2,330 trophies) from Zimbabwe between 2005 and 2014. For personal purposes, 111 leopards were exported (one body, 16 skins and 6 trophies were seized upon import from Zimbabwe; 4 pre-convention skins; 19 wild-source skins and 65 wild-sourced trophies) from Zimbabwe during the period examined. For circus and travelling exhibition purposes, 3 wild-sourced leopard bodies were exported, and for commercial purposes, a total of 8 leopards were exported (7 captive-source live specimens and one wild-source skin) during the period examined.

6. Countries of Import of African Leopards and Their Parts

The U.S., France, South Africa, Spain, Germany, Mexico, Russia, Canada, Austria, and Italy were the top ten importers of leopards and their products from 2005-2014, with the U.S. accounting for nearly half of all leopard imports (see **Table 4**). This underscores the major role the U.S. plays in the international trade in leopards, and the importance of ensuring that U.S. law stringently regulates leopard imports to ensure that such imports only occur if the import enhances the survival of the species.

Table 4. Top Ten Countries of Import of African Leopards and their Products, 2005-2014, all sources, all purposes.

Country of Import	Individual Leopards Exported (bodies, live, skins, trophies)	% of Global Exports (rounded to nearest whole percent)
United States	5,575	44%
France	1,072	8%
South Africa	878	7%
Spain	709	6%
Germany	539	4%
Mexico	510	4%
Russia	386	3%
Canada	318	3%
Austria	230	2%
Italy	192	2%

The following examines gross import data from the top ten leopard importer countries.

a. Austria

Austria imported African leopards and their products equivalent to 230 individuals between 2005 and 2014, including bodies (1), skins (56), and trophies (173) (Annex 4, Table 61). This amount is equivalent to approximately 2% of the global imports in leopards during this period. Most leopards imported into Austria were exported from Namibia (120 total: 93 trophies, 27 skins and one body, 52% of total imports), with Zimbabwe (44 total: 29 trophies and 15 skins, 20% of total imports), the United Republic of Tanzania (40 total: 12 skins and 28 trophies, 17% of total imports) and Zambia (11 trophies, 5% of total imports) also playing major roles in exports. For hunting trophy purposes, a total of 164 leopards were imported, all wild-source specimens (one body, 21 skins, and 142 trophies) into Austria between 2005 and 2014. For personal purposes, 65 leopards were imported (one pre-convention skin; 33 wild-source skins and 31 wild-sourced trophies) into Austria during the period examined. For circus and travelling exhibition purposes, one pre-convention skin was imported during the period examined.

b. Canada

Canada imported African leopards and their products equivalent to 318 individuals between 2005 and 2014, including bodies (33), live specimens (10), skins (134), and trophies (141) (Annex 4, Table 62). This amount is equivalent to approximately 2% of the global imports in leopards during this period. Most leopards imported into Canada were exported from Zimbabwe (97 total: 48 trophies, 43 skins and 6 bodies, 30% of total imports), with South Africa (53 total: 21 trophies, 19 skins, two live specimens and 11 bodies, 17% of total imports), Namibia (44 total: 25 trophies and 19 skins, 14% of total imports), the United Republic of Tanzania (36 total: 9 trophies and 27 skins, 11% of total imports), Zambia (36 total: 23 trophies and 12 skins, 11% of total imports), and the U.S. (25 total: 9 trophies, 3 skins, 6 live specimens and 7 bodies, 8% of total imports) also playing major roles in exports. For educational purposes, 3 leopards were imported (two wild-sourced leopard bodies and one wild-sourced leopard skin) into Canada between 2005 and 2014. For hunting trophy purposes, a total of 279 leopards were imported (two captive-bred leopard trophies; two F1 (born in captivity F1 and subsequent) leopard trophies; and

275 wild-source specimens (27 bodies, 119 skins, and 129 trophies) imported into Canada during this period. For personal purposes, 22 leopards were imported (one trophy was seized upon import; 6 pre-convention skins; 3 wild-source skins and 6 wild-sourced trophies) into Canada during the period examined. For commercial purposes, a total of 3 leopards were imported (one pre-convention body and two wild-source skins) during the period examined. For zoological purposes, 10 live leopards were imported into Canada between 2005 and 2014.

c. France

France imported African leopards and their products equivalent to 1,072 individuals between 2005 and 2014, including bodies (3), live specimens (13), skins (124), and trophies (932) (Annex 4, Table 63). This amount is equivalent to approximately 8% of the global imports in leopards during this period. Most leopards imported into France were exported from the United Republic of Tanzania (518 total: 439 trophies and 79 skins, 48% of total imports) and Central African Republic (198 total: 196 trophies and two skins, 18% of total imports), with Zimbabwe (98 total: 86 trophies and 12 skins, 9% of total imports), Namibia (86 total: 84 trophies and two skins, 8% of total imports), Mozambique (54 total: 41 trophies and 12 skins, 5% of total imports) and South Africa (45 total: 35 trophies, 8 skins, and two bodies, 4% of total imports) also playing major roles in exports to France. For hunting trophy purposes, a total of 584 leopards were imported into France during this period, all of which were wild-sourced (one body, 110 skins, and 473 trophies). For personal purposes, 475 leopards were imported (two pre-convention bodies, 9 wild-sourced skins and 459 wild-sourced trophies) into France during the period examined. For circus and travelling exhibition purposes, 4 wild-sourced leopard bodies were imported, and for zoological purposes, a total of 7 live leopards were imported into France during the period examined.

d. Germany

Germany imported African leopards and their products equivalent to 539 individuals between 2005 and 2014, including bodies (3), live specimens (10), skins (63), and trophies (463) (Annex 4, Table 64). This amount is equivalent to approximately 4% of the global imports in leopards during this period. Most leopards imported into Germany were exported from Namibia (266 total: 259 trophies, 5 skins and two bodies, 49% of total imports), with the United Republic of Tanzania (87 total: 73 trophies and 14 skins, 16% of total imports), Zimbabwe (81 total: 67 trophies and 14 skins, 15% of total imports), and South Africa (33 total: 25 trophies, 8 skins, 6% of total imports) also playing major roles in exports. For captive breeding purposes, Germany imported two live captive-bred leopards between 2005 and 2014. For hunting trophy purposes, a total of 486 leopards were imported, all wild-source specimens (one body, 42 skins, and 443 trophies). For personal purposes, 26 leopards were imported (one pre-convention body, two pre-convention skins and one pre-convention trophy, one wild-source body, 3 wild-source skins and 18 wild-sourced trophies) into Germany during the period examined. For circus and travelling exhibition purposes, one live captive-bred leopard and one pre-convention trophy was imported during the period examined. For commercial purposes, a total of 16 leopards were imported (one pre-convention skin, 8 skins of unknown source and 8 wild-source skins) during the period examined.

e. Italy

Italy imported African leopards and their products equivalent to 192 individuals between 2005 and 2014, including a body (1), a live specimen (1), skins (21), and trophies (169) (Annex 4, Table 65). This amount

is equivalent to approximately 2% of the global imports in leopards during this period. Most leopards imported into Italy were exported from the United Republic of Tanzania (93 total: 79 trophies and 14 skins, 48% of total imports), with Zimbabwe (38 total: 34 trophies and 4 skins, 20% of total imports), South Africa (22 total: 21 trophies, one skin, 11% of total imports) and Namibia (17 total: 16 trophies, one body, 9% of total imports) also playing major roles in exports. For hunting trophy purposes, a total of 186 leopards were imported (one ranched leopard trophy and 185 wild-source specimens: one body, 19 skins, and 165 trophies) into Italy during this period. For personal purposes, 4 leopards were imported (one pre-convention skins and 3 wild-source trophies) into Italy during the period examined. For circus and travelling exhibition purposes, one wild-sourced leopard skin was imported, and for zoological purposes, one live, captive-bred leopard was imported during the period examined.

f. Mexico

Mexico imported African leopards and their products equivalent to 510 individuals between 2005 and 2014, including a body (1), live specimens (8), skins (20), and trophies (481) (Annex 4, Table 66). This amount is equivalent to approximately 4% of the global imports in leopards during this period. Most leopards imported into Mexico were exported from the United Republic of Tanzania (186 total: 181 trophies and 5 skins, 36% of total imports), with Zimbabwe (76 total: 71 trophies and 5 skins, 15% of total imports), South Africa (60 total: 53 trophies, 6 skins and one body, 12% of total imports), Namibia (41 trophies, 8% of total imports), and the U.S. (34 total: 31 trophies and 3 live specimens, 7% of total imports) also playing major roles in exports. For hunting trophy purposes, a total of 487 leopards were imported (two captive-bred leopard trophies; two F1 (born in captivity F1 and subsequent) leopard trophies; two leopard trophies were seized upon import; 6 trophies marked as pre-convention specimens; and 475 wild-source specimens (one body, 19 skins, and 455 trophies) into Mexico between 2005 and 2014. For personal purposes, 5 wild-source leopard trophies were imported into Mexico during the period examined. For circus and travelling exhibition purposes, 3 live, captive-bred leopards were imported; while for commercial purposes, 3 wild-source leopard trophies were imported during the period examined. For zoological purposes, 5 live, captive-bred leopards were imported between 2005 and 2014.

g. Russia

Russia imported African leopards and their products equivalent to 386 individuals between 2005 and 2014, including bodies (9), live specimens (41), skins (36), and trophies (300) (Annex 4, Table 67). This amount is equivalent to approximately 3% of the global imports in leopards during this period. Most leopards imported into Russia were exported from the United Republic of Tanzania (73 total: 58 trophies and 17 skins, 19% of total imports), with Namibia (53 total: 47 trophies, 3 skins and 3 bodies, 14% of total imports), South Africa (50 total: 45 trophies and 5 skins, 13% of total imports), Zimbabwe (48 total: 42 trophies, 6 skins, 12% of total imports), and France (45 total: 35 trophies, 9 live specimens, and one body, 12% of total imports) also playing major roles in exports. For captive breeding purposes, a total of two leopards were imported (two live, captive-bred leopards) into Russia between 2005 and 2014. For hunting trophy purposes, a total of 303 leopards were imported, all wild-source (8 bodies, two live leopards, 30 skins, and 263 trophies) into Russia during this period. For purposes of reintroduction to the wild, 4 live, wild-source leopards were imported in Russia between 2004 and 2015. For personal purposes, 38 leopards were imported (one body and 37 trophies), while for circus and travelling exhibition purposes, 4 live, wild-source leopards and 4 live leopards whose source was unknown were

imported into Russia during this period. For commercial purposes, 4 pre-convention skins were imported, and for zoological purposes, one live, F1 leopard was imported in Russia during the period examined.

h. South Africa

South Africa imported African leopards and their products equivalent to 878 individuals between 2005 and 2014, including live specimens (36), skins (229), and trophies (613) (Annex 4, Table 68). This amount is equivalent to approximately 7% of the global imports in leopards during this period. Most leopards imported into South Africa were exported from Zimbabwe (225 total: 170 trophies, 52 skins, 3 live specimens, 26% of total imports) and Mozambique (181 total: 119 trophies and 62 skins, 21% of total imports), and the United Republic of Tanzania (151 total: 96 trophies and 55 skins, 17% of total imports), with Namibia (89 total: 78 trophies and 11 skins, 10% of total imports), Botswana (82 total: 73 trophies, 5 skins, and 4 live specimens, 9% of total imports), and Zambia (73 total: 55 trophies and 18 skins, 8% of total imports) also playing major roles in exports. For captive breeding purposes, a total of 8 live leopards were imports (5 captive-bred, two F1, and one wild-source). For educational purposes, 3 live, captive-bred leopards were imported into South Africa between 2005 and 2014. For hunting trophy purposes, a total of 798 leopards were imported (one captive-bred leopard trophy; two F1 (born in captivity F1 and subsequent) leopard trophies; one ranched leopard trophy; and 794 wild-source specimens (207 skins and 587 trophies) imported (one wild-sourced leopard skin and 4 wild-sourced trophies)) into South Africa during this period. For law enforcement purposes, two wild-source skins were imported into South Africa between 2005 and 2014. For personal purposes, 40 leopards were imported (7 captive-bred skins, 3 pre-convention skins; 10 wild-source skins and 20 wild-sourced trophies) into South Africa during the period examined. For circus and travelling exhibition purposes, 4 live, wild-sourced leopards were imported, and for commercial purposes, a total of 12 leopards were imported (8 captive-source live specimens, two live specimens, and two wild-source trophies during the period examined. For zoological purposes, 9 live, captive-bred leopards and two wild-source leopards were imported.

i. Spain

Spain imported African leopards and their products equivalent to 709 individuals between 2005 and 2014, including bodies (3), live specimens (3), skins (101), and trophies (602) (Annex 4, Table 69). This amount is equivalent to approximately 6% of the global imports in leopards during this period. Most leopards imported into Spain were exported from the United Republic of Tanzania (226 total: 189 trophies, 37 skins, 32% of total imports) and Zimbabwe (154 total: 138 trophies and 16 skins, 22% of total imports), with South Africa (92 total: 63 trophies and 29 skins, 13% of total imports), Mozambique (77 total: 64 trophies and 13 skins, 11% of total imports), Namibia (70 total: 68 trophies and two skins, 10% of total imports), Zambia (40 total: 38 trophies and two skins, 6% of total imports) and Botswana (39 total: 38 trophies and one skin, 6% of total imports) also playing major roles in exports. For hunting trophy purposes, a total of 690 leopards were imported, all wild-sourced (3 bodies, 99 skins, and 588 trophies) imported (one wild-sourced leopard skin and 4 wild-sourced trophies) into Spain during this period. For personal purposes, 15 wild-source leopard trophies were imported while for circus and travelling exhibition purposes, two captive-bred live leopards were imported between 2005 and 2014. For commercial purposes, a total of two leopards were imported (one captive-source live specimen and one wild-source skin) during the period examined.

j. United States of America

The U.S. imported African leopards and their products equivalent to 5,575 individuals between 2005 and 2014, including bodies (14), live specimens (26), skins (741), and trophies (4,794) (Annex 4, Table 70). This amount is equivalent to approximately 44% of the global imports in leopards during this period. Most leopards imported into the U.S. were exported from Zimbabwe (1,745 total: 1,489 trophies and 256 skins, 31% of total imports) and the United Republic of Tanzania (1,270 total: 1,118 trophies and 152 skins, 23% of total imports), with South Africa (900 total: 729 trophies, 163 skins and 8 bodies, 16% of total imports), Namibia (654 total: 646 trophies, 5 skins, 3 bodies, 12% of total imports), Zambia (468 total: 466 trophies and two skins, 8% of total imports) Mozambique (238 total: 133 trophies and 105 skins, 4% of total imports) and Botswana (196 total: 191 trophies and 5 skins, 4% of total imports) also playing major roles in exports. For educational purposes, two wild-source leopard trophies were imported into the U.S. between 2005 and 2014. For hunting trophy purposes, a total of 5,447 leopards were imported (two captive-bred leopard trophies; 175 leopard trophies were seized upon import; one ranched leopard skin and 5,269 wild-source specimens (12 bodies, 683 skins, and 4,573 trophies) into the U.S. during this period. For law enforcement purposes, 3 wild-source skins were imported into the U.S. between 2005 and 2014. For personal purposes, 67 leopards were imported (one trophy was seized upon import, while 15 pre-convention skins, one pre-convention trophy, two skins of unknown origin, two wild-source bodies, 11 wild-source skins, and 35 wild-sourced trophies) into the U.S. during the period examined. For circus and travelling exhibition purposes, 7 live captive-bred leopards, 3 pre-convention skins, and one wild-sourced leopard skin were imported between 2005 and 2014. For scientific purposes, 7 skins of unknown origin were imported, while for commercial purposes, a total of 19 leopards were imported (5 skins were seized upon import, while 6 pre-convention skins, one skin and one trophy of unknown origin, 3 wild-source skins and 3 wild-source trophies were imported between 2005 and 2014. For zoological purposes, two live F1 leopards were imported during the period examined.

Therefore, as demonstrated in this section, the African leopard is Endangered by overutilization for recreational and commercial purposes, and the U.S. plays a major role in this unsustainable international trade.

C. Disease or Predation

Wild leopards have been found to have at least nine infectious agents including viruses (rabies, feline leukemia, feline immunodeficiency), bacteria (*Anthrax*), and protozoa (*Toxoplasma*, *Sarcocystis*, *Hepatozoon*, *Giardia*, *Isospora*) (Murray et al. 1999). While there is evidence of a negative conservation impact of disease on wild populations of other large carnivores (i.e. *Canis lupis*, *Lycaon pictus*, *Canis latrans*, *Panthera leo*), there is no such evidence with respect to leopards (Murray et al. 1999).

The leopard is an apex predator in Africa and is not typically predated by animals other than humans. Lions do kill and eat leopards (Palomares and Caro 1999) but leopards are not among the typical prey of lions and such killing is not known to have a conservation impact on leopard populations.

The most significant non-human predator of leopards is leopards themselves. In a study of leopards in a reserve in South Africa, Balme and Hunter (2013) found high rates of infanticide by adult males which

accounted for almost half of cub mortality and caused the death of nearly a third of all leopard offspring; most of these adult males were immigrants; cubs are vulnerable to infanticide until at least 15 months of age; sometimes females defending their cubs were killed; males frequently consumed the cubs they killed; females also sometimes ate their dead cubs; females never killed cubs. Balme and Hunter (2013) consider infanticide in leopards to be primarily motivated by sexual selection: as females whose cubs were killed came into heat sooner, infanticide allows males to improve their fitness by accelerating their opportunity to father offspring. Despite such high levels of infanticide in the population studied by Balme and Hunter (2013), the population remained stable over the period studied; the authors warn against activities that would artificially elevate male turnover – such as trophy hunting – as this may increase infanticide levels.

D. Inadequacy of Existing Regulatory Mechanisms

1. U.S. Endangered Species Act and CITES

Statutory Background of the ESA

The U.S. has long recognized the need to protect wildlife, and, toward this end, has enacted multiple laws to prohibit human actions that contribute to species extinction. With the promulgation of the Lacey Act in 1900 (16 U.S.C. §§ 3371 *et seq*.), it became a federal offense to engage in commerce of protected species. In 1940, the U.S. signed the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere "to protect and preserve [species] in their natural habitat…in sufficient numbers and over areas extensive enough to assure them from becoming extinct through any agency within man's control." 56 Stat. 1534, T.S. No. 981, U.N.T.S. No. 193. These laws recognized that extinction knows no political boundaries, and that both national action and international cooperation are essential to effectively protect endangered species.

In 1966, Congress enacted the Endangered Species Preservation Act (Public Law No. 89-669), which created "a program in the United States of conserving, protecting, restoring, and propagating selected species of native fish and wildlife that are threatened with extinction." Because this statute extended protection only to native species, Congress found that it did not adequately protect foreign species that suffered from overexploitation, often because of the demands of the American marketplace. Therefore, in 1969, Congress enacted the Endangered Species Conservation Act (Public Law No. 91-135), which authorized the Secretary of the Interior to promulgate a list of species, native or non-native, that were "threatened with worldwide extinction." This Act also called for an "international ministerial meeting" to create a "binding international convention on the conservation of endangered species," ultimately leading to the passage of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (27 U.S.T. 1087, "CITES"). Thus, five decades ago the U.S. led the way to ensure that all countries act to save species from both local and global threats.

Recognizing that prior laws did not sufficiently protect endangered species, in 1973 Congress passed the Endangered Species Act. The purpose of the ESA is "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions" to which the United States is committed. 16 U.S.C. § 1531(b). "It is further declared to be the policy of Congress that all Federal

departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act." *Id.* § 1531(c). Thus, as the Supreme Court has declared, the goal of the ESA is to "reverse the trend toward extinction, whatever the cost." *TVA v. Hill*, 437 U.S. 153, 184 (1978).

The ESA defines the term "conserve" to mean "to use all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to [the ESA] are no longer necessary." *Id.* § 1532(3). Such measures may even include a "regulated taking" of the species, but only in the "extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved." *Id.*

Pursuant to Section 4 of the Act, the Service must "list" species as either "Endangered" or "Threatened," depending on the extent of the threats to their existence. *Id.* § 1533. The term "species" includes "any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." *Id.* § 1532(16). The Service adopted a policy 20 years ago that defines the term "distinct population segment," under which the agency must conclude that a particular population of a species is both "distinct" and "significant" before it can be determined to be a separate listable entity. 61 Fed. Reg. 4722 (Feb. 7, 1996).

An "Endangered" species is one that the Service has determined is already "in danger of extinction throughout all or a significant portion of its range." 16 U.S.C. § 1532(6). A "Threatened" species is one that "is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." *Id.* § 1532(20). The Act requires the Service to list a species as either "Endangered" or "Threatened" based on the following five factors: (1) the present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; and (5) "other natural or manmade factors affecting its continued existence." *Id.* § 1533(a)(1)(A-E). The Service is required to list a species if any one of these criteria is present. *Southwest Center for Biological Diversity v. Babbitt*, 215 F.3d 58, 60 (D.C. Cir. 2000).

The Service is required to base listing decisions "solely" on the "best available scientific and commercial data available." 16 U.S.C. § 1533(b)(1)(A). In imposing this requirement, Congress expressly intended to "ensure that decisions . . . pertaining to listing . . . are based solely upon biological criteria and to prevent nonbiological considerations from affecting such decisions." H.R. Conf. Rep. No. 835, 97th Cong. 2d Sess. 19-20 (1982). Thus, Congress made it clear that "economic considerations have no relevance to determinations regarding the status of species." *Id.*; *see also* S. Rep. No. 418, 97th Cong., 2d Sess. 12 (1982) ("This amendment would preclude the Secretary from considering economic or other non-biological factors in determining whether a species should be listed…Only in this way will the endangered and threatened species lists accurately reflect those species that are or are likely to be in danger of extinction"). Therefore, as the Supreme Court observed in *TVA v. Hill* "the language, history, and structure of the [ESA]…indicates beyond doubt that Congress intended endangered species to be afforded the highest priorities." 437 U.S. at 174. Moreover, in keeping with the overall purposes of the statute, even where the best available scientific evidence leaves some doubt as to the status of a species, the Service is required to "give the benefit of the doubt" to the species. *Conner v. Burford*, 848 F.2d 1441,

1454 (9th Cir. 1988); *see also San Luis & Delta-Mendoza Water Auth.*, 2000 U.S. Dist. LEXIS 1779 at *9 (E.D. Cal. 2000)).

Once a species is listed, it is entitled to various protections under the agency's implementing regulations, depending on whether it is listed as Endangered or Threatened. Per Section 9 of the statute, it is unlawful to "import any [Endangered] species into, or export any such species from the United States;" to "deliver, receive, carry, transport, or ship in interstate or foreign commerce . . . in the course of a commercial activity, any such species;" and to "sell or offer for sale in interstate or foreign commerce any such species." 16 U.S.C. § 1538(a)(1). It is also unlawful to "take" a member of an Endangered species within the United States or on the high seas, *id.* § 1538(a)(1)(B)-(C) – a term that includes "harass, harm, pursue, hunt, shoot, wound, kill, capture, or collect." *Id.* § 1532(19).

Section 10 of the ESA provides the FWS authority to issue permits for otherwise unlawful activities "for scientific purposes or to enhance the propagation or survival of the affected species…" 16 U.S.C. § 1539(a)(1)(A). The statute further provides that the FWS "shall publish notice in the Federal Register of each application for an exemption or permit," that each such notice "shall invite the submission from interested parties…of written data, views, or arguments with respect to the application," and that "[i]nformation received by the [FWS] as a part of any application shall be available to the public as a matter of public record at every stage of the proceeding." *Id.* § 1539(c). FWS may only grant a permit if it finds "and publishes in the Federal Register" that the permit (1) "was applied for in good faith," (2) if granted and exercised "will not operate to the disadvantage of such endangered species," and (3) will be "consistent with the purposes and policy" of the ESA – *i.e.*, to "conserve" Endangered and Threatened species. *Id.* § 1539(d). These procedures are mandatory. *See Gerber v. Norton*, 293 F.3d 173, 179-82 (D.C. Cir. 2002).

Whenever a species is listed as Threatened, FWS "shall issue such regulations as [it] deems necessary and advisable to provide for the conservation of such species." 16 U.S.C. § 1533(d). FWS has issued a regulation providing that all of the prohibitions that apply to Endangered species also apply to Threatened species, unless the agency (a) otherwise permits those activities pursuant to its general regulations governing permits for Threatened species, 50 C.F.R. § 17.32, or (b) has issued a special rule that governs a particular Threatened species. 50 C.F.R. § 17.31. However, pursuant to the plain language of the ESA, any such special rule must also "provide for the conservation" of the species – *i.e.*, positively benefit its recovery in the wild. 16 U.S.C. § 1533(d); *Sierra Club v. Clark*, 577 F. Supp. 783 (D. Minn. 1984), *aff'd*, 755 F.2d 608 (8th Cir. 1985); *Fund for Animals v. Turner*, 1991 WL 206232 (D.D.C. 1991)).

The ESA also requires FWS to "encourage…foreign countries to provide for the conservation" of listed species and implements the United States' international obligations with regard to worldwide Endangered and Threatened species. 16 U.S.C. § 1537. For example, CITES was drafted by representatives of countries participating in the International Union for the Conservation of Nature – including the United States – to ensure that international trade in specimens of wild animals and plants does not threaten their survival. CITES was first implemented on July 1, 1975, and today there are over 180 countries that are party to the agreement.

CITES classifies species in Appendices with varying levels of protection – those included on Appendix I are "species threatened with extinction." International commercial trade in these species is prohibited unless the Scientific Authority for the state of export has advised that the export will "not be detrimental

to the survival of the species," and the Management Authority for that country is satisfied that (a) the wildlife "was not obtained in contravention of the laws of the State for the protection of fauna and flora;" (b) "any living specimen will be so prepared and shipped as to minimize the risk of injury, damage to health or cruel treatment;" and (c) an "import permit has been granted" for the wildlife. *See* CITES Article III. An import permit may only be granted when the Scientific Authority for the state of import has advised that the import of the wildlife "will be for purposes which are not detrimental to the survival of the species," and that the "recipient of a living specimen is suitably equipped to house and care" for the wildlife, and the Management Authority for the state of import is satisfied that the specimen is "not to be used for primarily commercial purposes." *Id.*

FWS' 1982 Listing of African Leopards under the ESA Did Not Comport with the Best Available Science

In 1968 and 1969 alone, over 17,000 leopard hides were imported into the United States to supply a burgeoning and unsustainable leopard fur trade. 45 Fed. Reg. 19007 (March 24, 1980). In 1970, FWS listed three subspecies of leopard under the Endangered Species Conservation Act, requiring a permit for import of specimens of: the Sinai leopard (*Panthera pardus jarvisi*) (found in Sinai and Saudi Arabia), the Barbary leopard (*P. p. panthera*) (found in Morocco, Algeria, and Tunisia), and the Anatolian leopard (*P. p. tulliana*) (found in Lebanon, Israel, Jordan, Turkey, and Syria). 35 Fed. Reg. 8491 (June 2, 1970).

In 1972, FWS amended that Endangered listing to include all *Panthera pardus* (whether found in Africa, Asia Minor, India, Southeast Asia or Korea). 37 Fed. Reg. 2589 (Feb. 3, 1972); 37 Fed. Reg. 6476 (March 30, 1972). As explained in a subsequent Federal Register notice, FWS listed the species in1972 because it "was being drastically overutilized in the commercial fur trade" and "nearly every country contacted, in which the leopard was resident, expressed fears for the leopard's future if the fur trade was not brought under control," leading FWS to determine that the species could not "tolerate this enormous drain from its wild populations." 45 Fed. Reg. at 19008.

The species continued to be recognized as Endangered across its Asian and African range until 1982, when FWS reclassified the leopard in certain African range states to Threatened. 47 Fed. Reg. 4201 (January 28, 1982). In its proposed rule, FWS proposed to downlist African populations of the leopard occurring to the south of a line running along the borders of Senegal/Mauritania; Mali/Mauritania; Mali/Algeria; Niger/Algeria; Niger/Libya; Chad/Libya; Sudan/Libya; and Sudan/Egypt (see map below). (45 Fed. Reg. 19007 (March 24, 1980))

Figure 4. Map of Africa with red line denoting the proposed scope of the Threatened listing

In proposing to decrease protection for leopards in nearly all of their African range, FWS stated that it "has broad discretion in developing a management strategy that will effectively conserve Threatened species." 45 Fed. Reg. 19009. FWS stated that "data from each specific political entity within Sub-Saharan Africa are lacking" yet "enough are available from representative entities within the region to warrant action representing the region as a whole." *Id.* FWS further stated that reclassification on a country-by-country basis would be "biologically unsound." *Id.*

In its 1980 proposed rule, FWS relied on only three sources of information in determining that African leopards in most countries should be listed as Threatened rather than Endangered: "The Status and Conservation of the Leopard in Sub-Saharan Africa" by Randall L. Eaton (Safari Club International, January 1977); "The Leopard *Panthera pardus* in Africa" by Norman Myers (IUCN Monograph No. 5 1976); and "Status of the Leopard in Africa South of the Sahara" by James G. Teer and Wendell G. Swank (unpublished study financed by FWS in 1978). 45 Fed. Reg. at 19008.

Regarding the available data from these sources, FWS stated that it considered the leopard to be Threatened in most of its African range because, "A careful analysis of area/habitat type, maximum estimated density and minimum estimated density of leopard in this region by Eaton (loc. cit.) shows that an absolute minimum of 233,050 leopards may occur over the entire area; a conservative estimate of numbers would be 546,076 leopards, while a realistic estimate would place the number at 1,155,500 animals." *Id.* The following table from Eaton appears in the 1980 proposed rule:

Country	Absolute minimum	Conservative estimate	Realistic estimate
Kenya	6,379	25,640	35,000
Uganda	1,547	3,413	20,000
Tanzania	14,740	36,100	70,000
Senegal	1,435	2,870	6,000
Mali	3,088	6,175	15,000
Upper Volta	1,633	3,265	10,000
Niger	1,527	3,055	5,000
Chad	4,325	8,650	15,000
C.A.R.	5,450	10,900	20,000
Gambia	528	1,055	2,500
Guinea	2,250	4,500	10,000
Sierra Leone	700	1,400	3,000
Libera	2,500	5,000	20,000
Ivory Coast	5,625	11,250	30,000
Ghana	2,975	5,950	20,000
Nigeria	4,653	9,305	20,000
Cameroon	4,583	10,705	30,000
Angola	17,369	42,340	87,000
Zambia	18,500	46,250	70,000
Mozambique	16,190	32,378	67,000
Malawi	1,918	3,835	10,000
Botswana	3,165	6,846	20,000
Rhodesia	2,288	6,676	20,000
South West A.	3,477	6,544	20,000
South Africa	3,800	7,150	15,000
Sudan	6,900	22,900	80,000
Ethiopia	6,907	12,814	30,000
Congo	13,200	27,500	65,000
Gabon	13,400	26,800	50,000
Zaire	70,000	155,000	300,000

Table from USFWS 1980 proposed rule. 45 Fed. Reg. at 19009, from Eaton (1977).

Eaton's analysis – which was commissioned by Safari Club International, a group with a vested interest in inflating leopard numbers to decrease regulation of leopards to facilitate hunting trophy imports – was never published. The methodology Eaton – who is not a felid biologist – used to derive these population estimates is dubious at best, as he appears to have based his population numbers solely on the area of leopard habitat in each country and the rationale behind the leopard density applied to the available habitat is not disclosed. *Id.* at 19009. However, it is well established that availability of leopard habitat does not mean that leopards necessarily reside there, and that leopard density is dependent on available prey, not available habitat (Stein et al. 2016).

The 1980 proposed rule also states that Eaton conducted a study of leopards in 11 Sub-Saharan African countries and combined those results with Myers to determine the status of leopards in countries throughout Africa. 45 Fed. Reg. at 19009. In forming its conclusions about the status of leopards in

Africa, FWS relied on Eaton's views of Myers's study, which (as detailed below) do not accurately reflect the conclusions of Myers's study.

The purpose of Myers's 1976 study was to determine the leopard's distribution in sub-Saharan Africa, and to ascertain if numbers were being depleted by the fur trade or habitat modification. The author noted that the leopard existed in 40 countries and that his study would attempt to make assessments in at least one country in each of five biomes (Sahel, Sudano-Guinean woodland, rainforest, miombo woodland, and East African savannah grasslands). Myers visited 22 countries and corresponded with 10 others. Myers did not make detailed population estimates but rather focused on whether a population exists, and whether the population was expanding, declining, or stable. To draw his conclusions, Myers consulted with over 700 people, including "Wildlife and park officials at national and local level, private wildlife organisations, field scientists, anti-poaching teams, professional hunters, trappers, poachers, wildlife cropping units, fur-trade dealers, indeed anyone with specialist knowledge of wildlife." Myers (1976), at 12. Over 850 additional people were also interviewed, including "ranchers, veterinarians, livestock officials, forestry personnel, road gangs, customs officials, police and army personnel, anti-malarial teams, Peace Corps and other volunteers, and local chiefs and headmen," as well as "representatives of the fur trade in Europe and North America". *Id.* at 13. Myers recognized that these interviewees brought bias in terms of subjectivity to the study. *Id.* at 13.

Myers noted that the international fur trade had depressed leopard populations in several parts of Africa and cited habitat destruction and loss as a key threat to the survival of leopards. *Id.* at 21. Myers considered the use of poison to be a major threat, which leopards are more susceptible to because of their scavenging behavior, as well as killing due to livestock predation. Yet, he concluded that the leopard "shows more capacity to recover from over-exploitation that the other main spotted-fur species of Africa, the cheetah." *Id.* at 9. Myers claimed that there was no "bio-ecological grounds for permanently banning exploitation of the leopard by the fur trade," and recommended a limited offtake with a "rigorous system of controls." *Id.* at 9. Myers noted that "rainforest biotopes are reputed to present optimal habitats for leopard" and suggested that a leopard density of 1/km^2 is appropriate in some cases.[18] *Id.* at 13. Myers states that this leopard density is based on habitat type, prey distributions and predator competition, but more recent scientific evidence rebuts this figure (Jackson et al. 1989, Bailey 1993, Henschel 2008, Henschel 2009).

[18] Illogically, Myers (p. 14) used a figure by Schaller (1972) of "total predator biomass" in three areas in Kenya, none of which were rainforest habitat, which ranged as high as 95.7 kg/km^2 in Ngorongoro, to support the contention that rainforests might hold one 30 kg leopard / km^2. Myers cites to Schaller (1972) who estimated leopard density in Serengeti National Park as 1 / 22-26.5 km^2 (equivalent of a very low leopard density of about 0.05 leopards/km^2). After considering other density estimates, Myers states, "the leopard seems able to maintain a density of 1 to 10 km^2 in moderately suitable habitats, and 1 to 5 km^2 in favourable ones, with perhaps even 1 to 1 km^2 in exceptionally suitable conditions." *Id.* at 18.

The 1980 proposed rule apparently relied on Eaton's inaccurate characterizations of Myers' study – for example:

FWS Quoting Eaton's Interpretation of Myers	Myers's Actual Text
"The leopard in Kenya has a satisfactory status"	"leopard have declined in numbers and distribution in Kenya during the last decade."
"the leopard is satisfactory and probably abundant in Mozambique"	Myers did not comment that the leopard was probably abundant in Mozambique. Myers noted that the leopard was depleted in some areas.
"There may well be over 20,000 (leopards) in Rhodesia. The leopard has a satisfactory status in Rhodesia"	"its numbers have been significantly reduced in the face of recent agricultural expansion."
"Overall in South Africa the present status should be rated between rare and satisfactory with present trends being stable."	"Its stock-raisers have long tried to eliminate wild carnivores"; "the leopard in South Africa is officially classified as vermin"; "Numbers.... are disturbingly low, although the position is fairly stable"; "There are no grounds however for complacency, as the situation could easily become critical if any of the existing adverse factors were enhanced"; "Its numbers have long been thought to be very low."
"Myers says that leopards may have stabilized or increased recently in the Sudano-Guinean zone, including parts or portions of Sierra Leone, Guinea, Liberia, and northern Ivory Coast. In all of Sub-Saharan Africa, the West African region probably has the least satisfactory leopard populations; however, in much of the region it appears that the species' status is relatively satisfactory and probably does not deserve Endangered status except locally. Moreover, the regional trend may even be improving due to the encroachment of bush from overgrazing and burning, end or the drought in the Sahel portion, increased edge effect in forests from patchy agriculture and so on, all of which favor leopards."	Senegal: "Leopards are said to persist in much of Senegal, in fair though reduced numbers." Mali: "The overall trend, as elsewhere in West Africa, points toward a gradual elimination of leopard in all but a very few rugged hill tracts." Upper Volta: "The leopard is still widely found in Upper Volta. The leopard looks likely to decline steadily in distribution and status." Niger: "Until recently, however, leopard stocks in Niger were moderately sound." Chad: "Nothing better can be expected than very low densities." CAR: "The leopard's status is fairly satisfactory." Gambia: No leopard status information given. Guinea: "No recent information could be obtained about the status of leopard in Guinea." Sierra Leone: No leopard status information given. Liberia: "The leopard is believed to be evenly distributed throughout the country, except in farming and mining areas." Ivory coast: "Nothing was learned during the survey of the status of the leopard in Ivory Coast." Ghana: "Asibey (1971) considers the leopard very rare in many areas; by the 1980s it may hardly

FWS Quoting Eaton's Interpretation of Myers	Myers's Actual Text
	survive at all except in the most remote localities." Togo and Dahomey: "No specific information was obtained during the Survey. Nigeria: No leopard status information given. Cameroon: "leopards are reported in fair numbers in the south-east and in scattered relict populations elsewhere."

Based on this alleged abundance, FWS concluded that "the leopard in Sub-Saharan Africa can hardly be in danger of extinction." 45 Fed. Reg. at 19009.

FWS did recognize that the loss of habitat to agricultural land conversion "could present a long-term threat to the leopard" and that poaching for the fur trade (especially in European countries that had not yet become party to CITES) continued to threaten the species, and expressed concern about the increasing use of poison and its impacts on scavengers like leopards. *Id.* at 19010. Thus, FWS proposed to list leopards in sub-Saharan Africa as Threatened, leaving in place ESA and CITES Appendix I permitting requirements for the import of leopard fur and other parts. However, at the apparent urging of the trophy hunting industry, FWS proposed to adopt a special rule eliminating the requirement for ESA permits for the import of leopard trophies from sub-Saharan Africa, asserting that "there may be cases in which permitting the importation of leopard trophies taken under a strictly controlled management program will benefit the species by giving it an economic value which would in turn stimulate conservation measures." *Id.* FWS based this pro-trophy hunting position on an unpublished report from Teer and Swank (1977) containing interviews with wildlife officials in Kenya and Botswana who supported trophy hunting (but notably, Kenya prohibited trophy hunting in 1977 – prior to FWS' reliance on the Teer and Swank report – and Botswana prohibited trophy hunting in 2014 (Stein et al. 2016)).

Although the proposed special rule would not have required an ESA permit for the import of leopard trophies from sub-Saharan Africa, FWS stated that, "sport trophy imports into the United States will only be permitted when it is found to enhance the survival of the species." 45 Fed. Reg. at 19010 (emphasis added).

In 1982, FWS finalized the Threatened listing, but with a different geographic scope. 47 Fed. Reg. 4204 (Jan. 28, 1982). The final rule listed as Threatened "leopard populations occurring to the south of a line running along the borders of" Gabon/Rio Muni, Gabon/Cameroon, Congo/Cameroon, Congo/Central African Republic, Zaire/Central African Republic, Zaire/Sudan, Uganda/Sudan, Kenya/Sudan, Kenya/Ethiopia, and Kenya/Somalia. Despite having acknowledged in 1980 that reclassification on a country-by-country basis would be "biologically unsound," the Service narrowed this listing from the proposed sub-Saharan region to this "southern Africa"[19] region after learning that Senegal, Liberia, and Ghana considered their leopard populations to be endangered and since that there was "less substantial

[19] Notably, the 1982 final rule refers to the range of the listed entity as "southern Africa" – however, today, the phrase "southern Africa" commonly refers only to the southernmost region in sub-Saharan Africa, distinct from West, Central, and East Africa. This Petition will use the phrase "southern Africa" to refer to full range of the listed entity (**Figure 5**), even though that entity is neither scientifically nor geographically justifiable.

evidence" of leopard abundance from West Africa and the northern tier of countries in sub-Saharan Africa. *Id.* at 4207.

Figure 5. Map of Africa with red line denoting the current scope of the final Threatened listing

At the time, FWS had not yet adopted its policy regarding evaluation of distinct population segments ("DPS") and did not explain whether or why it thought that leopards in southern Africa were both "distinct" and "significant" such that the region forms a listable entity (since the area does not coincide with the full range of the subspecies or species). *See* 61 Fed. Reg. 4722 (Feb. 7, 1996); 16 U.S.C. § 1532(16). And today, twenty years since adopting the DPS policy, FWS still has not conducted an analysis of whether leopards in southern Africa can lawfully be listed as a DPS.

In addition to the three sources relied on in the 1980 proposed rule (discussed above), the 1982 final rule relied on "The Leopard *Panthera pardus* and Cheetah *Acinonyx jubatus* in Kenya" by P.H. Hamilton (unpublished study financed by FWS). 46 Fed. Reg. 44960 (Sept. 8, 1981). Relying on information from Safari Club International (gathered from interviews with hunters, game wardens, field biologists, and local people, but not hard data), FWS said there were an "absolute minimum" of 186,034 in southern Africa. 47 Fed. Reg. at 4205. The FWS stated that it "is reasonable to believe that the absolute minimum figures have validity and that there are probably well over 180,000 leopards in the area under consideration" and points to the fact that the minimum figure of Eaton for Kenya corresponds with P.H. Hamilton's minimum figure for that country. *Id.*

The 1981 Hamilton report, also based on questionnaires and personal observations, asserted that despite a decline in Kenya's leopard population since the 1960s, Hamilton believed that "a recovery of the leopard is underway in Kenya" and that "the lessons of Kenya are widely applicable." 47 Fed. Reg. at 4206. Notably missing is any acknowledgment that this asserted recovery took place in the years following Kenya's 1977 decision to prohibit trophy hunting of leopards. Further, as acknowledged – but not heeded

– in the final rule, even "Hamilton reports that leopards have declined generally in Kenya since the 1960s" and Hamilton said that the virtual elimination of leopards from North Africa "should serve as a warning to any who believe that this species can always survive no matter what the impact of man." 47 Fed. Reg. at 4206.

FWS stated that Hamilton "supports reclassification and controlled sport hunting of the species." *Id.* According to FWS, Hamilton supported lifting the ban on the importation of leopard trophies because "it has not served any useful purpose. The number involved has been relatively small and the ban runs counter to the concept of giving the leopard monetary value that will help to justify its continued existence in Africa." *Id*. This is not entirely surprising considering that Hamilton obtained his information by talking to 21 professional hunters. *Id.* at 4206. Unjustifiably, FWS characterized these biased sources (the professional hunters) as "the most valuable single source of information." *Id.* at 4206.

In the 1982 final rule, FWS continued to rely on the "expert opinion" of Eaton on the status of leopards in the relevant countries, even though FWS acknowledged that Hamilton "considers Eaton's estimates and judgements as invalid". *Id.* Further, FWS did not acknowledge that Eaton's conclusions conflict with Myers's conclusions in some cases, as noted above.

Further demonstrating that this 1982 downlisting was not based on the best available science – as required by law – FWS conceded the "primary reason" that it changed the geographic scope of the downlisting was due to opposition from range States in the northern portion of the sub-Saharan region (i.e., Liberia, Senegal, and Sudan opposed the proposal, and Benin, Ethiopia, and Ghana reported that the leopard was endangered in those countries). *Id.* at 4207.

Aside from this change in geographic scope and the addition of one report regarding population status in one country, the final rule does not include any new information regarding the threats to the species that was not included in the proposed rule. FWS acknowledged that "more than 90 percent" of the over 1,000 comments received on the proposed rule opposed the Threatened listing and special rule (*id.* at 4208), yet it finalized the Threatened listing and adopted the proposed special rule to allow the import of leopard trophies without requiring an ESA permit.

In relaxing its oversight of leopard trophy hunting, FWS baldly concluded that "Experts agree that the economic value that would develop for the species through sporthunting will encourage some of the countries [which may consider leopards as vermin] to develop management and conservation programs and will discourage indiscriminate killings by local landowners." *Id.* at 4209. Further, FWS stated that "hunting is already going on in Africa, and any increase caused by the participation of U.S. residents should not have significant adverse impacts." *Id.* Both of these statements are entirely unsupported and baseless, further proving that the current leopard listing is based on a woefully outdated foundation that was not even valid at the time the listing was finalized.

Thus, the 1982 listing for *Panthera pardus* cannot be said to be in compliance with the ESA's mandate that listing decisions be made solely on the basis of the best available science. In finalizing the listing, FWS relied on biased sources, misrepresented material scientific conclusions, and patently conceded that the scope of the listing was based on political – and not biological – considerations. The egregious flaws

in this listing are exacerbated by the decades that have passed without further review of the listing, the basis of which has been firmly rejected by a consensus of current leopard experts. Therefore, the current ESA protections for leopards in southern Africa are inadequate, endangering the entire species across a significant portion of its range.

Leopard Listing Under CITES

Panthera pardus has been listed on CITES Appendix I since the first meeting of the Conference of the Parties,[20] a listing that became effective on 4 February 1977. Trade in specimens of species listed on Appendix I "must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances." CITES Art. II.[21] Specimens of Appendix I species cannot be exported or imported unless authorized by permit by both exporting and importing countries. CITES Art. III.[22] An import permit can be granted only if the specimen is not to be used in the importing country for primarily commercial purposes. CITES, Art. III.

While Appendix I affords the highest level of protection under CITES, *Panthera pardus* does not enjoy the full extent of these protections, due to the unsustainable and not scientifically-based export quotas for hunting trophies and skins for personal purposes that are currently in place. Leopard export quotas have been set by CITES Resolutions since 1983 (CITES Resolution Conf. 4.13,[23] replaced today by Resolution Conf. 10.14 (Rev. CoP16)[24],[25] and FWS has long expressed support for this quota system. *See, e.g.*, Fed. Reg. Vol 59, Doc. No: 94-20050 (August 16, 1994).

As detailed in this section, the Service's implementation of the CITES and ESA listings for *Panthera pardus* is not based on science and fails to provide sufficient oversight of the trophy hunting industry to ensure that Americans are not contributing to unsustainable offtake of leopard populations, and therefore are not adequate regulatory mechanism to protect the species.

FWS Regulations for Leopard Trophy Imports to the U.S. Are Inadequate

In the 1982 rule finalizing the Threatened listing for southern African leopards under the ESA, FWS averred that even though no ESA import permit would be required for trophies, a CITES import permit for leopard trophies will only be issued if "it is determined that the country of origin for the trophy has a management program for the leopard, and can show that its populations can sustain a sport hunting harvest, *and that sport hunting enhances the survival of the species*." 47 Fed. Reg. at 4205 (emphasis added).

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[20] CITES, Appendices I-II, *available at* https://cites.org/sites/default/files/eng/cop/01/E01-Appendices.pdf.
[21] CITES, art. II, *available at* https://cites.org/eng/disc/text.php#II.
[22] CITES, art. III, *available at* https://cites.org/eng/disc/text.php#III.
[23] *See* Annex 1, CITES, CoP5 Doc. 5.23 (1985), *available at* https://cites.org/sites/default/files/eng/cop/05/doc/E05-23.pdf.
[24] CITES, CoP16 Conf. 10.4 (2002), *available at* https://cites.org/eng/res/10/10-14R16.php.
[25] *See also* CITES, CoP10 Doc. 10.42 (1997), *available at* https://cites.org/sites/default/files/eng/cop/10/doc/E10-41to43.pdf.

Further, the final rule provided that FWS will evaluate CITES import permit applications consistent with CITES Conference Report 2.11 [referring to then-valid Resolution Conf. 2.11], which – at that time – "indicate[d] that import permit decisions for sport-hunting trophies should be made on the basis of the following considerations: (1) Whether the importation will serve a purpose not-detrimental to the survival of the species; and (2) whether the killing of animals whose trophies are intended for import will ***enhance the survival of the species***." *Id.* (emphasis added).

Moreover, FWS asserted that "very few leopard trophies will be imported into the United States" and that the "number is expected to be considerably less than the high of two hundred leopard trophy imports recorded in 1969." 47 Fed. Reg. at 4211. The final rule stated that FWS had "reviewed the adequacy of the leopard conservation program in a specific case for Botswana and has determined in that case that the country currently meets the criteria." *Id.* at 4205.

However, since finalizing this regulation, FWS has not upheld these commitments, instead allowing well over 300 leopard trophy imports per year since 1999 and not conducting a rigorous analysis of whether the source country manages leopard populations in a way that enhances the survival of the species. Indeed, by its own admission, the Service's practice does not include making enhancement findings for the import of African leopard trophies.

While FWS regulations provide that hunting trophies[26] can only be imported as personal items and cannot be sold after import, and that each hunter is limited to importing two leopards per calendar year, these limits are inadequate to protect leopards from unsustainable take by U.S. hunters seeking to import their body parts as trophies. *See* 65 Fed. Reg. 26664, 26679 (May 8, 2000); 72 Fed. Reg. 48402 (Aug. 23, 2007); 50 C.F.R. §§ 23.55, 23.74. Indeed, on their face these regulations would allow for unlimited numbers of U.S. citizens to kill two leopards per year, a concept that is anathema to providing for the conservation of the species, as required by law. 16 U.S.C. § 1531(c)(1) ("It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of" the conservation purpose of the ESA).

Thus, in addition to the lack of scientific support for the original listing, the implementation of this listing is woefully inadequate to promote leopard conservation, endangering the survival of leopards in southern Africa.

- FWS Is Not Applying the Enhancement Standard to Trophy Imports

Although FWS committed in 1982 to only issue CITES import permits for leopard trophies after making an enhancement finding, 47 Fed. Reg. at 4205, the 1994 CITES Conference Report 2.11 [now known as Resolution Conf. 2.11] that FWS said it would use to evaluate the issuance of import permits was amended (based on a proposal from Namibia) to eliminate scientific scrutiny of trade in leopard parts, as indicated by the redline below:

[26] FWS defines "sport-hunted trophy" as "a whole dead animal or a readily recognizable part or derivative of an animal" that, inter alia, "[w]as legally obtained by the hunter through hunting for his or her personal use." 50 C.F.R. § 23.74(b).

"CONSIDERING the need of uniform interpretation of the Convention with regard to hunting trophies;

THE CONFERENCE OF THE PARTIES TO THE CONVENTION RECOMMENDS

a) that with the exception of the rare case of exemptions granted under paragraph 3 of Article VII of the Convention, trade in hunting trophies of animals of the species listed in Appendix I be permitted only in accordance with Article III, i.e. accompanied by import and export permits;

~~b) that the scientific opinions under paragraphs 2 (a) and 3 (a) of Article III of the Convention cover the trade in dead specimens, too;~~

~~c) that in order to achieve the envisaged double control (also in the scientific field) by the importing and the exporting country of the trade in Appendix-I specimens, the Scientific Authority have the possibility of comprehensive examination concerning the question of whether the importation is serving a purpose which is not detrimental to the survival of the species. This examination should, if possible, also cover the question of whether the killing of the animals whose trophies are intended for import would **enhance the survival of the species**;~~

b) in order to achieve the envisaged complementary control of trade in Appendix-I species by the importing and exporting countries in the most effective and comprehensive manner, the Scientific Authority of the importing country accept the finding of the Scientific Authority of the exporting country that the exportation of the hunting trophy is not detrimental to the survival of the species, unless there are scientific or management data to indicate otherwise;

…

CITES Resolution Conf. 2.11, on *Trade in Hunting Trophies of Species Listed in Appendix I* (emphasis added).[27]

The impact of these amendments was to eliminate the independent examination of detriment by the importing country, directing that "the importing country accept the finding of the Scientific Authority of the exporting country that the exportation of the hunting trophy is not detrimental to the survival of the species, unless there are scientific or management data to indicate otherwise." *Id.* The amendment also eliminated the CITES requirement to make an enhancement finding. Therefore, the CITES protections that FWS relied on in relaxing ESA protections for southern African leopards have since been amended, necessitating a status review of the species and increased federal protections.

Further, even though CITES Resolution Conf. 2.11 no longer required an enhancement finding after 1994, the Service was nevertheless bound to its commitment from 1982 that it would apply the enhancement standard to leopard trophy imports, a duty that FWS has failed to meet.

[27] *Compare* CITES, CoP9 Doc. 9.50 (1994), *available at* https://cites.org/sites/default/files/eng/cop/09/doc/E9-Doc-50.pdf, *with* CITES, Com. 9.13 (Rev.), *available at* https://cites.org/sites/default/files/eng/cop/09/E9-in-session.pdf.

- FWS Non-Detriment Advice Is Outdated and Not Scientifically Defensible

The final rule listing certain sub-Saharan national leopard populations as Threatened was published on January 28, 1982 and became effective on March 1, 1982. In the final rule, FWS acknowledged that it had reviewed the adequacy of the leopard conservation program in Botswana and determined that the country meets the criteria for issuance of CITES import permits, but that it had not yet reviewed any other African range state's leopard program. 47 Fed. Reg. at 4205.

Shortly thereafter, on March 25, 1982 the FWS's Office of the Scientific Authority sent a memorandum to wildlife authorities in relevant countries explaining the new Threatened status and how the FWS will determine, on a country-by-country basis, whether imports of leopard trophies will be for purposes that are not detrimental to the survival of the species (FWS 1982a). This memorandum states, "information now available to us is too incomplete for us to say with assurance that leopard trophy imports from any particular country can generally be approved under CITES" and states that the only countries that FWS might allow imports from were Botswana, Namibia, South Africa, Tanzania, Zambia and Zimbabwe (*Id.* at 1). The memorandum lists the factors that the Scientific Authority will consider when advising on leopard trophy imports and states, "We will advise in favor of trophy imports from a particular country only when the best available information shows that sport-hunting of leopards can reasonably be expected to enhance the survival of the species in that country." (*Id.* at 2). This memorandum makes clear that the FWS intended, at the time, to make findings of both non-detriment and enhancement, both of which were required by CITES at the time through the convention language and Resolution Conf. 2.11.

Per this 1982 memorandum, the factors to be considered in evaluating imports were divided into four main issues:

1) legal authority for sport-hunting (Does the country allow sport-hunting of leopards under national law or under laws of any smaller units of government (e.g., provinces or States)? Do any such laws provide sufficient authority to regulate the take of leopards? Is any such authority being exercised to effectively limit take? Is any take allowed by smaller units of government reviewed and coordinated at the national level?);

2) take for other purposes (Does the country allow a commercial trade of leopards or allow the removal of leopards for livestock predator control? Is any such trade effectively regulated and monitored?);

3) basis for limiting take (Does the country limit the quantity and spatial or seasonal distribution of the take of leopards? Are any such limits based on: Reliable information on leopard population trends and mortality estimates (including sport, commercial, predator control or other natural or man-caused mortality)? The relationship of leopard populations to available habitat? The goal of managing leopards to sustain their populations?); and

4) controls on the taking and trading in leopards (Does the country maintain a licensing system for persons who take or process leopards or parts thereof? Is there a standardized, mandatory system under which all lawfully taken leopards are tagged or otherwise made reliably identifiable? Does any such marking system effectively prohibit the transport, in any way, of marked leopards or parts thereof? Does a standardized, mandatory export permit system exist? If so, is the export permit system linked directly to the standardized marking system, and is approval required from the country of import before permits are issued? Is the country of export a Party to CITES?). (*Id.* at 2, 3).

If provided, answers to these questions would allow the FWS to determine if sport-hunting of leopards could reasonably be expected to be both not-detrimental to, and to enhance, the survival of the species in that country.

Only 2.5 months later, on June 10, 1982, the FWS Office of the Scientific Authority issued a memorandum to the FWS Federal Wildlife Permit Office advising that the import of leopard hunting trophies taken from Botswana, Tanzania, Zambia, Zimbabwe, or the Transvaal region in South Africa[28] after July 1, 1975[29] will not be detrimental to the survival of the species (FWS 1982b). FWS found that each of these countries, or in the case of South Africa, a portion of the country, "(a) has laws under which the regulated sport-hunting of leopards is allowed, (b) limits the quantity, or spatial or seasonal distribution of the take of leopards, (c) bases these limits on the goal of managing leopards to sustain their populations, (d) maintains a licensing system for persons who take or process leopards (except in South Africa), and (e) implements a permitting system to regulate trade in accordance with CITES." *Id*. At the same time, FWS noted that (1) leopard hunting was not allowed in Angola, Burundi, Gabon, Kenya, Lesotho, Malawi, Rwanda, Swaziland, and Uganda, (2) FWS did not have enough information to advise on Namibia, and (3) the "available information indicates that it would not be appropriate to allow leopard trophy imports from Congo, Mozambique, or Zaire." *Id*.

It is unclear what information FWS used to draw these conclusions in its non-detriment advice. However, recent events and information call into question whether any of the approved countries had at the time, or even have today, science-based wildlife management in place that uses reliable information on leopard population trends and that takes into account mortality from all sources, including sport, commercial, predator control or other natural or man-caused mortality. For example, South Africa banned the export of leopard trophies during 2016 after the South Africa Department of Environmental Affairs advised that it could not make a non-detriment finding for such exports due to: "no rigorous estimate for the size of the South African leopard population, nor reliable estimates of leopard population trends at national or provincial scales"; "excessive offtakes"; "poorly managed trophy hunting"; "almost no reliable estimates for the extend of illegal off-take of leopards, though data from a few intensive studies in South Africa suggest that levels of illegal off-take exceed levels of legal off-take"; national and provincial trophy hunting quotas are "arbitrary, based on speculative population estimates"; and "harvests of leopards is not managed consistently throughout the country; some provinces implement effective controls, others do not. Legal off-takes are poorly documented in many provinces. There is an urgent need for a coordinated national strategy which provides standardized guidelines to all provinces for the management of leopards" (South Africa Department of Environmental Affairs 2015, p. 16). The Department concludes, "legal local and international trade in live animals and the export of hunting trophies at present poses a high risk to the survival of this species in South Africa." This has most likely been the case since at least 1982 when the FWS approved imports from South Africa.

[28] Transvaal was a province of South Africa from 1910 until the end of apartheid in 1994, when a new constitution subdivided it and it was succeeded by the provinces of Gauteng, Limpopo, Mpumalanga and the eastern part of North West province. *See* Edgar Sanderson, Great Britain in Africa: The History of Colonial Expansion, 149 (Simon Publications LLC 2001).

[29] Thus, in another example of how this listing was designed to cater to the trophy hunting industry, FWS grandfathered in trophies of leopards killed in the previous seven years when trophy imports were banned due to the Endangered status of the leopard.

Furthermore, according to South Africa, "recent research suggests that trophy hunting may be unsustainable in Limpopo, KwaZulu-Natal and possibly North West [provinces]" – yet the Limpopo and North West provinces were once part of the Transvaal region in South Africa from which FWS approved imports. It is deeply concerning that, although this information has been available publicly for nearly a year (it was published on September 10, 2015), the FWS has not rescinded its 1982 approval of imports from the Transvaal region in South Africa.

While we do not have information provided to FWS by the aforementioned countries approved for imports, in an undated letter to the FWS Office of Scientific Authority from Namibia's (then called South West Africa) Department of Agriculture and Nature Conservation (apparently sent in response to the letter from FWS to leopard range states), Namibia explains that exports of leopard trophies had been prohibited by legislation since July 15, 1977 and trophy hunting of leopards was not allowed (South West Africa undated). Based on a survey of farmers, there were an estimated 3,000 leopards in the country; in 1980, 123 leopards were killed by farmers to protect their livestock; in 1981, 201 were killed for this purpose. The letter also explained that the South West Africa Hunter's and Guides' Association recently petitioned the government to allow leopard hunting, and this is evidence that the Service's decision to downlist African leopards to facilitate trophy hunting by Americans also encouraged foreign countries like Namibia to permit leopard trophy hunting.

Namibia approved the petition and opened leopard hunting under certain conditions for two hunting seasons beginning February 1, 1983. The conditions included: landowners must apply to the Department of Nature Conservation to qualify as potential trophy hunting ranches; smaller farms (< 5,000 ha.) would be allocated one leopard hunt per year, and larger farms two hunts per year; each trophy would be tagged with a metal tag bearing a unique number and the Department's emblem; dogs, horses, and bait may be used for hunting leopard but leopards may not be caged, trapped or confined for the purpose of trophy hunting; if it is found that the number of leopards killed for trophy plus the number killed for protection of livestock exceeds the number killed yearly in the past just for the protection of livestock, then trophy hunting would be stopped immediately; and farms would be inspected for leopard occurrence before hunting permits are issued. The letter said that the Department will keep records of permits issued, successful hunts, and measurements of trophies; no permits will be issued for export of leopard trophies killed before February 1, 1983; and all revenue received from trophy hunting will be deposited with the treasury which allocates money for research.

However, notably absent from these conditions is the establishment of a science-based wildlife management program that uses reliable information on leopard population trends and that takes into account mortality from all sources, including sport, commercial, predator control or other natural or man-caused mortality. The establishment of an annual quota of one leopard for small farms and two for large farms is completely arbitrary and is not based on knowledge of the leopard population in the area. The requirement that the number of leopards hunted legally must not out-number the number of leopards killed in previous years for stock protection is not science-based management: there is no information to allow the conclusion that offtakes for stock protection were biologically sustainable.

Nonetheless, on March 10, 1983, FWS issued an internal memorandum advising that the import of leopard trophies taken in Namibia on or after February 1, 1983 will be for purposes that are not detrimental to the survival of the species, referring back to the rationale included in the 1982 memorandum (FWS 1983). This memorandum provides no rationale for the decision or any comment on the information provided by Namibia.

These 1982 and 1983 non-detriment advice memoranda are completely outdated and scientifically indefensible today and cannot be said to qualify as adequate conservation measures. Pursuant to these internal memoranda – and in direct conflict with the commitments it made in the 1982 listing rule – FWS authorized the import of up to 657 leopard trophies per year from 1980 through 2014 (**Figure 2**). *See* 71 Fed. Reg. 20168, 20208 (April 19, 2006) ("From 2001 to 2003, there were between … 420 and 450 leopard trophies imported into the United States annually."); *see* Section IV(B), *supra*.

Then in September 2015 – in direct conflict with the decision it made in 1982 – FWS issued another internal memorandum, advising that the import of leopard trophies from Mozambique during calendar year 2015 will be for purposes that are not detrimental to the survival of the species. FWS, Non-Detriment Advice (Sept. 28, 2015) ("FWS 2015"). In that memorandum, FWS concedes that "there are no reliable, widely-accepted, continent-wide estimates of leopard population sizes in Africa" (*id*. at ¶ 9) and that "the impact of trophy hunting on leopard populations is unclear, but this activity may have negative impacts at the demographic and population levels, especially when females are shot and any dependent off-spring also perish" (*id*. at ¶ 13). There is no evidence that this advice has been reviewed or renewed for calendar year 2016, but there are critical flaws in this non-detriment advice.

First, the 2015 Mozambique non-detriment advice astoundingly relies on the findings of Martin and de Meulenaer (1988), asserting that the current population size of the leopard in Africa is more than 714,000. As detailed below, this report's methodology has been completely discredited, and the best available science makes clear that there are nowhere near this many African leopards left today. While FWS acknowledged some criticism, it wrongly concluded that the Martin and de Meulenaer (1988) findings "are still largely valid today." FWS, Non-Detriment Advice (Sept. 28, 2015) ("FWS 2015").

The FWS further stated, without identifying the source of the information, that, "Leopard densities vary from 1-30 individuals per 100 km^2 according to habitat, prey availability, and degree of threat. The lowest densities correspond to arid areas (for example, 1.25 adults per 100 km^2 in arid areas in South Africa), while the highest leopard densities correspond to mesic woodland savannas that occur in protected areas in East and South Africa (for example, 30.3 individuals per 100 km^2 in riparian areas with high prey density)." However, this general information is misleading and instead the FWS should have considered readily available information specific to Mozambique – for example, a 2008-2010 study in Niassa National Reserve, Mozambique, using camera traps found that leopard density was 2.18 – 12.65 leopard/100 km^2 (Jorge 2012), much lower than the 30.3 cited by FWS. Furhter, a more recent study using camera traps in Xonghile Game Reserve, a protected area in Mozambique, found leopard density to be only 1.53 leopard/100km^2 (Strampelli 2015); the author also studied leopards in another area, Limpopo National Park, and although he was not able to estimate leopard density there, he thought it would be on par with, or less than, that in Xonghile.

The FWS stated, "The impact of trophy hunting on leopard populations is unclear, but this activity may have negative impacts at the demographic and population levels, especially when females are shot and any dependent off-spring also perish (Barnett and Patterson 2005; Caro et al. 2009; Daly et al. 2005); Lindsey et al. 2007; Packer et al. 2009). An additional matter of potential concern is that female leopards have been taken as trophies despite national regulations that specify male-only harvests (e.g., Tanzania; Spong et al. 2000)." But according to Jorge (2012), females are not allowed to be trophy hunted in Niassa National Reserve, Mozambique; however, offtake for trophy hunting combined with illegal offtake resulted in an unsustainable overall offtake. The Service's failure to take this readily available information into account was arbitrary and capricious.

Further, in 2007, Mozambique successfully proposed to double its leopard CITES export quota from 60 to 120. The U.S. preliminary negotiating position was to oppose this proposal, a fact not mentioned in the 2015 Mozambique non-detriment advice, and the U.S. ultimately supported the proposal.

The 2015 FWS Mozambique memo outlines the claims made in Mozambique's 2007 CITES proposal including: "little research had been conducted into the status, distribution, or ecology of the leopard in Mozambique" but the proposal indicated that, based on Martin and de Meulenaer (1988) the leopard population was 37,542; a harvest rate of 5% is 1,779; three field studies characterized the leopard population as "widely distributed" and "common" (citing to Smithers and Tello 1976; Tello 1986; and Begg and Begg 2004); 82% of Mozambique is suitable leopard habitat that could support 3-10 leopards per 100km^2 (according to Mozambique's 2007 CITES proposal); Mozambique's protected areas comprise 130,537km^2 and 90% of these areas have good or prime leopard habitat (*id*); even if Mozambique's leopard population is 50% of that estimated by Martin and de Meulenaer (1988) or 20,000, this population size could sustain an annual harvest of 1000; therefore, according to Mozambique's proposal, the population estimated suggest that there is scope for increase in annual offtake without any danger of significant threat to the species. But even at the time this memorandum was issued, the Martin and de Meulenaer (2008) report had already been completely discredited and it was arbitrary for the Service to rely on that information in issuing its non-detriment advice.

The DSA acknowledges that Mozambique is a Category 3 country under the CITES national legislation project, meaning that "legislation does not meet the requirements for implementing CITES" and that the country is identified as in need of "priority attention". Indeed, in 2014, the Environmental Investigation Agency and the International Rhino Foundation (EIA and IRF) submitted a petition to the U.S. government to have Mozambique certified under the Pelly Amendment for diminishing the effectiveness of CITES (Environmental Investigation Agency and International Rhino Foundation 2014). This petition, which focusses on poaching and trafficking in elephants and rhinos, states, "Mozambique has failed to adopt adequate CITES implementing legislation, lacks adequate penalties to deter poaching and illegal trade and suffers from rampant corruption." (*Id*. at 1). DSA notes several recent developments such as the passage of a new law designed to reduce poaching and illegal wildlife trade and the development of a "national rhino and ivory plan." However, EIA and IRF state that, while the new law is a step in the right direction, it's not clear to what extent it will systemically improve CITES implementation. (*Id*. at 15). DSA also notes that "government corruption remains a serious problem." The EIA and IRF petition

documents rampant corruption in the wildlife sector. Transparency International gives Mozambique a score of 31 out of 100, with 0 being highly corrupt.[30]

In conclusion, DSA wrongly states that Mozambique has improved its CITES implementation in recent years; that the leopard population of Mozambique is sufficiently large enough to support sport-hunting quotas, despite relying the outdated and discredited figures by Martin and de Meulenaer (1988); and there are potential benefits to leopards deriving from concessionaires' management activities in Mozambique with regard to this species, despite the existence of evidence that offtake for trophy hunting and illegal offtake combined are not sustainable in Niassa Game Reserve, Mozambique. On this last point, the DSA notes that sport hunting in Mozambique is subject to a "Strategic Plan for the Development of Tourism in Mozambique (2004-2013)"[31] which "incorporates economic incentives to communities and the private sector through increased income and employment opportunities via leopard sport hunting"; however, the Plan offers no details on how hunting will be managed and regulated to ensure that it is not detrimental to the survival of the species.

Finally, the Mozambique non-detriment advice fails to take into consideration multiple relevant leopard studies that were available prior to September 2015:

- Braczkowski, A.R., Balme, G.A., Dickman, A., Macdonald, D.W., Johnson, P.J., Lindsey, P.A. and Hunter, L.T.B. 2015a. Rosettes, Remingtons and Reputation: Establishing potential determinants of leopard (*Panthera pardus*) trophy prices across Africa. *African Journal of Wildlife Research* 45(2): 158–168.

- Braczkowski, A.R., Balme, G.A., Dickman, A., Macdonald, D.W., Fattebert, J., Dickerson, T., Johnson, P. and Hunter, L. 2015b. Who bites the bullet first? The susceptibility of leopards *Panthera pardus* to trophy hunting. *PloS one*, 10(4): e0123100.

- Du Preez, B.D., Loveridge, A.J. and Macdonald, D.W. 2014. To bait or not to bait: A comparison of camera-trapping methods for estimating leopard *Panthera pardus* density. *Biological Conservation* 176: 153-161.

- Grey, J.C. 2011. *Leopard population dynamics, trophy hunting and conservation in the Soutpansberg Mountains, South Africa*. Doctoral thesis. Durham University, Old Elvet, Durham, South Africa.

- Henschel, P. 2008. *The conservation biology of the leopard Panthera pardus in Gabon: Status, threats and strategies for conservation*. Dissertation zur Erlangung des Doktorgrades der Mathematisch-Naturwissenschaftlichen Fakultäten der Georg-August-Universität zu Göttingen, *available at* http://d-nb.info/99732676X/34.

[30] Transparency International, *Corruption by Country: Mozambique*, *available at* https://www.transparency.org/country/#MOZ (last visited Jul. 20, 2016).
[31] Republic of Mozambique Ministory of Tourism, *Strategic Plan for the Development of Tourism in Mozambique (2004 – 2013)*, Volume I (Feb. 2004), *available at* http://www.tartarugabay.com/Mozambique%20Tourism%20Strategic%20Plan.pdf.

- Henschel, P. 2010. *The status of the leopard in Gabon and lessons learned for leopard research and management in W/C Africa*. Powerpoint presentation. Large Carnivore Workshop, 3-4 November 2010, *available at* http://www.largecarnivoresafrica.com/wp-content/uploads/philiph-henschel2.pdf.

- Jackson, P., Bell, R., Borner, M., Bothma, J.du P., Caughley, G., Hestbeck, J.B., Leyhausen, P., Mendelssohn, H., Norton, P.M., Ranjitsinh, M.K., Shoemaker, A.H., Singh, A., Swank, W., Walker, C., Wilson, V.J. and Martin, R.B. 1989. *A review by leopard specialists of The Status of Leopard in Sub-Saharan Africa by Martin and de Meulenaer*. Information document No. 3 submitted to the seventh meeting of the Conference of the Parties to CITES (Lausanne, 1989).

- Jorge, A.A. 2012. *The sustainability of leopard Panthera pardus sport hunting in Niassa National Reserve, Mozambique*. Master's thesis. School of Life Sciences, University of KwaZulu-Natal, Westville, South Africa. March 2012.

- Palazy L., Bonenfant C., Gaillard J-M, and Courchamp F. 2011. Cat Dilemma: Too Protected To Escape Trophy Hunting? *PloS one* 6(7): e22424.

- Pinnock, D. 2016. South Africa bans leopard trophy hunting for 2016. Africa Geographic blog, 25 January 2016.

- South Africa Department of Environmental Affairs. 2015. Non-detriment Findings. Government Gazette No. 39185, 10 September 2015, Department of Environmental Affairs Notice 897 of 2015.

- Swanepoel, L.H., Somers, M.J. and Dalerum, F. 2015. Functional responses of retaliatory killing versus recreational sport hunting of leopards in South Africa. *PloS one* 10(4): e0125539.

Therefore, this non-detriment advice – which relies on thoroughly discredited and outdated science and ignores the non-existence of a leopard management plan in Mozambique – is arbitrary, capricious, and a completely inadequate regulatory mechanism to protect the species from overexploitation.

Given that 2016 has seen the publication of the most comprehensive study on the status of this species (Jacobson et al. 2016a), as well as an updated IUCN assessment of the species (Stein et al. 2016), none of the three non-detriment advice memoranda can be said to be based on the best available science. Thus, current U.S. CITES regulations for leopards are insufficient to ensure that the U.S. impacts on this species are not detrimental, as required by law.

CITES Export Quotas Are Not Based on Science

Currently, CITES has established export quotas for twelve African countries for leopard skins traded for personal and hunting trophy purposes, totalling 2,648 leopard skins per year (CITES Resolution Conf. 10.14 (Rev. CoP16)) (see **Table 5**). Notably, two of these countries – Central African Republic and

Ethiopia – have populations that FWS recognizes are Endangered, highlighting the lack of scientific basis for these quotas.

Table 5: CITES African leopard export quotas 1983-2016.

Countries	Quota 1983	Quota 1985	Quota 1987	Quota 1989	Quota 1992	Quota 1994 - 2001	Quota 2002	Quota 2004	Quota 2007 - 2016
Botswana	80	80	80	100	100	130	130	130	130
Central African Republic	0	0	40	40	40	40	40	40	40
Ethiopia	0	0	500	500	500	500	500	500	500
Kenya	80	80	80	80	80	80	80	80	80
Malawi	20	20	20	20	50	50	50	50	50
Mozambique	60	60	60	60	60	60	60	60	120
Namibia	0	0	0	0	100	100	100	250	250
South Africa	0	0	0	50	75	75	75	150	150
Uganda	0	0	0	0	0	0	0	0	28
United Republic of Tanzania	60	250	250	250	250	250	500	500	500
Zambia	80	300	300	300	300	300	300	300	300
Zimbabwe	80	350	500	500	500	500	500	500	500
Total	**460**	**1140**	**1830**	**1900**	**2055**	**2085**	**2335**	**2560**	**2648**

Sources: CITES CoP5 Doc. 5.23, CITES CoP6 Doc. 6.27, CITES CoP7 Doc. 7.28, CITES Cop8 Doc. 8.20, CITES Resolution Conf. 8.10 and 8.10 (Rev.), CITES CoP9 Doc. 9.26, CITES CoP10 Doc. 10.42, CITES Resolution Conf. 10.4 and 10.4 (Rev. CoP13), CITES CoP12 Doc. 12.23.1, CITES CoP13 Com. 1 Rep. 1 (Rev. 1), CITES CoP13 Plen. 4, CITES CoP14 Com. 1.6, CITES CoP14 Plen. 4, and CITES Resolution Conf. 10.14 (Rev. CoP16).

CITES export quotas have grown substantially since the U.S. downlisted certain populations of sub-Saharan African leopards (**Table 5**). The total number of leopards that can be exported annually rose five-fold from 460 in 1983 to 2,648 in 2016; and the number of countries with export quotas rose from seven in 1983 to twelve in 2016.

However, these quotas have no scientific basis and are not routinely reviewed to ensure that are not detrimental to the survival of the species. Indeed, the basis for the original and subsequent CITES export quotas for leopards is a model by Martin and de Meulenaer (1988) that has been dismissed by modern leopard scientists – as discussed further below – as over-simplified since it was based on a correlation between rainfall and leopard numbers in savannah habitats of East Africa and used to predict leopard numbers across their entire sub-Saharan Africa range (Braczkowski et al. 2015b). Martin and de Meulenar's model was reviewed by specialists from the IUCN SSC Cat Specialist Group and was rejected because the methodology used was highly flawed resulting in exaggerated and inaccurate population figures (Jackson et al. 1989, Balme et al. 2010, Grey 2011). Yet, the model remains as the sole basis for the existing CITES leopard export quotas.

Botswana:

Botswana was one of the first countries to receive a CITES-approved leopard export quota in 1983, of 80 animals;[32] the working documents discussed at the 1983 meeting are not readily available, so it is not possible to evaluate the information used by the Parties when approving this quota. The quota was increased in 1987 to 100,[33] and then increased again in 1994 (effective in 1995) to 130, the latter with the support of the U.S.[34] Demonstrating the lack of an effective system to evaluate proposals to increase CITES leopard export quotas, the two most recent increases occurred without Botswana providing a supporting statement; there was no written proposal submitted for consideration by the Parties; Botswana simply requested the increases and the CITES Parties granted the request. Botswana then banned all trophy hunting, including of leopard, beginning in 2014 (Stein et al. 2016) due to declining wildlife populations, according to the Ministry of Wildlife, Environment and Tourism.[35] It is worth noting that 1987 is when the draft report of Martin and de Meulenaer (1987) was also presented to the Parties and this report was apparently used to establish or increase a number of CITES leopard quotas, including that of Botswana, where the authors estimated the population to be 7,729. (*Id.* at 647). However, in 1992, Botswana (and Malawi, Namibia, Zambia and Zimbabwe) proposed to transfer its population to CITES Appendix II with an export quota of 100; this proposal, which was not approved, estimated Botswana's leopard population to be 5,822 animals.

Central African Republic:

Central African Republic received a CITES leopard export quota in 1987, for 40 animals,[36] and this has remained the same until today. The supporting statement by Central African Republic in which this quota was requested did not provide a population estimate, explain how the figure of 40 was derived, or any provide other information about how they would ensure this offtake would not detrimental to the survival of the leopard.[37] Nonetheless, the CITES Parties approved the quota. It is worth noting that 1987 is when the draft report of Martin and de Meulenaer (1987) was presented to the Parties and this report was apparently used to establish or increase a number of CITES leopard quotas, including that of Central African Republic, where the authors estimated the population to be 41,546. (*Id.* at 647).

Ethiopia:

Ethiopia received a CITES leopard export quota in 1987 of 500.[38] However, there is no record of Ethiopia having submitted a supporting statement to the meeting where this quota was established.[39] No summary record of this meeting is readily available to the public. However, 1987 is when the draft report of Martin and de Meulenaer (1987) was presented to the Parties and this report was apparently used to establish or increase a number of CITES leopard quotas, including that of Ethiopia, where the authors

[32] CITES, CoP5 Doc. 5.23, p. 414 (1985), *available at* https://cites.org/sites/default/files/eng/cop/05/doc/E05-23.pdf.
[33] CITES, CoP8 Doc. 8.20, p. 1 (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/doc/E-20.pdf.
[34] CITES, CoP9 Com. I Summary Report, p. 172 (1994), *available at* https://cites.org/sites/default/files/eng/cop/09/E9-ComI.pdf.
[35] Press Release, Hunting Ban in Botswana, Message from Permanent Secretary (August 20, 2013), *available at* https://www.facebook.com/permalink.php?story_fbid=500849569997706&id=148228411926492.
[36] CITES, CoP7 Doc. 7.28, p. 791 (1989), *available at* https://cites.org/sites/default/files/eng/cop/07/doc/E07-28.pdf.
[37] CITES, CoP6 Doc. 6.28, p. 671 (1987), *available at* https://cites.org/sites/default/files/eng/cop/06/doc/E06-28.pdf.
[38] CITES, CoP7 Doc. 7.28, p. 791 (1989), *available at* https://cites.org/sites/default/files/eng/cop/07/doc/E07-28.pdf.
[39] CITES, CoP6 Doc. 6.1 (1987), *available at* https://cites.org/eng/cop/06/doc/index.php.

estimated the population to be 9,782. (*Id.* at 647). Therefore, the export quota would allow the offtake of 5.1% of the population annually, which is wholly unsustainable.

Kenya:

Kenya was one of the first countries to receive a CITES leopard export quota in 1983, of 80;[40] the working documents discussed at the 1983 meeting are not readily available to facilitate the evaluation of the information used by the Parties when approving this quota. This quota has remained unchanged from 1983 to the present, although Kenya banned trophy hunting in 1977 (further demonstrating that the CITES export quotas are not based on the best available information).

Malawi:

Malawi was one of the first countries to receive a CITES leopard export quota in 1983, of 20 animals;[41] the working documents discussed at the 1983 meeting are not readily available to facilitate evaluation of the information used by the Parties when approving this quota. The quota was increased to 50 in 1992[42] when Malawi (and Botswana, Namibia, Zambia and Zimbabwe) proposed to transfer its population to CITES Appendix II with an export quota of 50; this proposal estimated Malawi's leopard population to be only 541 animals;[43] this means that the offtake for international trade could comprise as much as 9.2% of the population annually which is well beyond the reproductive capacity of the species. Nonetheless, while the Parties did not approve the proposed transfer, they did approve the increased export quota.

Mozambique:

Mozambique was one of the first countries to receive a CITES leopard export quota in 1983, of 60 animals;[44] the working documents discussed at the 1983 meeting are not readily available to facilitate evaluation of the information used by the Parties when approving this quota. In 2007, Mozambique proposed to the CITES Parties to increase their annual leopard export quota from 60 to 120.[45] The proposal cited the Martin and de Meulenaer (2008) estimate of 37,542 leopards in Mozambique in justifying the quota increase. (*Id.* at 2). The FWS stated that their tentative U.S. negotiating position was to oppose this proposal (FWS 2007):

> "In this document, Mozambique proposes to increase its export quota for leopard hunting trophies and skins for personal use from 60 to 120. The United States, as reflected in the document we submitted for CoP12 on establishing scientifically based quotas, and in accordance with Resolution Conf. 9.21 (Rev. CoP13), which calls for establishment of a scientific basis for proposed quotas, is very interested in ensuring that annual export quotas are established on strong

[40] CITES, CoP5 Doc. 5.23, p. 414 (1985), *available at* https://cites.org/sites/default/files/eng/cop/05/doc/E05-23.pdf.
[41] CITES, CoP5 Doc. 5.23, p. 414 (1985), *available at* https://cites.org/sites/default/files/eng/cop/05/doc/E05-23.pdf.
[42] CITES, CoP8 Resolutions Adopted, p. 26 (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/E-Resolutions.pdf.
[43] CITES, CoP8, Amendments to Appendices (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/prop/E08-Prop-EQ1_to_EQ5_Panthera.PDF.
[44] CITES, CoP5 Doc. 5.23, p. 414 (1985), *available at* https://cites.org/sites/default/files/eng/cop/05/doc/E05-23.pdf.
[45] CITES, CoP14 Doc. 14.37.1 (2007), *available at* https://cites.org/sites/default/files/eng/cop/14/doc/E14-37-1.pdf.

biological data. Mozambique's request does not provide enough biological information about the population of leopards or their prey in Mozambique to determine whether the population can be sustained under the proposed quota figure."

However, the U.S. opposition to this proposal was not noted for the record and the proposal was accepted.[46] Israel opposed the proposal due to lack of scientific rigor and that there was little recent information on population status, distribution and ecology.[47]

Namibia:

In 1992, Namibia (and Botswana, Malawi, Zambia and Zimbabwe) proposed to transfer its leopard population to CITES Appendix II with an export quota of 100.[48] The CITES Parties did not approve the change in status but did approve the quota. This quota was increased in 2004 to 250 based on a population estimated by Martin and de Meulenaer (1988) of 7,745 (which, it was said, could support a "safe harvest" of 332 animals,[49] or 4.2% of the population annually). The U.S. expressed support for this increased quota.[50]

South Africa:

South Africa was first granted a CITES leopard export quota in 1989, of 50 animals;[51] the working documents discussed at this meeting are not readily available to facilitate evaluation of the information used by the Parties when approving this quota. However, according to Grey (2011) the proposal was based on a 1.5% offtake of the 23,472 leopards estimated to be in South Africa according to Martin and de Meulenaer (1988). South Africa's quota was increased to 75 in 1992[52] based on a verbal request from the country during a CITES meeting and with no documentation or reasoning provided. Then South Africa's quota was increased from 75 to 150 in 2004 based on information in a document submitted by the country that did not provide a population estimate but claimed that the leopard population was increasing;[53] the U.S. supported the increased quota despite the poor science.[54]

The increase in the CITES quota for South Africa meant that the number of permits issued in Limpopo Province of South Africa, where most leopard trophy hunting occurs, increased from 35 to 50 in 2006 even though there were no accurate population data for leopards in the province and no assessments

[46] CITES, CoP14 Com. I Rep. 2 (Rev. 1) (2007), *available at* https://cites.org/sites/default/files/eng/cop/14/rep/E14-Com-I-Rep-02.pdf ; CITES CoP14 Plen. 4 (Rev. 2) (2007), *available at* https://cites.org/sites/default/files/eng/cop/14/rep/E14-Plen-4.pdf.
[47] CITES, CoP14 Com. I Rep. 2 (Rev. 1), *available at* https://cites.org/sites/default/files/eng/cop/14/rep/E14-Com-I-Rep-02.pdf
[48] CITES, CoP 8 Amendments to Appendices (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/prop/E08-Prop-EQ1_to_EQ5_Panthera.PDF.
[49] CITES, CoP13 Doc. 19.1, p. 2 (2004), *available at* https://cites.org/sites/default/files/eng/cop/13/doc/E13-19-1.pdf.
[50] CITES, CoP13 Com. 1 Rep. 1 (Rev. 1), p. 1 (2004), *available at* https://cites.org/sites/default/files/eng/cop/13/rep/E13-ComIRep1.pdf.
[51] CITES, CoP8 Doc. 8.20, p. 1 (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/doc/E-20.pdf.
[52] CITES, CoP8 Doc. 8.45.1, p. 1 (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/doc/E-45-45_1.pdf
[53] CITES, CoP 13 Doc. 19.2 (2004), *available at* https://cites.org/sites/default/files/eng/cop/13/doc/E13-19-2.pdf.
[54] CITES, CoP13 Com. 1 Rep. 1 (Rev. 1), p. 1 (2004), *available at* https://cites.org/sites/default/files/eng/cop/13/rep/E13-ComIRep1.pdf.

were undertaken to determine whether offtake is sustainable (Grey 2011). However, Pitman et al. (2015) found that, in Limpopo Province, legal leopard offtake for trophy hunting and as problem animals combined was not sustainable. In 2015, the South Africa Department of Environmental Affairs similarly concluded that: national and provincial leopard hunting quotas are arbitrary; there is no rigorous estimate of the leopard population size, nor are there reliable estimates of trends at the national or provincial level; poorly managed trophy hunting and excessive offtakes were major threats; trophy hunting is poorly managed and not effectively controlled in many areas, and is not managed consistently throughout the country; and there are indications that trophy hunting is unsustainable in several provinces due to excessive hunting quotas, focused hunting efforts, and the additive impact of leopard poaching and problem animal control (South Africa Department of Environmental Affairs 2015). The Department concluded that export of hunting trophies poses a high risk to the survival of the species in South Africa (South Africa Department of Environmental Affairs 2015), and announced that it would suspend issuance of leopard export permits for 2016 (Pinnock 2016).

Uganda:

In 2007, Uganda proposed to the CITES Parties to transfer its population from CITES Appendix I to II, with an annual export quota of 50 of skins for personal purposes and trophies.[55] The proposal contained no information on the size or trend of the leopard population in Uganda, and provided no scientific basis for the quota of 50, although it did cite the Martin and de Meulenaer (1988) estimate of 700,000 leopards in Africa. (*Id.* at 2). The FWS stated that their tentative U.S. negotiating position was to oppose this proposal to transfer the population to Appendix II and to oppose the export quota of 50 leopards per year (FWS 2007):

> *"*The proposal is not written in accordance with the format for proposals to amend the Appendices as per Annex 6 to Resolution Conf. 9.24 (Rev. CoP13). As a result, it does not demonstrate that the population in Uganda no longer meets the biological criteria for inclusion in Appendix I or which precautionary measure will be in place. The CITES Secretariat has suggested that Uganda request consideration of this proposal under agenda item 37 (Appendix-I species subject to export quotas) rather than item 68 (Proposals to amend the Appendices).
>
> "Uganda asserts that the proposed export quota of 50 leopards per year is a precautionary figure that will account for both animal control and sport hunting. The United States, as reflected in the document we submitted for CoP12 on establishing scientifically based quotas and in accordance with Resolution Conf. 9.21 (Rev. CoP13), which calls for establishment of a scientific basis for proposed quotas, is keen to ensure that annual export quotas are established on strong biological data. Although a quota of 50 is considered by Uganda as precautionary, the proposal does not provide any supporting biological information for this figure. Therefore, it cannot be determined whether the population can be sustained under the proposed quota figure."

At CITES CoP14, Uganda followed the suggestion of the CITES Secretariat and requested during the CoP14 plenary that the Parties grant a quota under Resolution Conf. 10.14 and it would withdraw its

[55] CITES, CoP14 Prop. 3 (2007), *available at* https://cites.org/sites/default/files/eng/cop/14/prop/E14-P03.pdf.

proposal to transfer its population to Appendix II.[56] This request was agreed and the Parties established a leopard export quota for Uganda of 28.[57] However, the U.S. opposition to this proposal was not noted for the record. Democratic Republic of the Congo (DRC) supported the proposal but expressed concern for the cross-border leopard populations it shared with Uganda, noting that the quota might create tension or foster poaching in the DRC.[58] Israel opposed the proposal on the basis of lack of recent population data.

United Republic of Tanzania:

The United Republic of Tanzania's CITES-established export quota increased from 60 in 1983[59], to 250 in 1985,[60] to 500 in 2002,[61] which remains in effect today. The working documents discussed at the 1983 meeting are not readily available to facilitate evaluation of the information used by the Parties when approving this initial quota. The 1985 quota was approved based on a document submitted by the United Republic of Tanzania that admitted "there are no scientific data to provide a background for evaluation of this proposal;"[62] the document provided no estimate of the size of the leopard population in the country and no information on how the quota would not be detrimental to the survival of the species; the document stated that the reason for the increased quota was the large number of leopards killed each year by the government to protect lives and property, which numbered 406 in 1983. Despite this lack of information, as admitted by the proponent itself, the CITES Parties approved the export quota increase. In 2002, the United Republic of Tanzania requested to double its CITES leopard export quota to 500 on the basis of the Martin and de Meulenaer (1988) estimate of 39,000 leopards in Tanzania which would allow a "safe harvest" of 5% or 1,827 leopard annually.[63] The U.S. negotiating position on the 2002 proposal was undecided;[64] the record of the CITES meeting does not indicate that the U.S. expressed any view on the proposal; this proposal was approved. In Tanzania, rising leopard hunting quotas drove a large-scale declines in leopard abundance particularly in populations outside of Selous; 400 leopards were trophy hunted annually at an average rate of 1.33 leopards/1000km^2 (Packer et al. 2010). A hunting quota of no more than 1 leopard/1000km^2 has been recommended in general and 3 leopards/1000km^2 in the Selous Game Reserve (Packer et al. 2010).

Zambia:

Zambia was one of the first countries to receive a CITES leopard export quota in 1983, of 80;[65] the working documents discussed at the 1983 meeting are not readily available to facilitate evaluation of

[56] CITES CoP14 Plen. 2. https://cites.org/sites/default/files/eng/cop/14/rep/E14-Plen-2.pdf
[57] CITES, CoP14 Com. I Rep. 2 (Rev. 1) (2007), *available at* https://cites.org/sites/default/files/eng/cop/14/rep/E14-Com-I-Rep-02.pdf ; CITES CoP14 Plen. 4 (Rev. 2) (2007), *available at* https://cites.org/sites/default/files/eng/cop/14/rep/E14-Plen-4.pdf ; CITES CoP14 Com. I. 6. (2007), *available at* https://cites.org/sites/default/files/eng/cop/14/com/E14-Com-I-06.pdf.
[58] CITES, CoP14 Com. I Rep. 2 (Rev. 1) (2007), *available at* https://cites.org/sites/default/files/eng/cop/14/rep/E14-Com-I-Rep-02.pdf.
[59] CITES, CoP5 Doc. 5.23, p. 414 (1985), *available at* https://cites.org/sites/default/files/eng/cop/05/doc/E05-23.pdf.
[60] CITES, CoP6 Doc. 6.27 (1987), *available at* https://cites.org/sites/default/files/eng/cop/06/doc/E06-27.pdf.
[61] CITES, CoP12 Com. I Rep. 1 (Rev.), p. 2 (2002), *available at* https://cites.org/sites/default/files/eng/cop/12/rep/ComI_1.PDF.
[62] CITES, CoP5 Doc. 5.23, p. 421 (1985), *available at* https://cites.org/sites/default/files/eng/cop/05/doc/E05-23.pdf.
[63] CITES, CoP12 Doc. 12.23.1.2 (2002), *available at* https://cites.org/sites/default/files/eng/cop/12/doc/E12-23-1-2.pdf.
[64] 67 Fed. Reg. 66464 (Oct. 31, 2002).
[65] CITES, CoP5 Doc. 5.23, p. 414 (1985), *available at* https://cites.org/sites/default/files/eng/cop/05/doc/E05-23.pdf.

the information used by the Parties when approving this quota. Zambia (and Botswana, Malawi, Namibia, and Zimbabwe) proposed to transfer its population to CITES Appendix II with an export quota of 300; this proposal estimated Zambia's leopard population to be 3,332 animals;[66] therefore, the offtake is approximately 9% of the population annually, which is excessive. The CITES Parties did not approve the transfer of the population to Appendix II, but did approve the quota increase which remains in effect today.

In May 2015, the Tourism and Arts Minister of Zambia announced that hunting of leopards (and lions) would be reinstated in 2016 after a moratorium that started in January 2013 (Zambia DNPW 2015a). The Minister stated that the ban on leopard hunting was based on "lapses in monitoring" that have been rectified and that the leopard population was and still is "healthy". Leopard hunting was to resume in 2015/2016 but with cautionary – though unspecified – quotas. Following the Minister's announcement, in May 2015, the Zambia Wildlife Authority (ZAWA) stated that there were, at minimum, an estimated 4,000 leopards in Zambia and that, according to surveys conducted by ZAWA, big cats are found in three ecosystems in the country: Luangwa Valley, Kafui and Lower Zambezi (Zambia DNPW 2015b).

Additionally, Ray (2011) conducted the first-ever population survey of leopards in Zambia, in Luambe National Park and a portion of an adjacent Game Management Area (GMA), located within the Luangwa Valley, in 2006-2008, when trophy hunting was permitted. Ray noted that it was the opinion of park managers and professional hunters in the area that the leopard was found in "very high abundance". Using camera traps, Ray found that only 12 leopards lived in the National Park in 2008 and 10 in the portion of the GMA studied, with densities of 3.36/100 km^2 in the former and 4.79/100 km^2 in the latter. Ray stated that only one other leopard study, in South Africa, had found a lower density than that she found in the Park and this other study was not in a protected area. The offtake of leopards in the GMA was 8-12 leopards per year, and considered by Ray to be unsustainable. Ray recommended an offtake of 2 leopards / 1000 km^2 in the area (instead of 12 / 2,555 km^2, among other measures. Ray recommended that loss of income from hunting could be addressed by increasing the price of trophies.

Ray explicitly notes, "Until the 1980s, the leopard was one of the most threatened species listed by IUCN. This changed with the study of MARTIN & DE MEULENAR (1988), who suggested a population of leopards of about 700,000 in Africa, which was criticized and largely discredited from the scientific community (MARTIN & DE MEULENAR 1989). Members of the IUCN Cat specialist group mentioned their doubts of the estimates from this habitat model (MARTIN & DE MEULENAR 1989). Nevertheless, the result was that CITES increased the international hunting quotas for the African leopard, despite the lack of reliable continent-wide estimates of its population size."

Zimbabwe:

Zimbabwe received its first CITES-established export quota of 80 leopards in 1983;[67] the working documents discussed at the 1983 meeting are not readily available to facilitate evaluation of the information used by the Parties when approving this quota. This quota was increased to 350 in 1985 based on information provided by Zimbabwe that there were an estimated 38,000 leopards in the

[66] CITES, CoP8 Amendments to Appendices (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/prop/E08-Prop-EQ1_to_EQ5_Panthera.PDF.
[67] CITES, CoP5 Doc. 5.23, p. 414 (1985), *available at* https://cites.org/sites/default/files/eng/cop/05/doc/E05-23.pdf.

country.[68] The quota was increased to 500 in 1987; however, there is no record of Zimbabwe having submitted a supporting statement to the meeting where this quota was established.[69] No summary record of this meeting is available on the CITES website. However, 1987 is when the draft report of Martin and de Meulenaer (1987) was also presented to the Parties and this report was apparently used to establish or increase a number of CITES leopard quotas, including that of Zimbabwe, where the authors estimated the population to be 16,064. (*Id.* at 647). (It is of interest to note that, in 1992, Zimbabwe (and Botswana, Malawi, Namibia, and Zambia) proposed to transfer its population to CITES Appendix II with an export quota of 500; this proposal estimated Zimbabwe's leopard population to be only 1,379 animals).[70]

Du Preez et al. (2014) confirmed that the 500 figure was the result of using the flawed Martin and de Meulenaer model as a basis which over-estimated the number of leopards in Zimbabwe at 16,064. Today, as then, there is no reliable estimate of Zimbabwe's national leopard population and leopard numbers are not monitored in most of the areas where they are hunted (Du Preez et al. 2014). Yet, more leopards are hunted in Zimbabwe than any other country with up to 882 leopard hunting permits issued annually (although the average number of successful hunts each year, 261, does not fill the allocation (Du Preez et al. 2014)). Leopard trophy hunting offtakes have repeatedly failed to fill the allocation, possibly indicating that there are not enough leopards remaining and that leopard hunting in Zimbabwe is unsustainable, especially combined with other threats such as habitat loss (Du Preez et al. 2014). The large leopard quota in Zimbabwe is unjustified because there has been no rigorous scientific research undertaken to estimate the national leopard population (Du Preez et al. 2014). Hunting of female leopards is prohibited in Zimbabwe and there is a skull size minimum that must be met for exports to be allowed (Lindsey and Chikerema-Mandisodza 2012). In Zimbabwe, leopard hunting occurs without a national leopard management plan and leopard hunting quotas exceed the CITES export quota (Lindsey and Chikerema-Mandisodza 2012).

CITES Export Quotas Are Not Subject to Review

There has never been a rigorous review of the scientific basis of the CITES-established leopard export quotas, nor are these quotas reviewed on an on-going basis to determine if changes are necessary to protect leopards. Given the increasing imperilment of the species given the recent IUCN Red List assessment, it is high time for a review to be conducted and for a process of routine review to be established, and in the absences of such review the Service must exercise the precautionary principle when evaluating import permit applications for leopard parts.

In its 2015 non-detriment advice for Mozambique, the Service asserts that "CITES Resolution Conf. 10.14 was revised at CoP16. It directed Parties to report on their implementation of this resolution (Decision 16.76; CITES 2013c) and the Secretariat was directed to compile and present to the Standing Committee a summary of those reports (Decision 16.77; CITES 2013d). These decisions will enable Parties to monitor more effectively the implementation of quotas for leopard hunting trophies and skins for personal use. By Notification to the Parties No. 2015/042 (dated 30 July 2015), the Secretariat invited

[68] CITES, CoP5 Doc. 5.23, p. 16 (1985), *available at* https://cites.org/sites/default/files/eng/cop/05/doc/E05-23.pdf.
[69] CITES, CoP6 Doc. 6.1 (1987), *available at* https://cites.org/eng/cop/06/doc/index.php.
[70] CITES, Cop8 Prop. EQ5, p. 11 (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/prop/E08-Prop-EQ1_to_EQ5_Panthera.PDF.

Parties to submit their leopard report for compilation and submission by the CITES Secretariat to SC66 (CITES 2015c)."

However, Resolution Conf. 10.14, as amended, does not direct Parties to report on implementation of the resolution. And the related Decisions refer only to the tagging and tracking of leopard skins in trade, and not to the scientific basis of export quotas or issues related to the non-detriment finding. Decision 16.76 states, "Parties shall, by the 66th meeting of the Standing Committee, submit a report to the Secretariat on the implementation of the system as set out in paragraphs c) to j) of Resolution Conf. 10.14 (Rev. CoP16), including details of any problems with the processing of CITES documents, the management and tracking system in general, and the system in place to replace lost or damaged tags." Decision 16.77 states, "The Secretariat shall, at the 66th meeting of the Standing Committee, and subject to the availability of funds: a) provide a summary report to the Standing Committee based on the reports supplied by the Parties concerned in the implementation of Resolution Conf. 10.14 (Rev. CoP16); and b) on the basis of experience gained with the operation of the tagging system set out in paragraphs c) to j) of Resolution Conf. 10.14 (Rev. CoP16), make recommendations, as appropriate, to the Standing Committee regarding the feasibility and appropriateness of extending the system for use with other CITES-listed species."

At the 66th meeting of the CITES Standing Committee, the Secretariat reported that only three countries, South Africa, Slovakia, the U.S., had submitted comments in response to the Notification to the Parties, and none reported any problems with implementation.[71] South Africa advised that it would not allow females to be hunted beginning in 2015; that hunting reports containing details relating to the hunt, including information relating to body measurements, have to be submitted to the issuing authority immediately after the hunt; and that they have initiated the development of national guidelines for the allocation, management and monitoring of leopard trophy quotas, in order to promote a more uniform approach across the nine provinces in the country.

The Enduring Problem of the Martin and de Meulenaer Study

It is important to elaborate on the Martin and de Meulenaer (1987, 1988) study and criticisms of it because, from 1987 to the present, the FWS and authorities in other countries have used the results of this study to make non-detriment findings required for issuance of leopard export and import permits in accordance with CITES, as well as to provide the basis for CITES-established leopard export quotas. The following are some of the regulatory decisions based on the results of this study (see also Annex 1 to this petition):

- **2015**: FWS issued a non-detriment finding for the import to the U.S. of sport-hunted leopard trophies from Mozambique (FWS 2015).
- **2007**: CITES CoP14 increased the leopard export quota for Mozambique from 60-120.[72]
- **2004**: CITES CoP13 increased the leopard export quota for Namibia from 100 to 250 and South Africa from 75 to 150.[73]

[71] CITES, SC66 Doc. 40, *available at* https://cites.org/sites/default/files/eng/com/sc/66/E-SC66-40.pdf.
[72] CITES CoP 14 Doc. 37.1 (2007), *available at* https://cites.org/sites/default/files/eng/cop/14/doc/E14-37-1.pdf.

- **2002**: CITES CoP12 increased the leopard export quota for Tanzania from 250 to 500.[74]
- **1994**: CITES CoP9 increased the leopard export quota for Botswana from 100 to130, and that of South Africa from 50 to 75.[75]
- **1992**: At CITES CoP8, Botswana, Malawi, Namibia, Zambia and Zimbabwe proposed to transfer *Panthera pardus* from CITES Appendix I to Appendix II and to establish export quotas for eleven countries.[76] The proposals were rejected by vote, but the quotas in the proposals were approved. CoP8 adopted a new leopard quota of 100 for Namibia and increased the quota for Malawi from 20 to 50.[77]
- **1989**: CITES CoP7 adopted a new leopard export quota of 50 for South Africa and increased the quota for Botswana from 80 to 100.[78] There is no documentation from CoP7 to support the establishment of the quota for South Africa or the increase of the quota for Botswana.
- **1987**: CITES CoP6 adopted a new leopard export quota of 40 for Central African Republic, 500 for Ethiopia, and increased the quota for Zimbabwe from 350 to 500.[79] It should be noted that Ethiopia was not a CITES Party in 1987 when the leopard export quota was adopted and there is no documentation from CoP6 to support the establishment of this quota.

An abbreviated version of Martin and de Meulenaer's study, a *Survey of the Status of the Leopard* (Panthera pardus) *in Sub-Saharan Africa*, appeared first as an Annex to Document 6.26,[80] on *Trade in Leopard Skins*, discussed at the 6th meeting of the Conference of the Parties to CITES (CoP6), in 1987 (Martin and de Meulenaer 1987). The full study was subsequently published in 1988 (Martin and de Meulenaer 1988).

It must be noted at the outset that, as is explained in CITES CoP6 Document 6.26, the study was funded by Safari Club International and the American Fur Institute, which should immediately raise suspicions of potential bias, given the funders' economic interests in the outcome of the study. And, as noted above, in 1992 the document was used to support a proposal to transfer *Panthera pardus* from CITES Appendix I to Appendix II, in order to allow international commercial trade in leopard skins; the proposal was not approved.

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[73] CITES, CoP13 Doc. 19.1 (2004), *available at* https://cites.org/sites/default/files/eng/cop/13/doc/E13-19-1.pdf; CITES, CoP13 Doc. 19.2 (2004), *available at* https://cites.org/sites/default/files/eng/cop/13/doc/E13-19-2.pdf ; CITES, CoP13 Com. I Rep. 1 (Rev. 1) (2004), *available at* https://cites.org/sites/default/files/eng/cop/13/rep/E13-ComIRep1.pdf.

[74] CITES, CoP12 Com. I. Rep. (Rev.) (2002), *available at* https://cites.org/sites/default/files/eng/cop/12/rep/ComI_1.PDF; CITES, CoP12 Doc. 23.1.2 (2002), *available at* https://cites.org/sites/default/files/eng/cop/12/doc/E12-23-1-2.pdf.

[75] CITES, CoP10 Doc. 10.41 (1997), *available at* https://cites.org/sites/default/files/eng/cop/10/doc/E10-41to43.pdf.

[76] CITES, CoP8 Amendments to Appendices (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/prop/E08-Prop-EQ1_to_EQ5_Panthera.PDF.

[77] CITES, CoP8 Com.I 8.1 (Rev.) (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/E-Com-I.pdf.

[78] CITES, CoP8 Doc. 8.20 (1992), *available at* https://cites.org/sites/default/files/eng/cop/08/doc/E-20.pdf.

[79] CITES, CoP6 Doc. 6.28 (1987), *available at* https://cites.org/sites/default/files/eng/cop/06/doc/E06-28.pdf; CITES, CoP Doc. 7.27 (1989), *available at* https://cites.org/sites/default/files/eng/cop/07/doc/E07-27.pdf.

[80] CITES, CoP6 Doc. 6.26 (1987), *available at* https://cites.org/sites/default/files/eng/cop/06/doc/E06-26.pdf.

Martin and de Meulenaer used a computer modelling exercise, which correlated leopard density with rainfall, to derive estimates of the leopard population in 41 sub-Saharan African countries and a total African leopard population of 714,000 animals (**Figure 6**).

Figure 6. Martin and de Meulenaer leopard population estimates.

#	COUNTRY	PREDICTED POPULATION	FACTOR	FINAL POPULATION
1	ANGOLA	62,486		62,486
2	BENIN	4,915	0.1	492
3	BOTSWANA	7,729		7,729
4	BURKINA FASO	1,693		1,693
5	BURUNDI	495		495
6	CAMEROUN	41,896		41,896
7	CENTRAL AFRICAN REPUBLIC	41,546		41,546
8	CHAD	3,125		3,125
9	CONGO	32,394		32,394
10	DJIBOUTI	25		25
11	EQUATORIAL GUINEA	5,040		5,040
12	ETHIOPIA	9,782		9,782
13	GABON	38,463		38,463
14	GAMBIA	33		33
15	GHANA	5,990	0.1	599
16	GUINEA	15,689	0.1	1,569
17	GUINEA BISSAU	682	0.5	341
18	IVORY COAST	9,522		9,522
19	KENYA	10,207		10,207
20	LESOTHO	420		420
21	LIBERIA	5,031	0.1	503
22	MALAWI	4,530		4,530
23	MALI	3,365		3,365
24	MAURITANIA	230		230
25	MOZAMBIQUE	37,542		37,542
26	NAMIBIA	7,745		7,745
27	NIGER	454		454
28	NIGERIA	18,963	0.5	9,481
29	RWANDA	388		388
30	SENEGAL	781		781
31	SIERRA LEONE	2,803	0.1	280
32	SOMALIA	2,123		2,123
33	SOUTH AFRICA	23,472		23,472
34	SUDAN	22,035		22,035
35	SWAZILAND	805		805
36	TANZANIA	39,343		39,343
37	TOGO	2,537	0.1	254
38	UGANDA	4,292		4,292
39	ZAIRE	226,192		226,192
40	ZAMBIA	46,369		46,369
41	ZIMBABWE	16,064		16,064
	TOTALS	757,196		714,105

Source: Martin and de Muelenaer (1988), p. 8.

Importantly, since 2008, the IUCN has found that "there are no reliable continent-wide estimates of population size in Africa, and the most commonly cited estimate of over 700,000 leopards in Africa (Martin and de Meulenaer 1988) *is flawed*" (Henschel et. al. 2008) (emphasis added). This opinion of the world's foremost leopard experts alone should be reason enough for regulators to avoid using the results of the Martin and de Meulenaer report as the biological basis for decision-making regarding leopards. Leopard scientists continue to point out the shortcomings of Martin and de Meulenaer today: as noted above, the most recent publication on leopard status and distribution (Jacobson et al. 2016a) stated,

"Earlier Africa-wide assessments of population size (Myers, 1976; Eaton, 1977; Martin & De Meulenaer, 1988; Shoemaker, 1993) employed questionable population models based on scant field data and were widely criticized as being unrealistic (Hamilton, 1981; Jackson, 1989; Norton,1990; Bailey, 1993)" (p. 2).

Additionally, soon after the study by Martin and de Meulenaer became available, it was criticized by leopard experts in the IUCN/SSC Cat Specialist Group (Jackson et al. 1989) who rejected the estimates of leopard numbers in Africa given in the study. This paper was included as an information document at CITES CoP7[81] held in 1989 which put regulators on notice that the Martin and de Meulenaer study should not be used as a scientific basis for making regulatory decisions. A summary of this paper states:

> "Leading leopard specialist members of the IUCN/SSC Cat Specialist Group and other experts have reviewed the SURVEY OF THE STATUS OF THE LEOPARD IN SUB-SAHARAN AFRICA by Martin and de Meulenaer. They *reject the computer estimates of leopard numbers in Africa*, although they generally agree that there are still many leopards, especially in certain areas. Most reviewers felt they lacked competence to criticize the computer model as such, but, in common with those who are expert, *they challenged the data input*. The *basic relationship claimed between rainfall and prey and, therefore, leopard populations, was discounted for several specific types of habitat and areas*. Reviewers with extensive field experience in leopard habitat declared that no leopard survive in many areas assumed to be suitable in the model. *Where estimates of leopard numbers in specific places have been made by the reviewers they are generally less than half those predicted by the computer model*" (emphasis added).

Jackson et al. (1989) contains comments of individual co-authors, including:

- Dr. Marcus Borner, Regional Represenative, Frankfurt Zoological Society, Arusha, Tanzania who said, "The computer model has not produced an accurate estimate of the existing or potential leopard population because the data are either guesswork, hearsay or otherwise imprecise…Unscientific data have been fed through very complex scientific methods to make the outcome look serious…A short and superficial survey like this one could not have produced anything more precise than informed guesswork."
- Professor J. du P Bothma, Chair of Wildlife Management, University of Pretoria, South Africa who said, "The database upon which the assumptions are made…is often non-existent. Thus no matter how complicated or good the model the raw data simply do not allow the type of conclusions reached. In South Africa there are many areas suitable as leopard habitat which are simply not occupied by leopards any more."
- Professor Dr. Paul Leyhausen, formerly of the Max Planck Institut fur Verhaltensphysiologie, Germany, who said, "A model, however loosely it seems to fit reality, it is not itself biological reality…The computer model depends on just one variable: prey availability…If prey availability were the sole yardstick, lion numbers in the Serengeti should be much higher in average years than they actually are…The model in question is a theoretically interesting exercise. But it would be hazardous to the extreme to assume that actual leopard numbers conform with it even remotely, let alone to make it the basis of practical policy."

[81] CITES, CoP7 Doc. 3 (1989).

- Dr Peter Norton, Chief Directorate Nature and Environmental Conservation, Kimberley, South Africa, who said, "Much of the report is based on so-called "estimates" of population numbers which I find highly questionable, if not misleading. The model is based on a number of assumptions that are not substantiated by the results of my research work on leopards in the Cape Province of South Africa." Norton specifically criticized four of these assumptions: 1) "If natural habitats are relatively unaltered, leopards will be found there": Norton states that leopards have been "completely eradicated" from certain areas despite the fact that none of the areas have been substantially altered, but leopards had been hunted out. 2) "If leopard are reported they will be at a rainfall-related "carrying capacity": Norton states that adult male leopards make "forays" some distance out of their normal home range but he doubts that their transient presence in these areas indicates that the population in these areas is at "carrying capacity." 3) "Leopard densities are closely correlated with rainfall, irrespective of prey densities": Norton notes that most of the data points used in the Martin and De Meulenaer model are from reserves or hunting areas in savannah habitats where suitable leopard prey may exist; however, he provides examples from his own studies of other types of habitats (fynbos and forests) where suitable leopard prey densities are extremely low. Norton also notes that low biomass of leopard prey animals is likely to occur in high rainfall tropical forests. Critically, Norton notes that the Martin and De Meulenaer study uses a study by Coe et al. (1976) on the relationship between large herbivore biomass and rainfall to support their contention that there is a relationship between leopard density and rainfall; however, Norton notes that this is based on large herbivores, not the small mammals that leopards prey upon. Norton also notes that bushmeat hunting has nearly eliminated small animals preferred as prey by leopards and that although Martin and De Meulenaer recognize this they modified only some of the figures used in their calculations. 4) "Rainfall figures used in the correlation are representative of the study areas": Norton thought that the rainfall figures may be accurate for flatter areas but said, "I seriously question the accuracy of the rainfall figures used in the regression for areas with more varied topography, such as mountains" and provided an example from his study area to demonstrate the fact that the model's predictions do not hold up against field study evidence. Regarding the total number of leopards Martin and De Meulenaer estimated for South Africa (23,472), Norton said it is "totally unrealistic." Norton also stated, "I seriously doubt the regression's validity in mountain or forest habitats, or even in savanna habitats outside of reserves that have a high human population. The regression is just too good to be true. With all the variability in different habitat types, plus the fact that some of the rainfall figures are suspect, I just cannot accept that a wide range of biological systems spread throughout Africa will react so predictably." Regarding the confidence limits in Martin and De Meulenaer, Norton states they "have no biological reality at all. In fact they are dangerous in that they give an aura of scientific respectability that they do not deserve." Norton compared estimates of Martin and De Meulenaer for habitats in South Africa with his best guesses and found that the estimates far exceeded, by ten-fold, the number of leopards he thought existed: 23,470 versus 2,390 (**Figure 7**).

Figure 7. Norton's leopard population estimates.

Table Norton's guesses of the possible numbers of leopards in the different vegetation types (White 1983) in South Africa, compared to Martin & de Meulenaer's (1988) 'estimates'

White's vegetation type number	Description	Norton's guess	M & de M's 'estimate'
16c	Coastal forest transition	200	3 002
19a	Afromontane	50	5 733
20	Highveld grassland transition	20	1 307
24	Scrub forest	50	2 105
28	Mopane woodland	200	771
29d	Woodland	500	3 459
29e	Tongaland bush	200	555
34	Scrub/highveld transition	50	374
35a	Acacia savanna	10	77
39	Evergreen bush & thicket	50	1 417
44	Kalahari Acacia	20	1 335
48	Tongaland bush	20	206
50	Fynbos	600	1 489
51	Karoo/Namib	20	291
52	Succulent karoo	20	67
53	Dwarf karoo	0	161
56	Kalahari/karoo	300	337
57a	Grassy karoo	0	37
57b	Karoo/highveld transition	10	390
58	Highveld	50	331
66	Altimontane	0	17
74	Namib	20	7
77	Mangrove swamp	0	5
	TOTAL	2390	23 470

Source: Jackson et al. 1989, p. 7.

- Dr. M.K. Ranjitsinh, Director of Wildlife Conservation, Government of India who said, "To work out a population based on an arithmetical calculation in one place and then extrapolating it elsewhere has posed many a problem, and the figure can be totally wrong because of so many factors. And when you are extrapolating it for a continent as large as Africa with its diverse climatic, geomorphical, demographic and other considerations, I would be extremely wary of the result … if the figures are accepted and a harvest quota based upon them is adopted, it will become an accepted guideline and parameter for future harvest and one will not know the results until the population of the leopard nose-dives, in places perhaps beyond redemption."
- Vivian Wilson, Director, Chipangali Wildlife Trust, Zimbabwe questioned if the number of leopards can be estimated based on habitat and rainfall stating, "There are vast areas in Africa where there is a lot of suitable habitat, a good food supply and also high rainfall, and yet leopards are either absent or occur in low numbers." Wilson described her experience in Central African Republic where rainfall is high, and there are large areas of ideal leopard habitat and large numbers of leopard prey, but low numbers of leopards due to them having been killed by people many years previously. Wilson provided two other examples to support her conclusion. Wilson said that there are fewer than 10,000 leopards in Zimbabwe compared to 16,064 estimated by Martin and De Meulenaer. Wilson guessed at population sizes in eight countries, based on her experience, and compared them to the estimates of Martin and De Meulenaer, and found that her total population figure was three times less than theirs (**Figure 8**).

Figure 8. **Wilson's leopard population estimates.**

Country	Wilson's guess	Martin & de Meulenaer		
		Predicted Pop.	Lower limit	Upper limit
South Africa	± 10 000	23 472	12 910	42 954
Zimbabwe	± 10 000	16 064	8 335	29 256
Botswana	5 000 ?	7 729	4 251	14 144
Malawi	± 2 000	4 530	2 492	8 290
Zambia	15 000 ?	46 369	25 503	84 855
C.A.R.	± 10 000	41 546	22 435	76 445
Ivory Coast	± 7 000	9 522	5 142	17 520
Sierra Leone	± 100	2 805	1 402	5 382
T O T A L :	59 100	152 035	82 470	278 826

Source: Jackson et al. (1989), p. 10.

- An anonymous co-author stated, "there seems to be a conceptual flaw in the model" in that there is "abundant wildlife literature" that indicates that even if habitat is suitable one cannot expect to find a species there. This author further states that there are "very many and very extensive areas where they would fully expect, according to their model, to find abundant leopards, in fact there would be zero leopards … I can think of more than a dozen extensive areas in each of many countries…where the model would postulate sizable numbers of leopard, but none has been seen, or surmised to exist, since the late 1960s." Anonymous goes on to state that many other factors besides habitat need to be taken into account including activities and density of human communities, types of livelihoods of such communities, availability of poison, size and scope of the skin market, degree of known poaching, conservation capacity, corruption, official ineptitude, public awareness, and conservation commitment.

In another early review of the study of Martin and de Meulenaer, one of the co-authors of Jackson et al. (1989), Norton (1990), published his full analysis, which stated,

> "Results of ecological studies on leopards in the Cape Province, South Africa, carried out by the Chief Directorate: Nature and Environmental Conservation, suggest that some of the assumptions on which the population estimates are based are highly suspect, and that the population figures may be unrealistically high. The recommendations for leopard conservation and management should therefore be viewed with caution, *especially hunting quotas based on a proportional offtake from the 'estimated total' population*" (p. 218) (*emphasis added*).

Norton further states, similar to his comments in Jackson et al. (1989):

> "As I interpret it, the model is largely based on the following questionable assumptions: 1) that if natural habitats are unaltered, leopards will be found there; 2) that if leopards are reported, they will be at a rainfall-related 'carrying capacity'; 3) that all leopard densities are closely correlated with rainfall, irrespective of prey densities; 4) that the rainfall figures used in the correlation are representative of the study areas."

Norton studied each of these assumptions and found that in South Africa: 1) leopards have been extirpated—"hunted out"—from areas where habitat has not been substantially altered; 2) individual leopards, especially male leopards, may journey over 100 km from the nearest known leopard population but one leopard is not indicative of the presence of a population of leopards at 'carrying capacity'; 3) most of the data points in Martin and de Meulenaer's regression are from savanna habitats, but in other habitats (forests, including rain forests) the density of prey animals available for leopards is low to extremely low. Norton also questions the use by Martin and de Meulenaer of Coe et al. (1976) study of the relationship between large herbivore biomass and rainfall because it is based on large herbivore numbers mostly in savanna habitats, whereas leopard prey consists of small mammals. Norton notes that in some areas bushmeat hunting has eliminated small mammals making it difficult for leopards to survive; and 4) Norton questions the accuracy of the rainfall figures used in the Martin and de Meulenaer for all areas and provides a specific example from one of his study areas.

Norton states that he has been reluctant to provide leopard estimates for the region of South Africa in which he works, or for the country as a whole, because these would be more likely to be "a misleading guess" (p. 219). After closely examining Martin and de Meulenaer's estimates for South Africa, Norton found them to be "far too optimistic!" (p. 219, punctuation as in original). In one area Norton estimated to hold "no more than a hundred or so leopards", Martin and de Meulenaer estimated a population of 4,419. In another area where Norton estimated there to be one or two hundred leopards at the most, Martin and de Meulenaer estimated a population of 9,000. In a final area, Norton thought there were no more than "a handful" of leopards but Martin and de Meulenaer estimated a population of 1,335 leopards. In summation, Norton states, "I should be very surprised if there are more than two or three thousand leopards in South Africa at the most. As far as I am concerned, an estimate of over 20 000 is just plain nonsense!" (p. 219, punctuation as in original). Norton concludes, "I therefore suggest that the 'estimates' of leopard populations in the different countries in Africa be rejected, and all recommendations involving these estimates be viewed with extreme caution."

Thus, by 1990, it should have been explicitly clear to FWS that leopard experts – including one of the original authors (Martin) – found the original Martin and de Meulenaer report to be flawed. Yet, from 1989 through 2015, FWS and the CITES Parties have used the report by Martin and de Meulenaer as the scientific basis for establishing CITES export quotas and issuing CITES export and import permits.

More recently, Henschel (2008, 2009) criticized Martin and de Muelenaer for assuming that the Congo Basin[82] was a leopard stronghold based on unaltered habitat and supposedly prey-rich habitat. Henschel said that although the Congo Basin comprised only 12% of the leopard's range in Africa, Martin and de Meulenar estimated that it contained 40% of the leopard population of Africa. Henschel (2008, 2009) noted that other authors, Jackson et al. (1989) and Bailey (1993), also criticized Martin and de Meulenaer because the biomass of potential prey is actually lower in forests as compared to savannah. Henschel (2008) writes,

> "While it is widely accepted that in savannas ungulate biomass is positively correlated with rainfall (Coe et al., 1976, East, 1984) and that in these open habitats leopard density is linked with prey biomass (Marker and Dickman, 2005, Hayward et al., 2007), it has to be understood that although ungulate biomass increases with rainfall it decreases with forest cover, as a high proportion of the primary productivity is in the canopy and only available to relatively small arboreal mammals (Robinson and Bennett, 2004). Yet it is rainforest habitat that was considered optimal leopard habitat by Martin & de Meulenaer in their 1988 status survey, who considered the forests of the Congo Basin an absolute stronghold for the species that would harbour and estimated 40% of Africa's leopards, and predicted extremely high population densities for this habitat type of up to 40 individuals/100 km^2 (Martin and de Meulenaer, 1988). These population density estimates have since been used to produce population size estimates for central African countries, but the results were widely considered to be exaggerated (e.g. Jackson, 1989, Norton, 1990). Bailey (1993) and Jenny (1996) are among several authorities who have argued that since terrestrial mammalian prey biomass is lower in rainforest than in savannah environments, leopard densities should be correspondingly lower. Perhaps most importantly, Martin and de Meulenaer's

[82] The Congo Basin spans across six countries—Cameroon, Central African Republic, Democratic Republic of the Congo, Republic of the Congo, Equatorial Guinea and Gabon.

> model failed to account adequately for reduction of wild prey as a factor lowering leopard density, which could lead to overestimates especially in the Congo Basin, where forest wildlife suffers from a high demand for wild game for both local and commercial use (Wilkie and Carpenter, 1999)."

Henschel (2009) stated, "The figures published by Martin & de Meulenaer (1988) are still quoted today, and remain the chief source of information for African governments proposing to open or raise harvest quotas for trophy hunting of leopards. However, evidence is mounting that leopards have already disappeared from a number of forest sites on the fringes of the Congo Basin." Henschel (2009) notes that these sites are densely populated with people, that people consume medium-sized wild mammals as bushmeat, that such mammals are preferred leopard prey, and that such prey populations are depleted near densely populated areas. Henschel (2009) hypothesizes that this has led to reduced and even extirpated leopard populations in such areas. Henschel's study of leopards in Gabon found a strong correlation between commercial bushmeat hunting near settlements and the local disappearance of leopards (Henschel 2009).

Marker and Dickman (2005) found that, in Namibia, rainfall was not directly related to leopard density. They found leopard densities to be lower outside of reserves despite there being no marked difference in prey biomass between protected and unprotected areas; the authors explained that "the lower leopard density outside reserves was probably a result of local persecution by landowners, as leopards are commonly considered a threat both to people and their stock." (p. 113). Marker and Dickman note,

> "This is one of the main objections raised to the leopard population estimates made by Martin & de Meulenaer (1988), who assumed that where leopards occur, they should be at the carrying capacity determined by rainfall, without considering factors such as local persecution (Norton 1990). Although leopard density appeared to be indirectly linked to rainfall via the relationship with prey biomass, the overall determinants of leopard density and spatial ecology are likely to be a complex set of factors including an artificial 'carrying capacity' determined by the attitudes of local communities."

In a presentation delivered at the Large Carnivore Workshop, 3-4 November 2010, Henschel (2010) estimated the leopard population of Gabon to be 5,910 compared to the Martin and de Meulenaer estimate of 38,463. Regarding Martin and de Meulenaer's estimate of 714,000 leopards in sub-Saharan Africa, Henschel said, "Do not believe it!"

Chapman and Balme (2010) noted that Martin and de Meulenaer estimated the sub-Saharan leopard population to be 714,000 and the South African population to be 23,000 and said that this is "widely considered to be a gross overestimate" and "South Africa's true leopard population size, while still unknown, is thought to be an order of magnitude less" (p. 114). The authors state, "The detrimental consequences of basing management decisions on such unreliable estimates are patently obvious." (*id.*)

Ray (2011) noted that the Martin and de Meulenaer study has been "critically debated among specialists as presenting a high overestimate and has thus been rejected." (p. 1)

Swanepoel et al. (2014) used population modelling to estimate the leopard population size of South Africa which they estimated to be 4,476 leopards, far below the 23,472 leopards Martin and de Meulenaer estimated.

Du Preez et al. (2014) expressed concern about an increase in the CITES leopard export quota for Zimbabwe from 80 leopards per year to 500 being established based on Martin and de Meulenaer's calculations which "were based on the flawed assumption that leopards occurred at the highest possible density in all habitats" and "used rainfall data to estimate abundance; calculating what seems likely to have been an overestimate of Zimbabwe's leopard population at 16,064." (p. 153-154)

Braczkowski et al. (2015b) expressed concern that while leopards are one of the most sought trophies, leopard hunting quotas are based on "expert guesstimates" or "an over-simplified model that correlated leopard density to rainfall [cite to Martin and de Meulenaer] but ignored important factors such as anthropogenic mortality and prey availability."

Strampelli (2015), who studied leopards in Mozambique, stated there are no reliable continent-wide estimates of population size for the species and note that Martin and de Meulenaer was "obtained through a model that correlated leopard numbers with rainfall but omitted information on prey density or human related mortality, has been heavily criticized and is widely considered by specialists to be flawed." (p. 5-6). Strampelli states that the "over-simplified" Martin and de Meulenaer estimate of 37,542 leopards in Mozambique was used as justification for the 2007 increase in the CITES leopard export quota from 60 to 120. Strampelli further states,

> "Martin & de Meulenaer (1988) estimated a country-wide population for Mozambique of 37,542 leopards, based on density of 0.10/km2 (10 leopards per 100 km^2). This estimate was recently successfully quoted as a justification for an export quota increase (CITES 2007). The same report also states that "it is clear that much of Mozambique (perhaps up to 80%) falls within the category capable of supporting leopards at densities of between 0.03 and 0.1 per km²" – i.e. between 3.00 and 10.00 per km^2. Such estimates have already been universally rejected as exaggerated and inaccurate by experts (Balme et al. 2010b); indeed, that density in XGR, one of the better protected areas of the country, was estimated at 1.53/100 km^2 suggests that it is unlikely that many areas in Mozambique experience leopard densities such as those quoted in the quota revision application. Although some landscapes will have higher primary productivity levels, it seems plausible that the high levels of anthropogenic disturbances common in much of the country (Hatton et al. 2001) likely more than counteract this."

A study by Jacobson et al. (2016a) on leopard status and distribution stated, "Earlier Africa-wide assessments of population size (Myers, 1976; Eaton, 1977; Martin & De Meulenaer, 1988; Shoemaker, 1993) employed questionable population models based on scant field data and were widely criticized as being unrealistic (Hamilton, 1981; Jackson, 1989; Norton,1990; Bailey, 1993)." (p. 2)

Therefore, the existing CITES export quotas and domestic implementing regulations are completely outdated, scientifically indefensible, and inadequate to protect the leopard in southern Africa, and the exploitation facilitated by these regulations endangers the continued existence of the African leopard.

2. African Leopard Range Country Mechanisms

The significant decline in both the range and, in many cases, the size of leopard populations due to habitat destruction, loss of prey, excessive and poorly regulated trophy hunting, poaching for commercial trade, and human-leopard conflict demonstrates that many range States do not have adequate regulatory mechanisms to protect leopards.

There are several African regional agreements that have relevance to African leopards: the African Union's African Convention on the Conservation of Nature and Natural Resources, 1968;[83] the Revised African Convention on the Conservation of Nature and Natural Resources, 2003;[84] and the Protocol on Wildlife Conservation and Law Enforcement of the Southern African Development Community, 1999.[85]

The African Union (AU), formed in 1992, is an intergovernmental organization comprising 54 African States including all sub-Saharan Africa leopard range States.[86] The AU has an Executive Council to coordinate and take decisions on policies in areas of common interest to Member States, including environmental protection (Article 13 (1)(e)).[87]

Two AU Conventions are relevant to African leopard conservation: the African Convention on the Conservation of Nature and Natural Resources (entered into force in 1968), and the Revised African Convention on the Conservation of Nature and Natural Resources (negotiated in 2003, not yet entered into force).[88]

Parties to the African Convention on the Conservation of Nature and Natural Resources, which entered into force in 1969, have agreed to "adopt the measures necessary to ensure conservation, utilization and development of soil, water, flora and fauna resources in accordance with scientific principles and with due regard to the best interests of the people." (Article I). The Convention lists the leopard as a Class B protected species (Article VIII); Class B species "shall be totally protected, but may be hunted, killed, captured or collected under special authorization granted by the competent authority." (Article VIII (1)(b)). Notably, some leopard range States that are significant exporters of leopard specimens have not ratified the Convention: Namibia, South Africa, and Zimbabwe. But even in range countries that have ratified the Convention, this law does not provide sufficient protection for leopards.

The Convention does not establish a Secretariat or designate the role and frequency of meetings of the Conference of the Parties; it also does not contain enforcement measures to address non-compliance with the Convention. Article XVI states:

> The Contracting States shall supply the Organization of African Unity with: (a) the text of laws, decrees, regulations and instructions in force in their territories, which are intended to

[83] African Union's African Convention on the Conservation of Nature and Natural Resources (1968), *available at* https://treaties.un.org/doc/Publication/UNTS/Volume%201001/volume-1001-I-14689-English.pdf.
[84] Revised African Convention on the Conservation of Nature and Natural Resources (2003), *available at* http://faolex.fao.org/docs/pdf/mul45449.pdf.
[85] Protocol on Wildlife Conservation and Law Enforcement of the Southern African Development Community (1999), *available at* http://www.sadc.int/files/4813/7042/6186/Wildlife_Conservation.pdf.
[86] *See* African Union, *at* http://www.au.int/en/countryprofiles.
[87] *Id. at* http://www.au.int/en/sites/default/files/ConstitutiveAct_EN.pdf.
[88] *Id. at* http://www.au.int/en/sites/default/files/treaties/7782-sl-revised_-_nature_and_natural_resources_1.pdf.

> ensure the implementation of this Convention; (b) reports on the results achieved in applying the provisions of this Convention; and (c) all the information necessary for the complete documentation of matters dealt with by this Convention if requested.

However, it is unclear if any States have complied with these requirements. Article XVIII addresses settlement of disputes, including the interpretation or application of the Convention, and allows submission of concerns by any party to the Commission of Mediation, Conciliation and Arbitration of the Organization of African Unity. However, it is unclear if any Party has done so and to what effect.

Very few African leopard range States to have ratified the Revised African Convention on the Conservation of Nature and Natural Resources.[89] The Revised Convention has not yet entered into force because fifteen Parties must ratify it and only thirteen have done so.

Several leopard range States have signed the Treaty of the Southern African Development Community (SADC):[90] Angola, Botswana, DRC, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.[91] Among SADC's objectives is to "achieve sustainable utilisation of natural resources and effective protection of the environment" (Article 5 (g)). Article 22 of SADC calls for the establishment of Protocols to achieve the Treaty's objectives. The SADC Protocol on Wildlife Conservation and Law Enforcement[92] elaborates on Article 5 (g) of the Treaty. Its objectives are to:

> a) promote the sustainable use of wildlife; b) harmonise legal instruments governing wildlife use and conservation; c) enforce wildlife laws within, between and among States Parties; d) facilitate the exchange of information concerning wildlife management, utilisation and the enforcement of wildlife laws; e) assist in the building of national and regional capacity for wildlife management, conservation and enforcement of wildlife laws; f) promote the conservation of shared wildlife resources through the establishment of transfrontier conservation areas; and g) facilitate community-based natural resources management practices for management of wildlife resources (Article 4).

With regard to wildlife management and conservation programs, Parties shall: "establish management programmes for the conservation and sustainable use of wildlife and integrate such programmes into national development plans" and "assess and control activities which may significantly affect the conservation and sustainable use of wildlife so as to avoid or minimise negative impacts." (Article 7) Parties are also to take measures to ensure the conservation and sustainable use of wildlife including:

> a) the protection of wildlife and wildlife habitats to ensure the maintenance of viable wildlife populations; b) prevention of over-exploitation and extinction of species; c) restrictions on the taking of wildlife, including but not limited to restrictions on the number, sex, size or age of specimens taken and the locality and season during which they

[89] *Id. at* http://www.au.int/en/sites/default/files/treaties/7782-sl-revised_-_nature_and_natural_resources_1.pdf.
[90] Treaty of the Southern African Development Community, *available at* http://www.sadc.int/files/5314/4559/5701/Consolidated_Text_of_the_SADC_Treaty_-_scanned_21_October_2015.pdf.
[91] *Id. at* http://www.sadc.int/member-states/
[92] *Id. at* http://www.sadc.int/files/4813/7042/6186/Wildlife_Conservation.pdf.

> may be taken; and d) restrictions on trade in wildlife and its products, both nationally and internationally, as required by relevant international agreements.

Article 12 of the Protocol concerning sanctions states:

> 1. Sanctions may be imposed against any State Party which: a) persistently fails, without good reason, to fulfill obligations assumed under this Protocol; or b) implements policies which undermine the objectives and principles of this Protocol. 2. The Council [SADC Council of Ministers] shall determine whether any sanction should be imposed against a State Party and shall make the recommendation to the Summit if it decides that a sanction is called for. The Summit shall decide, on a case-by-case basis, the appropriate sanction to be imposed.

However, it appears that no such sanctions have been considered or approved.

The Lusaka Agreement[93] is also in force in some leopard range countries (e.g. Kenya, Tanzania, Republic of Congo (Brazzaville), Uganda, South Africa, Liberia, Swaziland and Zambia).[94] The Agreement entered into force in 1994 and has the purpose "To support the member states and collaborating partners in reducing and ultimately eliminating illegal trade in wild fauna and flora".

The Lusaka Agreement is focused generally on fighting illegal wildlife trade in and between member States, including through wildlife enforcement officer training. The leopard could benefit in the future from such Lusaka Agreement activities but, to date, there have been no specific programs aimed at illegal leopard trade.

Ineffective conservation policies and inadequate enforcement throughout many leopard range States, as well as lack of efficacy of management and lack of government resources, endanger the survival of the African leopard (**Table 6**).

In addition, while all sub-Saharan African countries that are listed as Threatened under the ESA are CITES Parties, only four of these countries have "legislation that is believed generally to meet the requirements for implementation of CITES" (Category 1 under the CITES National Legislation Project) (Democratic Republic of the Congo, Namibia, South Africa, and Zimbabwe); nine of these countries have "legislation that is believed generally not to meet all of the requirements for the implementation of CITES" (Category 2) (Botswana, Burundi, Republic of the Congo, Gabon, Kenya, Malawi, Mozambique, Tanzania, Zambia); and five have "legislation that is believed generally not to meet the requirements for the implementation of CITES" (Category 3) (Angola, Lesotho, Rwanda, Swaziland, Uganda) (**Table 6**).[95]

[93] Lusaka Agreement (1994), *available at* http://lusakaagreement.org/?page_id=126.
[94] *Id. at* http://lusakaagreement.org/?page_id=24.
[95] The CITES National Legislation Project categorizes Parties by whether or not they have national legislation to implement the Convention. Category 1: legislation that is believed generally to meet the requirements for implementation of CITES; Category 2: legislation that is believed generally not to meet all of the requirements for the implementation of CITES; and Category 3: legislation that is believed generally not to meet the requirements for the implementation of CITES. *See* https://cites.org/legislation.

Table 6. National policies and laws where leopards are listed as Threatened under the ESA.

Country	National Policies, Laws, Regulations
Angola	Wildlife legislation is out-dated and limited; no evidence of consistent enforcement; became a CITES Party in December 2013; legislation in Category 3 under the CITES National Legislation Project; under law, leopard can be hunted, including by foreigners, with a license (DLA Piper 2015).
Botswana	CITES Party since 1978, National Legislation Project Category 2,[96] CITES legislation for terrestrial wildlife and for plants enacted.
Burundi	Became a CITES Party in 1988; CITES National Legislation Project Category 2;[97] CITES legislation enacted.
Republic of the Congo	Strong wildlife protection laws with serious penalties; enforcement is limited and inadequate; became a CITES Party in 1983 and the country has Category 2 CITES implementing legislation; leopards are a fully protected species (Category A) and hunting is not allowed for such species (DLA Piper 2015).
Democratic Republic of the Congo	CITES Party since 1976; legislation is in Category 1 under the CITES National Legislation Project.[98]
Gabon	There are flaws in the primary wildlife legislation and extremely weak penalties; became a CITES Party in 1989; legislation is in Category 2 under the CITES National Legislation Project; leopards are a completely protected species and cannot be hunted (DLA Piper 2015).
Kenya	Became a CITES Party in 1979; legislation is in Category 2 under the CITES National Legislation Project and Kenya is a country "requiring attention as a priority;"[99] strong wildlife legislation enacted, but implementing legislation is pending consultation process.
Lesotho	CITES Party since 2003; legislation is in Category 3 under the CITES National Legislation Project; enabling legislation (environmental) enacted.[100]
Malawi	Became a CITES Party in 1982; legislation is in Category 2 under the CITES National Legislation Project.[101]
Mozambique	Legislation is flawed and inadequate; there is no list of protected species; the law does not prohibit the hunting of protected species; Mozambique became a CITES Party in 1981; CITES National Legislation Project Category 3; enforcement is lacking (DLA Piper 2015). As of January 2016, Mozambique was listed in Category 2 and identified as a Party requiring attention as a priority, CITES-specific legislation enacted but local legal consultant reviewing existing legislation, preparing new draft legislation to address gaps, assisting with national consultative process and preparing final draft legislation.[102]
Namibia	Namibia has a comprehensive national legal framework; Namibia became a CITES Party in 1990; legislation is in Category 1 under the CITES National Legislation Project; financial penalties are comparatively low considering the potential economic value of wildlife; leopards are "protected game" which can be hunted under a permit issued by the Ministry of Environment and Tourism (DLA Piper 2015).

[96] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP+Table2-20years.pdf.
[97] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP+Table2-20years.pdf.
[98] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP-Cat1.pdf.
[99] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP-Table1-Priority17.pdf.
[100] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP-Table3-less20.pdf.
[101] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP+Table2-20years.pdf.
[102] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP-Table1-Priority17.pdf.

Country	National Policies, Laws, Regulations
Rwanda	CITES Party since 1981; CITES National Legislation Project Category 3 and identified as a Party requiring attention as a priority.[103]
South Africa	South Africa has an "impressive suite" of wildlife regulations and stringent penalties; South Africa has been a CITES Party since 1975; it is in Category 1 of the CITES National Legislation Project; the leopard is a "protected species" which may be hunted under permit; the provinces implement the national laws and there is great disparity between the provinces in this regard; South Africa lacks the enforcement and prosecutorial capacity to adequately combat wildlife crimes (DLA Piper 2015).
Swaziland	CITES Party since 1997; CITES National Legislation Project Category 3; Comprehensive draft and revised draft legislation prepared.[104]
Tanzania	CITES Party since 1980; CITES National Legislation Project Category 2 and identified as a Party requiring attention as a priority;[105] legislation enacted for Tanzania mainland but lack of legislation for Zanzibar a major concern.
Uganda	CITES Party since 1991; CITES National Legislation Project Category 3;[106] Wildlife Policy adopted; draft legislation aligned with policy and submitted to Cabinet.
Zambia	Zambia's national wildlife laws are inadequate as there are significant omissions and confusion; Zambia has been a CITES Party since 1981 and its legislation is in Category 2 under the CITES National Legislation Project; Zambia's laws do not prohibit the hunting and trade of "protected species" for commercial purposes; the leopard is not a protected species but is classified as a "dangerous" animal and a "game animal"; the laws have strong penalties for some violations (illegal hunting of elephants) but these do not extend to other species, including leopards; fines are inadequate compared to potential profits; Zambia banned big cat hunting in 2013 and 2014, except in Game Management Areas, due to declining numbers and allegations of corruption in the awarding of safari hunting concessions (DLA Piper 2015).
Zimbabwe	Zimbabwe has detailed legislation and comprehensive penalties; nonetheless, enforcement is inadequate and wildlife crime is widespread; CITES Party since 1981; Zimbabwe's legislation is in Category 1 under the CITES National Legislation Project.[107]

E. Other Natural or Manmade Factors Affecting the Species' Existence

1. Prey Depletion

Leopard population densities are directly related to biomass of medium (10-40 kg) and large-sized wild herbivores, the main leopard prey (Stein et al. 2016). However, populations of such herbivores have been severely depleted by the unsustainable bushmeat trade which is considered to be a major threat to the survival of the African leopard (Jacobson et al. 2016a, Stein et al. 2016). As noted in Jackson et al. (1989), the existence of suitable habitat in and of itself does not mean that leopards will be present; there are many places with suitable habitat that contain no leopards because the prey has been depleted. In some places, bushmeat hunting has nearly eliminated the small- to medium-sized animals preferred as

[103] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP-Table1-Priority17.pdf.
[104] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP-Table3-less20.pdf.
[105] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP-Table1-Priority17.pdf.
[106] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP+Table2-20years.pdf.
[107] CITES, *at* https://cites.org/sites/default/files/eng/prog/Legislation/CITES-NLP-Cat1.pdf.

prey by leopards (Jackson et al. 1989). According to Stein et al. (2016), Craigie et al. (2010) found an estimated 59% average decline in leopard prey populations in 78 protected areas in West, East and Southern Africa between 1970 and 2005 due to commercialized bushmeat trade.

In intact rainforests where there is intense competition with humans for wild prey and "wild meat harvests denudes forests of prey" and may drive local leopard extinction (Henschel 2008). Bushmeat hunting in the Congo Basin for local and commercial use has reduced the wild prey base, resulting in lower leopard densities and even the disappearance of leopards from some places (Henschel 2008, 2009). Leopard range is largely reduced in human-populated areas in the Democratic Republic of the Congo due illegal hunting and bushmeat trade (Stein et al. 2016). Bushmeat poaching in Mozambique and Zambia has severely reduced leopard prey inside and outside of protected areas (Stein et al. 2016).

2. Human-Leopard Conflict

Intense persecution, particularly for livestock loss but also for human deaths and injury, is a major threat to the leopard in Africa (Ray et al. 2005, Henschel 2008, Stein et al. 2016). About 60-70% of Africa's people rely on agriculture and livestock for their livelihoods, and the human population of Africa is expected to more than double by 2050 (Stein et al. 2016); thus, the future will likely see increasing numbers of people using increasing amounts of land in conflict with decreasing numbers of leopards. Currently, many sub-Saharan African countries allow farmers to kill predators considered to be a threat to life or property without first obtaining a permit; it is likely that a large number of leopards are killed but not reported; and the total number of leopards killed due to conflict is unknown (Stein et al. 2016). Leopards have been eradicated from some areas in order to protect livestock and humans (Jackson et al. 1989). Marker and Dickman (2005) found leopard densities to be lower outside of reserves despite there being no marked difference in prey biomass between protected and unprotected areas; the authors explained that "the lower leopard density outside reserves was probably a result of local persecution by landowners, as leopards are commonly considered a threat both to people and their stock." (p. 113). And indiscriminate killing, such as the poisoning of carcasses aimed at attracting and killing carnivores of any and all types, and the use of snares to kill other species, is also a threat to the survival of leopards (Henschel 2008, Jorge 2012).

* * *

As demonstrated in this Petition, the current listing of leopards in "southern Africa" is biologically, legally, and geographically unsound, as it relies on biased anecdotal reports that have been discredited for over two decades, and leopards in the 18 countries currently listed as Threatened are in danger of extinction based on the ESA listing factors and should be included along with leopards in Asia and North and West Africa in one species-level Endangered listing. The Service cannot continue to maintain this unlawful split-listing and must immediately initiate a status review of the species. 16 U.S.C. § 1533(b)(3). Indeed, in order to ensure that listings are based on the best available science, the ESA requires FWS to "conduct, at least once every five years, a review of *all* species" listed under the ESA to determine if such species should be reclassified or removed from the list. 16 U.S.C. § 1533(c)(2) (emphasis added). *See also* 50 C.F.R. § 424.21; *Florida Home Builders Ass'n v. Norton*, 496 F.Supp.2d 1330 (M.D. Fl. 2007) (making clear that FWS has a non-discretionary duty to conduct five-year status reviews of each species listed under the ESA). Since finalizing the 1982 listing for leopards in southern Africa, FWS has not conducted a single five year review for *Panthera pardus*, in violation of the ESA. Thus, FWS must

expedite the processing of this petition and immediately issue a positive 90-day finding to begin this long-overdue status review. Petitioners are confident that a status review will reveal that listing the species *Panthera pardus* as Endangered across its entire African and Asian range is warranted.

V. FWS Must Immediately Restrict Leopard Trophy Imports

Additionally, even before FWS completes a status review of the species, we hereby petition the Service take immediate action to restrict leopard imports to address the primary impact that the U.S. has on leopard conservation. First, we urge FWS to suspend the issuance of CITES import permits for *Panthera pardus* trophies until the FWS non-detriment advice memoranda are updated for each range country where trophy hunting occurs. Second, we urge FWS to rescind the special rule pertaining to leopards from southern Africa (50 C.F.R. § 17.40(f)) to require ESA permits for all otherwise prohibited activities, consistent with 50 C.F.R. § 17.31(a).

A. FWS Must Suspend Leopard Trophy Imports Pending Scientific Review

It is arbitrary and capricious for the Service to issue CITES import permits for leopard trophies based on the faulty 1982, 1983, or 2015 non-detriment advice memoranda. As detailed above, those memoranda are not supported by the best available science and, therefore, the Service cannot possibly rely on those memoranda to make a reasoned finding that the issuance of leopard trophy import permits "will not be detrimental to the survival of that species." CITES Art. III; 50 C.F.R. § 23.61 ("Detrimental activities, depending on the species, could include, among other things, unsustainable use and any activities that would pose a net harm to the status of the species in the wild. For Appendix I species, it also includes use or removal from the wild that results in habitat loss or destruction, interference with recovery efforts for a species, or stimulation of further trade.").

Under the Administrative Procedure Act, a reviewing court shall "hold unlawful and set aside agency action, findings, and conclusions found to be ... arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law[.]" 5 U.S.C. § 706(2). In evaluating agency actions under this standard, courts must consider "whether the [agency's] decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989) (citation and internal quotation marks omitted); *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416 (1971). If an agency, however, "failed to provide a reasoned explanation, or where the record belies the agency's conclusion, [the court] must undo its action." *Cnty. of Los Angeles v. Shalala*, 192 F.3d 1005, 1021 (D.C.Cir.1999). At the very least, the agency must have reviewed relevant data and articulated a satisfactory explanation establishing a "rational connection between the facts found and the choice made." *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43 (internal quotation marks omitted); *see also* Pub. Citizen, Inc. v. Fed. Aviation Admin., 988 F.2d 186, 197 (D.C.Cir.1993) ("The requirement that agency action not be arbitrary or capricious includes a requirement that the agency adequately explain its result."). "[A]n agency acts arbitrarily or capriciously if it 'has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Am. Wildlands*, 530 F.3d at 997-98 (*quoting Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43).

In order to comply with the APA, ESA, and CITES, the Service must not issue any leopard trophy import permits unless or until it has strictly scrutinized the trophy hunting programs of leopard range states to determine whether recreational offtake of this imperiled species is sustainable. In order to facilitate that evaluation, the Service should determine whether the range state from which the trophy originated:

- Has an approved and current national leopard management plan, which develops and implements conservation activities for specific leopard conservation units and works in concert with regional leopard management plans. Such national management plans should be developed using the IUCN SSC guidelines for strategic conservation planning, based on scientific information, and implemented in a manner that benefits the species and provides economic incentives for local communities to protect and expand leopard habitat.
- Has up-to-date estimates on leopard distribution range, abundance, and status.
- Observes a precautionary approach to establishing hunting quotas given current leopard population trends.
- Carries a credible capacity to monitor and manage leopard populations in order to maintain healthy numbers and genetic diversity.
- Has appointed an identified national leopard plan coordinator.
- Implements its leopard management in a manner that is informed by the biological needs of the species and is based on the best available science.
- Has sound law enforcement capabilities to deter or punish illegal retaliatory killings.
- Involves local communities in leopard protection and humane conflict mitigation strategies.
- Implements a human-leopard conflict management plan (including rapid response, mitigation approaches, a training component, education).
- Actively promotes wildlife-integrated land-use to ensure land-use planning does not negatively impact leopard conservation.
- Achieves conservation targets within identified time frames.
- Documents the achievement of stated goals and monitor and evaluate the implementation of the plan, and adapt it as necessary.
- Is in compliance with all international, regional and national commitments, agreements and regulations relating to wildlife (and specifically leopard) conservation, including (but not limited to) CITES.
- Has enacted laws and provided ample resources for enforcement against illegal trade in leopards and their parts.
- Cooperates with neighboring countries for transboundary leopard population conservation and monitoring.
- Has a system for measuring good governance when it comes to wildlife conservation/protection policy making and its implementation (for example, transparency International's corruption perception index).
- Has credible policies for managing any hunting offtake, including:
    - A science-based system for establishing hunting quotas which is demonstrably sustainable at a population level;

- Price-setting (taxes and minimum number of safari days) and a system of concession leasing that increase the value of leopards across their range (no competition on price);
- Hunting moratoria for any declining populations;
- A verifiable and enforceable mechanism to ensure no subadults or females are taken;
- An adaptive management policy of monitoring the impacts of the removal of individuals on remaining populations , and adjusting quotas accordingly; and
- A demonstrable commitment to ensure proceeds of trophy hunting are used to benefit wildlife (and specifically leopard) conservation and communities living with wildlife.

The status of *Panthera pardus* has changed dramatically since the 1982 and 1983 memoranda were drafted, and it is entirely arbitrary and capricious for the Service to rely on those memoranda to make non-detriment findings. It is particularly egregious for the Service to turn a blind eye to the last decade of warnings from leopard experts that the Martin and De Meulenaer's report of 700,000 leopards in Africa is completely inaccurate, and to have doubled-down on this bad science in issuing its 2015 non-detriment advice for Mozambique.

Additionally, the existing non-detriment advice memoranda only purport to authorize leopard imports from South Africa if they originate from "Transvaal" – but this now-defunct region does not encompass the whole of the leopard's range in South Africa and it does not appear that the Service has limited leopard trophy imports from South Africa to this part of the country. Thus, it appears that the Service's practice of allowing American trophy hunters to import their leopard kills does not even comply with its own non-detriment advice, which is arbitrary, capricious, and not in accordance with law.

Thus, in order to comply with CITES, the ESA, and the APA, FWS must immediately initiate a review of the leopard hunting programs in African range states, prioritizing the seven countries from which FWS currently allows leopard trophy imports: Mozambique, Botswana, South Africa, Tanzania, Zambia, Zimbabwe, Namibia. Unless or until such review is completed, FWS cannot lawfully issue any CITES import permits for leopard trophies.

B. FWS Should Repeal the ESA Special Rule for Leopards

In addition to taking the above action regarding CITES import permits, FWS must also take immediate action to apply the enhancement standard to leopard trophy imports. As discussed above, FWS committed in 1982 to not issue leopard trophy import permits unless the enhancement standard was met. *See* 47 Fed. Reg. at 4205 (import permit for leopard trophies will only be issued if "it is determined that the country of origin for the trophy has a management program for the leopard, and can show that its populations can sustain a sport hunting harvest, *and that sport hunting enhances the survival of the species*") (emphasis added). The Service has completely abdicated this duty, primarily through the adoption of a special rule that waives the requirement for ESA permits for leopard trophy imports. 50 C.F.R. § 17.40(f). In order to require ESA permits for all otherwise prohibited activities, consistent with 50 C.F.R. § 17.31(a), the Service should rescind this special rule.

As an initial matter, the Service only has authority under the ESA to issue special rules that are "necessary and advisable to provide for the conservation of such species." 16 U.S.C. § 1533(d). Special rules must be designed and implemented to actually promote the conservation of the Threatened species. *See Sierra Club v. Clark*, 755 F.2d 608 (8th Cir. 1985); 16 U.S.C. § 1531(b) (the primary purpose of the ESA is to "provide a program for the conservation of such endangered species"); 16 U.S.C. § 1532(3) (the term "conservation" means "to use…all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary"). The current special rule – which allows American trophy hunters to exploit African leopards with little oversight, constituting a recognized threat to the species – is not *necessary* or *advisable* to provide for leopard conservation. Indeed, as demonstrated in this Petition, trophy hunting of leopards is poorly managed, unsustainable, and does not promote the conservation of *Panthera pardus*.

Therefore, the Service must take action to apply the enhancement standard to leopard trophy imports, in addition to requiring compliance with CITES permitting standards. *See, e.g.,* FWS, *Ensuring the Future of the Black Rhino* (Nov. 25, 2014), *at* http://www.fws.gov/news/blog/index.cfm/2014/11/25/Ensuring-the-Future-of-the-Black-Rhino (acknowledging that the ESA enhancement standard is more stringent than the CITES non-detriment standard and that these rhino import permits will only be issued if the Service finds "that the rhino is taken as part of a well-managed conservation program that contributes to the long-term survival of the species").

Rescinding the leopard special rule – the only purpose of which is to waive the ESA permitting requirements for trophy imports – would achieve this goal. Such action would be consistent with the Service's recent action to reign in the unfettered imports of African elephant and lion trophies. *See* 50 C.F.R. § 17.40(e) ("African elephant sport-hunted trophies may be imported into the United States provided: (A) The trophy was legally taken in an African elephant range country that declared an ivory export quota to the CITES Secretariat for the year in which the trophy animal was killed; (B) A determination is made that the killing of the trophy animal will enhance the survival of the species and the trophy is accompanied by a threatened species permit issued under § 17.32; (C) The trophy is legibly marked in accordance with 50 CFR part 23; (D) The requirements in 50 CFR parts 13, 14, and 23 have been met; and (E) No more than two African elephant sport-hunted trophies are imported by any hunter in a calendar year."); 50 C.F.R. § 17.40(r)(2) ("The import exemption found in § 17.8 for threatened wildlife listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) does not apply to this subspecies. A threatened species import permit under § 17.32 is required for the importation of all specimens of *Panthera leo melanochaita*."). *See also Safari Club Int'l v. Jewell*, 76 F.Supp.3d 198 (D.D.C.2014) (upholding the Service's non-detriment advice memorandum and enhancement memorandum finding that elephant trophy imports from Tanzania are unsustainable); 80 Fed. Reg. 79999 (Dec. 23, 2015) (FWS committing to review African lion range state management plans prior to issuing any ESA import permits for lion trophies).

Moreover, because the trophy hunting industry has been on notice since 1982 that the import of leopard trophies must meet the enhancement standard before being authorized, the Service could issue a Director's Order to reiterate that the commitment made in the 1982 rule remains in force. Such order would be consistent with recent action that the Director took to prohibit FWS from issuing ESA or CITES

trophy import permits for any species to individuals who previously violated federal wildlife law, and directing FWS to "consider all relevant facts or information available" when determining whether to issue a permit.[108] It would also be consistent with the Director's order to strengthen enforcement of existing laws pertaining to the trade in ivory (including ivory obtained through trophy hunting), making clear that the burden of proof is on the importer "to definitively show" that the importation of elephant tusks is ESA compliant.[109]

Thus, while the Service considers this Petition to reclassify all *Panthera pardus* as Endangered, it must take swift action to bring its existing regulations and practice into compliance with the ESA by rescinding the special rule for leopards, applying the enhancement standard to any applications for leopard trophy imports, and updating the non-detriment advice memoranda for any country that authorizes leopard trophy hunting. *See* Declaration of Dr. Jane Goodall, ¶ 9-12; Declaration of Dereck Joubert, ¶ 19 ("The effort to protect leopards from extinction is vital – we no longer have the luxury of time to use or abuse these big cats for our own desires. Poaching of leopards – primarily for the fur trade – continues at unsustainable rates, and the African leopard is under immense threats from habitat loss and human conflict. To allow the trophy hunting of leopards for recreational purposes to continue unchecked is scientifically and ethically unjustified.").

VI. Conclusion

This Petition presents substantial scientific and commercial information indicating that the petitioned action – listing all *Panthera pardus* as Endangered – may be warranted. *See* 50 C.F.R. § 424.14(b). Therefore, Petitioners expect that the Service will promptly issue a positive 90-day finding on this Petition. 16 U.S.C. § 1533(b)(3). Further, because the Service has never reviewed the 1982 listing for *Panthera pardus*, the Service must immediately initiate a status review of the African leopard to bring that listing into compliance with the Endangered Species Act. *Id.* at § 1533(c)(2).

Not only must the Service reevaluate this listing to ensure it is based on the best available science, but it must take immediate action to restrict the import of African leopard trophies by requiring Endangered Species Act permits, applying the enhancement standard to each proposed import of leopard parts, and reevaluating its CITES non-detriment advice for African leopard range states. Indeed, a recent Congressional report specifically directs the Service to "rescind regulations that allow trophy imports to meet lesser conservation standards and require enhancement findings and import permits for all trophies of listed species."[110]

[108] *See* FWS, Director's Order No. 212 § 3 (Dec. 9, 2015), *available at* http://www.fws.gov/policy/do212.pdf.
[109] *See* FWS, Director's Order No. 210 § 2 (Feb. 25, 2014), *available at* http://www.fws.gov/policy/do210.pdf.
[110] Representative Raul M. Grijalva, *Missing the Mark: African Trophy Hunting Fails to Show Consistent Conservation Benefits*" (June 13, 2016), *available at* http://democrats-naturalresources.house.gov/imo/media/doc/Missing%20the%20Mark.pdf.

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VIII. Annexes

A. Declaration from Dr. Jane Goodall
B. Declaration from Dereck Joubert
C. CITES Establishment of Leopard Export Quotas 1987-2013
D. Information from the CITES Trade Database

ANNEX A

Declaration of Jane Goodall, Ph.D., DBE
Founder, the Jane Goodall Institute & UN Messenger of Peace

England)
)
County of Dorset)

I, Jane Goodall, hereby declare as follows:

1. I reside in Bournemouth, England.

2. I received my Ph.D. in ethology from Cambridge University in 1965 and I have received over 45 honorary degrees from universities around the world. I have held several academic appointments, including serving as a professor at Stanford University, University of Southern California, Cornell University (Andrew D. White Professor at Large), and the University of Dar Es Salaam, and I routinely lecture on the topics of primatology, ethology, and conservation. I began studying the behavior of wild chimpanzees in what is now known as Gombe National Park, Tanzania, in 1960. I have written 15 books, plus 16 children's books, many of them drawing upon my knowledge of African wildlife and conservation efforts, and have co-authored more than 86 research papers that have been published in peer-reviewed scientific journals. I am a United Nations Messenger of Peace and I currently serve in an advisory capacity in more than 100 organizations, including the Wildlife Conservation Society, the Cougar Fund and other groups that work on big cat conservation. A copy of my curriculum vitae is attached hereto.

3. In 1977, I founded the Jane Goodall Institute (JGI), which supports community-centered conservation in areas of East Africa and the Congo Basin. For example, JGI is working with 54 villages in western Tanzania to promote environmentally friendly agricultural practices, improve education, build efficient stoves to reduce demand for timber, and raise local incomes in order to mitigate deforestation and habitat loss for chimpanzees. JGI has also protected hundreds of thousands of acres of land in Tanzania, Uganda and Democratic Republic of Congo in which local communities have been empowered with technology to report activities that relate to habitat destruction and poaching.

4. The study of the Gombe chimpanzees is one of the two longest running studies of any wild animal species – now 56 years long – and my colleagues and I have made significant discoveries regarding the behavior of chimpanzees in Gombe, including the use and manufacture of tools, hunting and meat sharing, food preferences, ranging patterns, mother-offspring and sibling relationships, communication patterns, reproductive behavior, social dominance, personality differences, intercommunity "war" and the cultural traditions of a chimpanzee community. While conducting field work at Gombe, I have seen leopards on multiple occasions.

5. Based on my personal knowledge of African wildlife and for the following reasons, I support this administrative petition to extend the full protections of the Endangered Species Act to African leopards and to immediately increase scrutiny of leopard trophy imports into the U.S.

6. I have observed a significant decline in the presence of leopards in Gombe and other locations in Africa I have visited for decades. Leopards are extremely elusive and although I did not frequently see them when I first arrived at Gombe, it was apparent through their prints, scat, and sound that leopards were commonly there. Several months after I began tracking the chimpanzees, I experienced my first siting of a leopard, a male who passed only a few yards away from me through the long grass. In the 1960s and 1970s, two leopards routinely ranged through the Kakombe valley in Gombe and Gombe rangers would see leopards on the beach of Lake Tanganyika at night. One actually sometimes visited my camp at night. But today Gombe, Tanzania's smallest national park, is increasingly pressured by human encroachment and it has been some years since there was any verified observation of any leopard.

7. At multiple other field sites where researchers study chimpanzees – such as Tai National Park in Cote d'Ivoire, the Bili-Uele Forest in Democratic Republic of Congo, and Mahale Mountains National Park in Tanzania – there have been documented instances of chimpanzee and leopard interactions. Chimpanzees sometimes appear to demonstrate fear of leopards and even behave more altruistically in the presence of leopards (suggesting that leopards may predate on chimpanzees, a theory supported by a 2012 study that discovered a chimpanzee patella and phalanges in leopard scat), but there have also been documented instances of chimpanzees antagonizing leopards (including evidence of chimpanzees killing leopard cubs and one incident of chimpanzees eating an adult leopard). There are also examples of baboons on the Serengeti forcing leopards to take refuge in a tree, and reports from Ruaha National Park of leopards preying on baboons. This fascinating behavior is increasingly difficult to observe, due to the decline in the leopard's population and range.

8. It is absolutely clear that leopards – like most wildlife in Africa – are at greater risk of extinction today than they were in 1982 when the U.S. Fish and Wildlife Service listed southern African leopards as Threatened. In the nearly six decades during which I have learned a great deal about wildlife in Tanzania and other African countries, the human population has more than doubled, resulting in rapidly vanishing wildlife habitat, wiping out forests and grasslands essential to sustain leopards and their prey. Large mammals – like leopards and chimpanzees – play essential roles in their ecosystems, and in order to preserve these magnificent animals in perpetuity it will require all nations to exercise their full power to promote the conservation of imperiled species.

9. Given the precipitous decline of African leopards in recent decades, and because the threats to the continued existence of *Panthera pardus* and its habitat are significant, the United States must ensure that it is not contributing to the imperilment of this species and do all it can to promote the conservation of leopards in Africa. Thus, it is completely unacceptable that American trophy

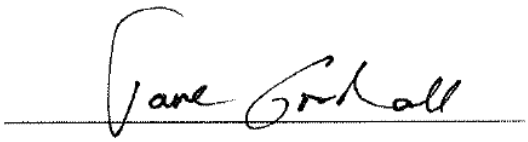
hunters continue to import hundreds of leopard trophies per year, apparently for recreational purposes.

10. Trophy hunters target large males in their prime – those who carry the genes likely to result in the perpetuation of strength and magnificence, splendid individuals whose decapitated heads disfigure the walls of countless wealthy homes. Trophy hunters routinely boast about the animals they have killed, posting photographs of their smiling faces hovering over the lifeless bodies of their conquests, even though the prey (which may be drugged or baited) is often shot with a high powered rifle from a safe distance. Trophy hunters sometimes defend this malicious slaughter by claiming that the money they pay for the pleasure of killing is what enables impoverished countries to pay for conservation of wildlife, but this argument has many flaws.

11. The money paid to hunt a leopard or other trophy animal is often counted as profit by a hunting outfitter and does not usually end up in a conservation program. And as the founder of an organization that has worked for decades on community-based conservation in Africa, I can say confidently that putting a bounty on the heads of individual animals is counter-productive to promoting their protection. Indeed, normalizing the recreational killing of a species promotes poaching of the species for commercial purposes. On the whole, trophy hunting is having a negative impact on populations of imperiled species, including leopards, which are subject to unsustainable quotas across their African range. Conservation programs are only as effective as the governmental organizations responsible for managing them, and the countries where the most trophy hunting occurs have high levels of corruption.

12. In my expert opinion, leopards across their African range are in danger of extinction and the U.S. Fish and Wildlife Service should strictly regulate the import of hunting trophies and other leopard parts in order to not continue to contribute to the decline of this endangered species.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is, in my professional opinion, true and correct.



Dr. Jane Goodall

Executed on the 20th day of July, 2016

the Jane Goodall Institute

Curriculum Vitae
Jane Goodall, Ph.D., DBE
Founder, the Jane Goodall Institute
UN Messenger of Peace
www.janegoodall.org

Personal

Date of Birth: 3rd April 1934
Nationality: British
Marital Status: Married to Baron Hugo van Lawick, 1964 (divorced);
Married to Hon. Derek Bryceson, M.P., 1975 (widowed)
Children: Hugo Eric Louis van Lawick (1967 -)

Education

1950 School Certificate (London) with Matriculation Exemption

1952 Higher Certificate (London)

1962 Entered Cambridge University, United Kingdom, as Ph.D. candidate in Ethology under Professor Robert Hinde

1966 Ph.D. in Ethology, Cambridge University, United Kingdom

Research

From 1960 Behavior of free-living chimpanzees in Gombe National Park, Tanzania

1968-1969 Social behavior of the spotted hyena, *Crocutta crocutta*, Ngorongoro Conservation Area, Tanzania

1967-2003 Scientific Director of the Gombe Stream Research Centre, Tanzania

1972-2003 Director of research on the behavior of the olive baboon, *Papio anubis*, Gombe National Park, Tanzania

Academic Appointments

1971 – 1975 Visiting Professor, Department of Psychiatry and Program of Human Biology, Stanford University, Calif., USA

From 1973 Honorary Visiting Professor in Zoology, University of Dar es Salaam, Tanzania

1987 – 1988 Adjunct Professor of the Department of Environmental Studies, Tufts University, School of Veterinary Medicine, Boston, Mass., USA

1990 Associate, Cleveland Natural History Museum, Cleveland, OH, USA

1990 Distinguished Adjunct Professor, Departments of Anthropology and Occupational Therapy, University of Southern California, Calif., USA

1996 – 2002 Andrew D. White Professor-at-Large, Cornell University, NY, USA

Professional Affiliations

From 1974 Trustee, L.S.B. Leakey Foundation, USA

From 1976 Trustee, the Jane Goodall Institute for Wildlife Research, Education and Conservation, USA

From 1981 Scientific Governor, Chicago Academy of Sciences, USA

From 1984 International Director, ChimpanZoo (research program involving zoos and sanctuaries worldwide), USA

From 1987 Vice President, the British Veterinary Association's Animal Welfare Institute, UK

From 1988 Trustee, Jane Goodall Institute, UK

From 1989 Director, Humane Society of the United States, USA

From 1990 Member of the Advisory Board, Advocates for Animals, UK

From 1991 Member of the Advisory Board, the Albert Schweitzer Institute for the Humanities, USA

From 1993 Trustee, the Jane Goodall Institute, Canada

From 1994 Member of the Board, the Orangutan Foundation, USA

From 1994 Member of the Advisory Board, Trees for Life, USA

From 1997 Founder, Whole Child Initiative, USA

From 1995 Member of the Advisory Board, International Dolphin Project and Dolphin Project Europe

From 1995 Member of Council of Advisors, Global Green, USA

From 1996 Member of Advisory Board, The Fred Foundation, Netherlands

From 1998 to May 2008 President, Advocates for Animals, UK

From 1999 Member of Advisory Board, The Orion Society, USA

From 2000 to 2007 Member of the Board, Save the Chimps/Center for Captive Chimpanzee Care, USA

From 2000 Co-founder of Ethologists for Ethical Treatment of Animals/Citizens for Responsible Animal Behavior, USA

From 2001 Member of the International Advisory Board, Teachers Without Borders, USA

From 2001 Member of Advisory Committee, RESTORE, USA

From 2001 Honorary Trustee, The Eric Carle Museum of Picture Book Art, USA

From 2001 Member of IPS Ad-Hoc Committee for the World Heritage Status for Great Apes

From 2001 Member of Board of Trustees, NANPA Infinity Foundation, USA

From 2001 Member of Board, North American Bear Center, USA

From 2001 Member of Advisory Board, Laboratory Primate Advocacy Group, USA

From 2001 Member of Advisory Board, Tech Foundation, USA

From 2001 Member of Honorary Committee, Farm Sanctuary, USA

From 2002 Member of Advisory Board, Rachel's Network, USA

From 2002 Member of the Board of Directors, The Cougar Fund, USA

From 2002 Scientific Fellow of the Wildlife Conservation Society, USA

From 2002 Member of Board of Directors, The Many One Foundation, USA

From 2002 Member of Board of Governors and Officers, For Grace, USA

From 2002 Member of Advisory Board, Dignity U Wear, USA

2002-2003 Papadopoulos Fellow, The Kinkaid School USA

From 2003 Member of the Honorary Board, Albert Schweitzer Institute, USA

From 2004 Member of Advisory Board, Initiative for Animals and Ethics, Harvard University, USA

From 2004 Honorary Patron, Ryan's Well Foundation, Canada

From 2004 Member of Advisory Board, MONA-Spain

From 2004 Member of the Advisory Council, The Spiritual Alliance to Stop Intimate Violence, USA

From 2004 Member of Honour Committee of Fundación Altarriba, Spain

From 2005 Member of International Advisory Board, Friends of Africa International, USA

From 2005 Member of Cincinnati Zoo Advisory Council, USA

From 2005 Member of Advisory Board, Chimps Inc., USA

From 2005 Member of Advisory Board, KidsRights, Netherlands

From 2005 Member of Advisory Board, MediSend, USA

From 2005 Member of Honorary Board, Quinnipiac University, USA

From 2006 Member of Advisory Board, Foundation for Natural Leadership

From 2006 Member of Advisory Board, Nuclear Age Peace Foundation, USA

From 2006 Honorary Member, Club of Budapest, Hungary

From 2006 Member of the Mothers Network, ENO, Finland

From 2006 Member of Board of Directors, National Institute for Play, USA

From 2007 Fellow, Wings WorldQuest, USA

From 2007 Member of Advisory Board, Gift of Life in America, Inc., USA

From 2007 Member of Advisory Board, The Heart of America Foundation, USA

From 2007 Member of Advisory Board, Project R&R: Release and Restitution for Chimpanzees in U.S. Laboratories, a campaign of the New England Anti-Vivisection Society, USA

From 2007 Member of Advisory Board, Save the Chimps, USA

From 2007 Member of Advisory Board, Slow Food Nation, USA

From 2007 Distinguished Fellow, Ewha Academy for Advanced Studies, Republic of Korea

From 2007 Member of Advisory Board, Human and KIND, USA

From 2007 Honorary Board Member, The Scholar Ship Research Institute, UK

From 2007 Member of Advisory Board, Climate Clean, USA

From 2008 Member of the Great Chapter, Grace Cathedral, CA, USA

From 2008 Honorary Board Member, Eagle Vision Initiatives, USA

From 2008 Honorary Patron, Comunidad Inti Wara Yassi, UK

From 2008 Honorary Fellow, Institute of Biology, UK

From 2008 Patron, Earth Charter-UK

From 2008 Special Advisor for Biodiversity, Prince Albert II of Monaco Foundation, Monaco

From 2008 Member of Council of Honour, Waldrappteam, Austria

From 2008 Member of the Board, Climate Change Center, Republic of Korea

From 2008 Patron, Julia's House, UK

From 2008 Member of the Honorary Committee, Alpine Peace Crossing, Austria

From 2008 Member of the Advisory Council, Ebola Vaccination Initiative

From 2008 Patron, Society of Theological Zoology, Germany

From 2008 Member of Celebrity Circle Board, Green Chimneys, USA

From 2009 Honorary Keeper of the Museum Tridentino of Natural Science, Italy

From 2009 Member of Advisory Board, EcoReserve, USA

From 2009 Honorary Fellow, Society of Biology, UK

From 2009 Member of Advisory Board, Goodplanet Foundation of Yann Arthus-Bertrand, France

From 2009 Member of Advisory Board as advisor for Biodiversity, Foundation Jacques Chirac, France

From 2010 Honorary Co-Chair of the Build the Peace Committee, USA

From 2010-2013 Patron, Minding Animals International, Australia

From 2010 Member of the International Conference, WE, USA

From 2010 Member of Advisory Board, Living with Wolves, USA

From 2010 Goodwill Ambassador, Equine Sciences Academy, USA

From 2010 Acclaimed Ambassador, Best Friends Animal Society, USA

From 2011 Member of the Advisory Council, Voices for a World Free of Nuclear Weapons, USA

From 2011 Patron, Voiceless, Australia

From 2012 Honorary Councilor, World Future Council, Germany

From 2012 Honorary Board, Center for Great Apes, USA

From 2013 International Patron, School Broadcasting Network Inc., Australia

From 2013 Member of Scientific and Ethics Council, Ecolo-Ethik, France

From 2013 Philosophical Society, Trinity College, Dublin, Ireland

From 2014 Member of Advisory Council, International Women's Earth and Climate Initiative (IWECI), USA

From 2014 Member of Advisory Board, Years of Living Dangerously, USA

From 2014 Advisor to Board, APOPO, USA

From 2014 Advisory Board, Mongabay.org, USA

From 2014 Honorary Board of Directors, IFAW, USA

From 2015 Patron of Nature, IUCN, USA

Memberships

1972 Honorary Foreign Member of the American Academy of Arts and Sciences, USA

1981 Explorer's Club, USA

1984 Foreign Member of the Research Centre for Human Ethology at the Max-Planck Institute for Behavioral Physiology, Germany

1988 American Philosophical Society, USA

1988 Society of Woman Geographers, USA

1990 Deutsche Akademie der Naturforscher Leopoldina, Germany

1991 Academia Scientiarium et Artium Europaea, Austria

1991 Honorary Fellow of the Royal Anthropological Institute of Great Britain and Ireland

2004 Great Ape Subsection of the Primate Specialist Group, USA

2006 Honorary Member, Ewha Academy of Arts and Sciences, Republic of Korea

2006 Member of the International Primatological Society, USA

Honorary Degrees

1975 LaSalle College, Philadelphia, Penn., USA

1979 Stirling University, Stirling, Scotland, UK

1986 Ludwig-Maximilians University, Munich, Germany

1986 Zoologisches Institut der Universitat Munchen, Munchen, Germany

1986 Tufts University, Boston, Mass., USA

1988 University of North Carolina, Greensboro, N.C., USA

1990 University of Pennsylvania, Philadelphia, Penn., USA

1991 Colorado College, Colorado Springs, Colo.,USA

1993 College of William and Mary, Williamsburg, Va., USA

1993 University of Miami, Coral Gables, Fla., USA

1994 Utrecht University, Utrecht, Netherlands

1996 Western Connecticut State University, Danbury, Conn., USA

1996 Salisbury State University, Salisbury, Md., USA

1997 University of Edinburgh Veterinary School, Edinburgh, Scotland, UK

1998 University of Guelph, Guelph, Ontario, Canada

1999 Albright College, Reading, Penn., USA

2000 Wesleyan College, Macon, Ga., USA

2001 University of Minnesota, Minneapolis, Minn., USA

2001 University at Buffalo, Buffalo, N.Y., USA

2001 Ryerson University, Toronto, Ontario, Canada

2001 Providence University, Taiwan, Republic of China

2002 Elon University, Elon, N.C., USA

2002 Sweet Briar College, Sweet Briar, Va., USA

2003 University of Central Lancashire, UK

2004 University of Natal, Pietermaritzburg, South Africa

2004 Haverford College, Haverford, Penn., USA

2005 Pecs University, Pecs, Hungary

2005 Syracuse University, Syracuse, N.Y., USA

2005 Rutgers, The State University of New Jersey, Camden, N.J., USA

2006 The Open University of Tanzania, Dar es Salaam, Tanzania

2007 Doane College, Crete, Neb., USA

2007 Uppsala University, Uppsala, Sweden

2007 Kyoto University, Kyoto, Japan

2007 University of Liverpool, Liverpool, UK

2008 Lehigh University, Bethlehem, Penn., USA

2008 University of Toronto, Toronto, Canada

2008 University of Haifa, Haifa, Israel

2008 National Taiwan University of Science and Technology, Taiwan, Republic of China

2009 University of Liège, Liège, Belgium

2009 University of Pablo de Olavide, Seville, Spain

2009 University of Alicante, Sant Vicent del Raspeig/Alicante, Spain

2011 American University of Paris, Paris, France

2011 Giordano Bruno GlobalShift University, Budapest, Hungary

2011 Maimonides University, Buenos Aires, Argentina

2012 National Tsing Hua University, Taiwan

2012 Goldsmiths, University of London, UK

2013 University of St. Andrews, Scotland, UK

2013 Trinity College, Dublin, Ireland

2013 St. Ignatius of Loyola University, Peru

2014 University of South Australia, Adelaide, Australia

2016 University of Redlands, Redlands, CA

Awards

1963 and 1964 Franklin Burr Award for Contribution to Science, National Geographic Society, USA

1970 Stott Science Award, Cambridge University, UK

1974 Gold Medal for Conservation, San Diego Zoological Society, USA

1974 Conservation Award, Women's Branch of the New York Zoological Society, USA

1974 Bradford Washburn Award, Boston Museum of Science (with Hugo van Lawick), USA

1980 Order of the Golden Ark, World Wildlife Award for Conservation, presented by HRH Prince Bernhard of the Netherlands, Netherlands

1984 J. Paul Getty Wildlife Conservation Prize, Tanzania

1985 Living Legacy Award, the Women's International Center, USA

1987 The Albert Schweitzer Award of the Animal Welfare Institute, USA

1987 National Alliance for Animals Award

1987 E. Mendel Medaille from the Deutsche Akademie der Naturforscher Leopoldina, East Germany

1987 Golden Plate Award, Academy of Achievement, USA

1988 Centennial Award, National Geographic Society, USA

1988 Joseph Wood Krutch Medal, the Humane Society of the United States, USA

1988 Award for Humane Excellence, American Society for the Prevention of Cruelty to Animals, USA

1989 Encyclopedia Britannica Award for Excellence on the Dissemination of Learning for the Benefit of Mankind, USA

1989 Anthropologist of the Year Award

1990 The Anthropology in Media Award, American Anthropological Association, USA

1990 Whooping Crane Conservation Award, Conoco, Inc., USA

1990 Gold Medal of the Society of Women Geographers, USA

1990 Washoe Award

1990 The Kyoto Prize in Basic Science, Japan

1991 The Edinburgh Medal, UK

1993 Rainforest Alliance Lifetime Achievement Award, USA

1994 Chester Zoo Diamond Jubilee Medal, UK

1995 Commander of the British Empire, presented by Her Majesty Queen Elizabeth II, UK

1995 The National Geographic Society Hubbard Medal for Distinction in Exploration, Discovery, and Research, USA

1995 Lifetime Achievement Award, In Defense of Animals, USA

1995 The Moody Gardens Environmental Award, USA

1995 Honorary Wardenship of Uganda National Parks, Uganda

1996 The Zoological Society of London Silver Medal, UK

1996 The Tanzanian Kilimanjaro Medal, Tanzania

1996 The Primate Society of Great Britain Conservation Award, UK

1996 The Caring Institute Award, USA

1996 The Polar Bear Award, National Alliance for Animals

1996 William Proctor Prize for Scientific Achievement, Sigma Xi, USA

1997 Tyler Prize for Environmental Achievement, USA

1997 David S. Ingalls, Jr. Award for Excellence

1997 Common Wealth Award for Public Service, USA

1997 The Field Museum's Award of Merit

1997 Royal Geographical Society / Discovery Channel Europe Award for A Lifetime of Discovery

1997 Global 500 Roll of Honour Award, UNEP, Seoul, Korea

1998 Disney's Animal Kingdom Eco Hero Award, USA

1998 National Science Board Public Service Award, USA

1998 The Orion Society's John Hay Award, USA

1999 International Peace Award, Community of Christ, USA

1999 Botanical Research Institute of Texas International Award of Excellence in Conservation, USA

2000 Reorganized Church of the Latter Day Saints International Peace Award, USA

2001 Graham J. Norton Award for Achievement in Increasing Community Liability

2001 Rungius Award of the National Museum of Wildlife Art, USA

2001 Master Peace Award

2001 Gandhi/King Award for Non-Violence, USA

2002 The Huxley Memorial Medal, Royal Anthropological Institute of Great Britain and Ireland

2002 United Nations Messenger of Peace Appointment, USA

2003 Benjamin Franklin Medal in Life Science, USA

2003 Harvard Medical School's Center for Health and the Global Environmental Citizen Award, USA

2003 Prince of Asturias Award for Technical and Scientific Achievement, Spain

2003 Chicago Academy of Sciences' Honorary Environmental Leader Award, USA

2003 Commonwealth Club Centennial Medallion Award

2004 Dame of the British Empire, presented by HRH Prince Charles, UK

2004 Teachers College Columbia University Medal for Distinguished Service to Education, USA

2004 Nierenberg Prize for Science in the Public Interest, USA

2004 Will Rogers Spirit Award, the Rotary Club of Will Rogers and Will Rogers Memorial Museums

2004 Lifetime Achievement Award, the International Fund for Animal Welfare (IFAW), USA

2004 Polar Star Award, Paris, France

2004 Save Our Species Award, Santa Barbara, Calif., USA

2004 Time Magazine European Heroes Award

2004 Extraordinary Service to Humanity Award, The Bear Search and Rescue Foundation, USA

2004 Medal for Distinguished Service to Education, Teachers College, Columbia University, N.Y., USA

2005 Lifetime Achievement Award, Jackson Hole Wildlife Film Festival, USA

2005 Siemens Academy of Life Award, Austria

2005 Westminster College President's Medal, Salt Lake City, Utah, USA

2005 National Organization for Women's Intrepid Award, USA

2005 Honorary Conservation Award, University of Iowa, USA

2005 Discovery and Imagination Stage Award, USA

2005 Westminster College President's Medal for Exemplary Achievement, Utah, USA

2005 Pax Natura Award, Utah, USA

2005 Two Wings Award, Vienna, Austria

2006 International Patron of the Immortal Chaplains Foundation, USA

2006 UNESCO 60th Anniversary Golden Medal Award, Paris, France

2006 French Legion of Honor, awarded by the President of France, Mr. Jacques Chirac, and presented by Prime Minister Dominique de Villepin

2006 Lifetime Achievement Award, Jules Verne Adventures

2006 Biophilia Award, Jazzpur Society, Windsor, Canada

2006 Genesis Award, Humane Society of the United States, USA

2007 Lifetime Achievement Award, WINGS WorldQuest

2007 Honorary Medal of the City of Paris, presented by Mr. Bertrand Delanoë, mayor of Paris, France

2007 Roger Tory Peterson Memorial Medal, Harvard Museum of Natural History, USA

2008 Presidential Medal for Global and Visionary Leadership, Montana State University, Bozeman, Mont., USA

2008 Prix de la Fondation Prince Albert II de Monaco, presented to David Lefranc by Prince Albert II of Monaco

2008 Prize for Sustainable Community Development, Weidemann Foundation, Calif., USA

2008 State of Rhode Island and Providence Plantations Citation, R.I., USA

2008 Eurogroup Award, Brussels, Belgium

2008 Courage of Conscience Award, The Peace Abbey, Sherborn, Mass., USA

2008 Environmental Education Award of Hebei University of Science and Technology, China

2008 L.S.B Leakey Foundation Prize for Multidisciplinary Research on Ape and Human Evolution (Leakey Prize), USA

2009 United States Department of the Interior, The Secretary's Lifetime Achievement Award, presented by Mr. Ken Salazar, USA

2009 Minerva Award, USA

2010 Association of American Geographers Atlas Award, USA

2010 International Golden Doves for Peace Award, Italy

2010 Peace Hero, Kids for Peace, USA

2010 BAMBI Award, Germany

2010 NEA Award for Outstanding Service to Public Education, NEA Foundation, Washington, D.C., USA

2011 Order of Merit of the Italian Republic, Italy

2011 Mayor's Medallion, Lincoln, Neb., USA

2011 Heart of Green Award for Lifetime Achievement, TheDailyGreen.com, USA

2011 Focus magazine's Greatest Personality of Planete Doc Film Festival, Poland

2011 Honorary International Ranger Award, The Thin Green Line Foundation and International Ranger Federation, Australia

2011 Inspirational International Award, The Inspiration Awards for Women, USA

2011 Grand Officer of the Order of Merit of the Italian Republic, presented by the President of the Republic's Counselor Magistrate Dr. Elio Berarducci

2012 Lifetime Achievement Award, The Observer Ethical Awards, UK

2012 Outstanding Harmony Award in Rio+20, World Harmony Foundation, Australia

2012 Anne Marrow Lindberg Award for Living with Grace and Distinction, Huffington Center for Aging, USA

2012 II Monito del Giardino international award, Italy

2012 AARP Inspire Award, USA

2013 Varner Vitality Lecture, Oakland University, Michigan, USA

2013 WildCare Environmental Award, California, USA

2013, Wyland Icon Award, USA

2014 Better Malaysia Foundation (BMF) Person of the Year Award, Kuala Lumpur, Malaysia

2014 Animal Defence and Anti-Vivisection Society, Person of the Year Award, British Columbia, Canada

2014 Distinguished Lecturer, the University of Iowa Lecture Committee, Iowa, USA

2014 Invercargill Vegan Society Award, Dunedin, New Zealand

2014 BAUM Award, Germany

2014 Look! World Achievement Award

2014 Green Prize Award, Santa Monica Public Library

2014, Recognition of lifelong contributions to wildlife protection from MOTC, Taiwan

2014, World Technology Network (WTN) Award for Use of Technology in Policy, New York, USA

2014, President's Medal from the British Academy, London, UK

2014, Captain Planet Foundation Exemplar Award, Atlanta, GA USA

2015, Asia Pacific Brand Foundation, The BrandLaureate Legendary Award, Malaysia

2015, Premi Internacional Catalunya Prize, Catalonia, Spain

2015, The Perfect World Foundation, Conservationist of the Year 2015, Stockholm, Sweden

2015, the Orang Utan Republik Foundation, Pongo Environmental Award, Beverly Hills, CA USA

Publications

Books

1967 My Friends the Wild Chimpanzees. Washington, D.C.: National Geographic Society

1971 Innocent Killers (with H. van Lawick). Boston: Houghton Mifflin; London: Collins.

1971 In the Shadow of Man. Boston: Houghton Mifflin; London: Collins.
Published in 48 languages.

1986 The Chimpanzees of Gombe: Patterns of Behavior. Boston: Bellknap Press of the Harvard University Press. Published also in Japanese and Russian.

R.R. Hawkins Award for the Outstanding Technical, Scientific or Medical book of 1986, to Bellknap Press of Harvard University Press, Boston.

The Wildlife Society (USA) Award for "Outstanding Publication in Wildlife Ecology and Management."

1990 Through a Window: My Thirty Years with the Chimpanzees of Gombe. London: Weidenfeld & Nicolson; Boston: Houghton Mifflin.
Translated into more than 15 languages.

1991 Penguin edition, UK. American Library Association "Best" list among Nine Notable Books (Nonfiction) for 1991.

1993 Visions of Caliban (co-authored with Dale Peterson, Ph.D.). Boston: Houghton Mifflin.
New York Times "Notable Book" for 1993.
Library Journal "Best Sci-Tech Book" for 1993.

1999 Brutal Kinship (with Michael Nichols). New York: Aperture Foundation.

1999 Reason For Hope: A Spiritual Journey (with Phillip Berman). New York: Warner Books, Inc. Translated into more than 13 languages.

1999 40 Years At Gombe. New York: Stewart, Tabori, and Chang.

2000 Africa In My Blood (edited by Dale Peterson). New York: Houghton Mifflin Company.

2001 Beyond Innocence: An Autobiography in Letters, The Later Years (edited by Dale Peterson). New York: Houghton Mifflin Company.

2002 The Ten Trusts: What We Must Do To Care for the Animals We Love (with Marc Bekoff). San Francisco: Harper San Francisco.

2005 Harvest for Hope: A Guide to Mindful Eating (with Gary McAvoy and Gail Hudson). New York: Warner Books.

2009 Hope for Animals and Their World: How Endangered Species Are Being Rescued from the Brink (with Thane Maynard and Gail Hudson). New York: Grand Central Publishing.

2010 50 Years at Gombe. New York: Stewart, Tabori, and Chang.

2014 Seeds of Hope: Wisdom and Wonder from the World of Plants (with Gail Hudson). New York: Grand Central Publishing.

Children's Books

1972 Grub: The Bush Baby (with H. van Lawick). Boston: Houghton Mifflin.

1988 My Life with the Chimpanzees. New York: Byron Preiss Visual Publications, Inc. Translated into French, Japanese and Chinese.
Parenting's Reading-Magic Award for "Outstanding Book for Children," 1989.

1989 The Chimpanzee Family Book. Saxonville, MA: Picture Book Studio; Munich: Neugebauer Press; London: Picture Book Studio.

Translated into more than 15 languages, including Japanese and Kiswahili.
The UNICEF Award for the best children's book of 1989.
Austrian state prize for best children's book of 1990.

1989 Jane Goodall's Animal World: Chimps. New York: Macmillan.

1989 Animal Family Series: Chimpanzee Family; Lion Family; Elephant Family; Zebra Family; Giraffe Family; Baboon Family; Hyena Family; Wildebeest Family. Toronto: Madison Marketing Ltd.

1994 With Love (illustrated by Alan Marks). New York / London: North-South Books. Translated into German, French, Italian, and Japanese.

1999 Dr. White (illustrated by Julie Litty). New York: North-South Books.

2000 The Eagle & the Wren (illustrated by Alexander Reichstein). New York: North-South Books.

2001 Chimpanzees I Love: Saving Their World and Ours. New York: Scholastic Press.

2004 Rickie and Henri: A True Story (with Alan Marks) New York: Penguin Young Readers Group.

2013 Dr. White (illustrated by Julie Litty) gift book size. Honk Kong: minedition

2014 The Eagle & the Wren (illustrated by Alexander Reichstein) gift book size. Hong Kong: minedition

2014 With Love (illustrated by Alan Marks) gift book size. Hong Kong: minedition

2014 Jane Goodall The Chimpanzee Children of Gombe (with Michael Neugebauer). Hong Kong: minedition

2015 Prayer for World Peace (with Michael Neugebauer). Hong Kong: minedition

Films

1963 Miss Goodall and the Wild Chimpanzees, National Geographic Society.

1984 Among the Wild Chimpanzees, National Geographic Special.

1988 People of the Forest, with Hugo van Lawick.

1990 Chimpanzee Alert, in the Nature Watch Series, Central Television.

1990 Chimps, So Like Us, HBO film nominated for 1990 Academy Award.

1990 The Life and Legend of Jane Goodall, National Geographic Society.

1990 The Gombe Chimpanzees, Bavarian Television.

1995 Fifi's Boys, for the Natural World series for the BBC.

1995 My Life with the Wild Chimpanzees, National Geographic.

Chimpanzee Diary for BBC2 Animal Zone.

Animal Minds for BBC.

1999 Jane Goodall: Reason For Hope, PBS special produced by KTCA.

2001 Chimps R Us PBS special Scientific Frontiers.

2002 Jane Goodall's Wild Chimpanzees, in collaboration with Science North and Science Museum of Minnesota.

2004 Jane Goodall's Return to Gombe, produced by Tigress Productions for Animal Planet/Discovery Communications.

2004 Jane Goodall's State of the Great Ape, produced by Tigress Productions for Animal Planet/Discovery Communications.

2005 Jane Goodall - When Animals Talk, produced by Tigress Productions for Animal Planet/Discovery Communications.

2006 Jane Goodall's Heroes, produced by Creative Differences for Animal Planet/Discovery Communications.

2007 Almost Human, produced by Creative Differences for Animal Planet/ Discovery Communications

2010 Jane's Journey, produced by Animal Planet, CC Medien, NEOS Film and Sphinx Media

2014 Jane and Payne, produced by Boy Olmi and LSD Live (Dylan Williams)

2015 Racing Extinction, produced by Discovery and directed by Louie Psihoyos

2016 Time to Choose, directed by Charles Ferguson

Articles

1962 Nest building in a group of free-ranging chimpanzees. Ann. N.Y. Acad. Sci. 102: 455-467.

1963 Feeding behaviour of wild chimpanzees: a preliminary report. Symp. Zool. Soc. Lond. 10: 39-48.

1963 My life with the wild chimpanzees. National Geographic 124 (2):272-308.

1964 Tool-using and aimed throwing in a community of free-living chimpanzees. Nature. 201: 1264-1266.

1965 Chimpanzees of the Gombe Stream Reserve. In: I. DeVore (Ed). Primate Behaviour. New York: Holt, Rinehart and Winston.

1965 New discoveries among Africa's chimpanzees. National Geographic 128 (6): 802-831.

1965 Infancy, childhood and adolescence in a group of wild chimpanzees. Proc. Roy. Inst. Lond.

1966 (with H. van Lawick). Use of tools by the Egyptian Vulture, Neophron porenoptemus. Nature. 212: 1468-1469.

1967 Mother-offspring relationships in chimpanzees. In: D. Morris (Ed). Primate Ethology. London: Weidenfeld & Nicolson. pp. 287-345.

1967 (with H. van Lawick). Tool-using bird, the Egyptian Vulture. National Geographic 133 (5): 631-651.

1968 Behaviour of free-living chimpanzees of the Gombe Stream Area. In: J.M. Cullen and C.G. Beer (Eds). Anim. Behav. Monog. Vol. 1, Part 3. London: Bailliere, Tindall, and Casell. pp. 165-311.

1968 Expressive movements and communication in free-ranging chimpanzees: a preliminary report. In: P. Jay (Ed). Primates: Studies in Adaptation and Variability. New York: Hold, Rinehart and Winston. pp. 313-374.

1969 Some aspects of reproductive behaviour in free-living chimpanzees. Journ. Reprod. Fert.

1970 Some aspects of mother-infant behaviour in wild chimpanzees. In: R. Schaffer (Ed). Determinants of Infant Behaviour. New York: John Wiley and Sons.

1970 The scratching rocks clan. Animals. 13: 401-407.

1970 Tool-using in Primates and other Vertebrates. In: D.S. Lehrman, R.A. Hinde, and E. Shaw (Eds). Advances in the Study of Behaviour, Vol. 3. New York and London: Academic Press. pp. 195-249.

1971 Some aspects of aggressive behaviour in a group of free-living chimpanzees. Int. Soc. Sci. Journ. 23 (1): 89-97.

1973 Baboons too use tools. Science News 103: 71-72.

1973 The behaviour of chimpanzees in their natural habitat. Am. J. Psychiatry. 130 (1): 1-12.

1973 (with H. van Lawick and C. Packer). Use of objects as tools in free-living baboons in the Gombe National Park, Tanzania. Nature 24: 212-213.

1973 Cultural elements in a chimpanzee community. In: W.W. Menzel (Ed). Precultural Primate Behaviour, Vol I. Karger: Fourth IPV Symposium Proceedings.

1975 Chimpanzees of Gombe National Park: 13 years of research. In: I. Eibesfeldt (Ed). Hominisation und Verhalten. Stuttgart: Gustav Fischer Verlag. pp. 74-136.

1975 The chimpanzee: a model for the behaviour of early man? In: V. Goodall (Ed). Quest for Man. London: Pall Mall Press. pp. 130-169.

1975 On the contribution of chimpanzee studies to understanding human origins. In: S.L. Isaac (Ed). Perspectives on Human Evolution, Vol. 3: Essays on East Africa and Human Origins--a tribute to the life's work of the late Louis Leakey.

1976 (with D.A. Hamburg). New evidence on the origins of human behaviour. In: D. Hamburg and K. Brodie (Eds). American Handbook of Psychiatry, Vol. 6, New Frontiers. New York: Basic Books.

1976 Continuities between chimpanzee and human behaviour. In: G.L Isaac and E.R. McGown, (Eds). Human Origins: Louis Leakey and the East African Evidence California: W.J. Benjamin Inc.

1976 (with D. Riss). Sleeping behaviour and associations in a group of captive chimpanzees. Folia Primatol. 25: 1-11.

1977 Infant-killing and cannibalism in free-living chimpanzees. In: Folia Primatol. 28: 59-282.

1977 (with K. Morris). Competition for meat between chimpanzees and baboons of the Gombe National Park. Folia Primatol. 28: 109-121.

1977 (with D. Riss). The recent rise to the alpha rank in a population of free-living chimpanzees. Folia Primatol. 27: 134-151.

1978 Chimp Killings: Is it the Man in them? Sci News 113: 276.

1979 (with A. Bandora, E. Bergmann, C. Busse, H. Matama, E. Mpongo, A. Pierce, D. Riss). Inter-community interactions in the chimpanzee population of the Gombe National Park. In: D.A. Hamburg and E.R. McGown (Eds). The Great Apes. Menlo Park, California: Benjamin/Cummings. pp. 13-53.

1979 Life and Death at Gombe. National Geographic 155 (5): 592-621.

1980 (with J. Athumani). An observed birth in a free-living chimpanzee in Gombe National Park, Tanzania. Primates. 21 (4): 545-549.

1982 Order without law. Journal of Social and Biological Structures 5: 353-360.

1983 Population dynamics during a 15 year period in one community of free-living chimpanzees in the Gombe National Park, Tanzania. Zeitscherift fur Tierpsychologie 61: 1-60.

1983 (with T. Nishida, R.W. Wrangham, and S. Uehara.) Local differences in plant-feeding habits of chimpanzees between the Mahale Mountains and Gombe National Park, Tanzania. J. Human Evol. 12: 467-480.

1984 (with D.A. Collins, C.D. Busse and J. Goodall. 1984. Infanticide in two populations of Savanna Baboons. In: G. Hausfater and S.B. Hrdy (Eds). Infanticide: Comparative and Evolutionary Perspectives. New York: Aldine Publishing Company. pp. 193-216.

1984 The nature of the mother-child bond and the influence of family on the social development of free-living chimpanzees. In: N. Kobayashi and T.B. Brazelton (Eds). The Growing Child in Family and Society. Tokyo: University of Tokyo Press. pp. 47-66.

1985 Chapter. In: P.L. Berman (Ed). The Courage of Conviction. New York: Ballantine Books.

1985 (with H. Kummer, H). Conditions of innovative behaviour in primates. Phil. Trans. R. Soc. Lond. 308: 205-214.

1986 Mountain Warrior. Omni. May 1986, 132-143.

1986 Social rejection, exclusion, and shunning among the Gombe chimpanzees. Special issue: Ostracism: A social and biological phenomenon. Eth. and Sociobiol. 17 (3-4): 227-236.

1987 A Plea for the Chimps. The New York Sunday Times Magazine. May 17, 1987. pp. 108-110.

1987 A Plea for the Chimpanzees. Am. Sci. 75 (6): 574-577.

1988 Ethical concerns in the use of animals as donors. Xenograft 25: Proceedings of the International Congress, Xenograft 25. Elsevier Science Publishers. pp. 335-349.

1988 (with A. Prince, J. Moor-Jankowski, J. Eichberg, H. Schellekens, R. Mauler, and M. Girard) Chimpanzees and AIDS research. Nature. 333 (9): 513.

1989 The Chimpanzee: Man's closest relative in danger. In: Kakakuona, the magazine of the Tanzania Wildlife Protection Fund. 1 (1): 5-9.

1989 (with A. Prince, B. Brotman, H. Dienske, H. Schellekens, and J. Eichberg). Appropriate conditions for maintenance of chimpanzees in studies with blood-borne viruses: an epidemiologic and psychosocial perspective. J. Med. Primatol. 18: 27-42.

1989 (with R.W. Wrangham). Chimpanzee use of medicinal leaves. In P. Heltne and L. Marquardt (Eds) Understanding Chimpanzees, pp. 22-37. Cambridge: Harvard University Press.

1990 (with A.L. Zihlman, and M.E. Morbeck). Skeletal biology and individual life history of Gombe chimpanzees. J. Zool., London 221: 37-61.

1990 Gombe: Highlights and Current Research. In: In: P.G. Heltne and L.A. Marquard (Eds). Understanding Chimpanzees. Boston: Harvard University Press. pp. 2-21.

1990 ChimpanZoo. In: P.G. Heltne and L.A. Marquard (Eds). Understanding Chimpanzees. Boston: Harvard University Press. pp. 148-150.

1990 Area Status Report: Tanzania. In: P.G. Heltne and L.A. Marquard (Eds). Understanding Chimpanzees. Boston: Harvard University Press. pp. 360-361.

1990 Respect for Life. In: C. Fadiman (Ed). Living Philosophies. New York: Doubleday. pp. 81-88.

1992 Psychosocial needs of laboratory chimpanzees. Proceedings of the Symposium on Biomedical Research on Primates.

1993 Unusual violence surrounding the rise to alpha rank in the Gombe chimpanzee community. In: Proc. XIIIth Cong. IPS.

1993 (with J. Wallis). Anogenetal swelling in pregnant chimpanzees of Gombe National Park. Am. J. Primatol. 31(2): 89-98.

1994 (with P.A. Morin, J.J. Moore, R. Chakraborty, L. Jin, and D.S. Woodruff). Kin selection, social structure, gene flow and the evolution of chimpanzees. Science 265: 1193-1201.

1994 (with C.B. Stanford, Wallis, J., Matama, H.) Patterns of Predation by chimpanzees on red colobus monkeys in Gombe National Park, 1982-1991. American Journal of Physical Anthropology, 94 (2) 213-228.

1994 (with C.B. Stanford, Wallis, J, Mpongo, E) Hunting decisions in wild chimpanzees. Behaviour, 131, 1-18.

1995 (with C. Packer, D.A. Collins, and A. Sindimwo). Reproductive constraints on aggressive competition in female baboons. Nature 373: 60-63.

1995 Why is it unethical to use chimpanzees in the laboratory? ATLA. 23: 615-620.

1995 Chimpanzees and others at play. ReVision 17 (4): 14-20.

1997 (with A. Pusey and J. Williams). The influence of dominance rank on the reproductive success of female chimpanzees. Science. 277: 828-831.

1999 (with A. Whiten, McGew, W.C., Nishida, T., Reynolds, V., Sugiyama, Y. Tutin, C.E.G., Wrangham, R.W., Boesch, C.) Cultures in chimpanzees. Nature 399, 682-5.

2001 (with Marc Bekoff). Primate Origins of Human Cognition and Behavior, edited by Tetsuro Matsuzawa. (Book review). Science. 411: 995-996.

2001 (with Bekoff, M.). The view from Japan. Nature 411, 995-996.

2001 (with Mario L. Santiago, Cynthia M. Rodenburg, Shadrack Kamenya et. al.) Noninvasive Detection and Molecular Identification at Simian Immunodeficiency Virus in Wild-living Chimpanzees. Nature.

2001 (with A. Whiten, McGew, W.C., Nishida, T., Reynolds, V., Sugiyama, Y. Tutin, C.E.G., Wrangham, R.W., Boesch, C.) Charting cultural variation in chimpanzees. Behavior 138, 1489-1525.

2001 (with Constable, J., Ashley, M., & Pusey, A.) Noninvasive paternity assignment in Gombe chimpanzees. Molecular. Ecology, 10:1279-1300.

2001 (with Hill, K., Goodall, J, Pusey, A., Williams, J., Boesch, C., Boesch, H., & Wrangham, R.W.) Chimpanzee mortality in the wild. Journal of Human Evolution. 40:437-450.

2002 (with RW Wrangham and D Pilbeam). Apes as time machines. In BMF Galdikas, N Briggs, LK Sheeran, GL Shapiro, and J Goodall eds, All Apes Great and Small Volume 1: Chimpanzees, Bonobos, and Gorillas. Plenum/Kluwer Publication

2002 (with Anne Pusey, Shadrack Kamenya, Anthony Collins, Richard Wrangham, Beatrice H. Hahn et. al.) SIV cpz in Wild Chimpanzees. Science.

2002 (with Lonsdorf, E. V.) Cultures in chimpanzees. Encyclopedia of Evolution. Oxford UK, Oxford University Press.

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ANNEX B

Declaration of Dereck Joubert

Botswana)
)
Okavango)

I, Dereck Joubert, hereby declare as follows:

1. I reside at Duba Plains camp, in the Okavango Delta in Botswana.

2. After my studies at University of Witwatersrand in Johannesburg, South Africa, I started work at the Chobe Lion Research Institute in Botswana researching and, later, filming big cats, for the major broadcasters of the world (e.g., BBC, National Geographic).

3. During our 30 years with the National Geographic Society so far, my wife Beverly and I have made over 25 films for National Geographic that have garnered 9 Emmy Awards, a Peabody award, and other international recognition. I have also published 11 books, multiple scientific papers, and dozens of articles for National Geographic Magazine and other publications, focusing on the plight of wildlife in southern Africa.

4. In 2006 Beverly and I were awarded the status of National Geographic Explorers in Residence, two of only 10 people that carry that title around the world.

5. In 2009, we founded the Big Cats Initiative, a National Geographic program dedicated to the preservation of big cats (including leopards, lions, tigers, jaguars, and cheetahs) through education, conservation projects, and a worldwide awareness campaign. To date, the Big Cats Initiative has funded over 90 grants across more than 27 countries. Further, the Big Cats Initiative has supported research, including the most recent and most comprehensive study of leopard populations across their range.

6. In 2011, I received a Presidential Order of Meritorious Service by the President of Botswana for my conservation efforts in Botswana. I am currently a member of the International Union for Conservation of Nature (IUCN) African Lion Working Group.

7. I am also the founder and CEO of Great Plains Conservation, a company that manages approximately 1,800,000 acres of land in Botswana and Kenya for conservation purposes. Through this effort I have converted large tracts of land that were formerly open to hunting to wildlife preserves that benefit surrounding communities and provide opportunities for low-impact eco-tourism. For example, the Selinda Reserve is a 350,000 acre private wildlife sanctuary in the northern part of Botswana that provides habitat for leopards and dozens of other species. Through this effort we increased the economic benefit to the nation of Botswana from that concession by 2,500% by switching from hunting to photographic tourism. I also sit on the board of The Big Life Foundation in Kenya.

7. I have made four films about leopards: "Eye of the Leopard," "The Unlikely Leopard," "Living with Big Cats " and "Big Cat Odyssey" all of which required Beverly and I to follow individual leopards on a daily basis for multiple years to capture natural leopard behavior. For example, for "Eye of the Leopard," from 2003-2007 Beverly and I following a leopard cub – named Legadema – from eight days of age, a journey that exposed us to the often

mysterious lives of leopards and gave us an insight into just how fragile and complex their societies are. Making these films – which involves hundreds of hours in the field, tracking leopards, highlighted the need to engage in policy decisions to protect the world's remaining big cats.

8. Based on my substantial experience in field biology and wildlife filmmaking, it is my expert opinion that leopards are in danger of extinction across their African and Asian range, and that governments must take all actions within their authority to promote the conservation of this species before it disappears.

9. Because of the secretive and solitary nature of leopards, it is exceedingly difficult get an accurate census of leopards across the species' African range. There were estimates of about 700,000 leopards in Africa in the 1980s, but the most recent science states that such estimates were flawed. There is no reason to believe that the population trend for leopards is significantly different to those of other big cats in Africa, all of which indicate a 95% decline over the past 50 years. Our own findings coincide with that hypothesis and in many areas I have surveyed, in particular where there is hunting, leopard have declined significantly. Territories have been disrupted and breeding has been suppressed. It is unlikely that there are more than 50,000 leopards in Africa today. Indeed, based on my experience over the last 30 years working with leopards, the population has significantly decreased in that time. For example, in the Selinda and Kwando areas of Botswana where we estimated a home range of 12 sq km per leopard and studied 26 females, once trophy hunting increased, we reached a point where we saw no leopards in 5 years and heard none either. Overhunting is a huge threat to this species.

10. Leopards are severely impacted by habitat loss and human encroachment, with the most recent data revealing that the African leopard has lost 48-67% of its historical range. I have actively worked to reduce those threats through protecting leopard habitat, educating surrounding communities on how to peacefully coexist with these predators, and implementing a program to reimburse local people for any loss of livestock caused by leopards, via our foundations and initiative (Great Plains Foundation, Big Cats Initiative and The Big Life Foundation.) However, the habitat loss is often linked to over population of humans and a task best tackled at a different level of policy and leadership discussion. Hunting, however, is something we can actually do something about with rational legislation today.

11. Despite their imperiled status, leopards continue to be targeted by trophy hunters, most of whom are American. I estimated that in the five years I followed Legadema, 10,000 leopards were legally shot by trophy hunters, (according to issued CITES permits) in addition to the immense amount of leopard poaching during the same period. The African leopard simply cannot sustain losses of thousands or even hundreds of individuals per year – at this rate the subspecies could go to the very edge of extinction in 10-15 years.

12. In my expert opinion, trophy hunting is a dire threat to the continued survival of the African leopard. My own observations across six hunting concessions in Botswana are consistent with this observation. Scientific papers (Palazy et al) on the relationship between lions and trophy hunters are also indicative of that basic fact that trophy hunting is the direct cause of cat population declines wherever it is carried out.

13. In addition, the activity undermines conservation, fuels corruption at the local levels in particular and often higher up, and causes the loss of the healthiest animals in the populations, animals that are key for reproduction and social cohesion of those species. Leopards are no exception. A single young male has enormous obstacles to overcome to survive on his own, to learn how to hunt, to fight for territory and to earn the status to breed. But it is exactly these qualities that trophy hunting targets the young male for, and selects the finest breeders, and carriers of the best genetic qualities for the survival of the species. This selection process often condemns them to death before they can breed. In addition, the cubs of prime breeding males that are shot are left unprotected and vulnerable to incoming territorial males, whose first order of business is to kill cubs from other males. Each leopard that is shot as a trophy cannot be considered in isolation but as just the tip of the iceberg in a trickle down effect of destruction to the family and society of leopards he influences.

14. Hunting is often cited as being a deterrent to poaching, but it was clearly demonstrated in Botswana, that the presence and occurrence of gunshots by legal hunters in an area only served to confuse anti poaching forces in their efforts to detect illegal hunters (poachers.) Once trophy hunting was stopped the wildlife authorities and the military (carrying out anti-poaching duties) were significantly more effective in finding and stopping poachers, to the degree where poaching in the border sections of Botswana went from 'rampant' to 'zero' over a six year period.

15. As a revenue resource, not only has hunting been shown to contribute less than 0.27% to the GDP's of African countries that still allow hunting today, it cannot co-exist with tourism for obvious reasons, so it actually erodes the potential for an alternative land use. The replacement of hunting, in particular of big cats, with tourism, however, is a very viable way to use the land more kindly. For example, before I acquired the Selinda concession in Botswana it was used almost exclusively for trophy hunting. On the first day of purchase I stopped all the hunting. Since then I have seen a steady regrowth and benefit to the wildlife, both in terms of population recovery, and of course the attitude of wildlife towards humans (tourists). We have no attacks, no charges, animals don't run in fear that we have been able to create a facility that is wild again but that allows people from around the world to see wildlife and become engaged with the life changing experiences that a safari in Africa can offer. We converted the concession into a Reserve and it now employs 20 times the number of local staff, pays taxes, and delivers a benefit to the nation of over 2,500% more that it was doing under the hunting regime, while providing food on a daily basis to many thousands of dependents of people we employ.

16. Claims that trophy hunting promotes conservation through financial contributions are not supported, nor are the claims that hunting is the only land use that creates value in marginal wildlife areas. The Selinda Reserve is a classic example of what was once considered a marginal piece of land. The value of these animals is a combination of "intangible" and "real." Who can quantify the impact on a young person, of seeing their first leopard in a tree in the wild, or the disappearance of any knowledge of a leopard to the Ingwe people of the Zulu nation, who take the leopard as their spiritual totem? For tourism, however, it is tangible. For example, I did a survey in Savuti in Botswana to calculate the value of one male lion trophy versus the value of that male lion as a living eco-tourism asset. At the time (in1995), the value of the dead lion was US$15,000, whereas its value alive was approximately US$2,000,000. A male leopard that may live 12 years in the wild is

an enduring revenue stream, a single hunt of that leopard ends, not just its genetic lineage, but its earnings potential for conservation, forever. Most trophy hunting operations, are owned by foreign interests and do not share money with local communities. Responsible eco-tourism – like that operated by Great Plains Conservation – shares the benefit with governments and local communities. For example, most hunting concessions can only service 12-15 hunters per year, whereas an eco-tourism operated concessions can service thousands with much less of an ecological impact. In each of our concessions we pay over more than US$30,000 per year in leases and benefits.

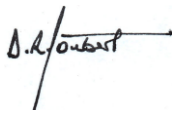
17. Because of our income from tourism and because of our influence on our guests, many of whom come specifically to see leopards, we have been able to solicit support in being able to rescue and move 100 rhinos from the highest poaching areas in South Africa to the protection in Botswana. This is an added and often hidden benefit of protecting the iconic cats of Africa: the extended holistic conservation ethic born from protection rather than selfish eradication.

18. Trophy hunting is little more than a bloodlust and thrill of killing and has no longer any place in sound wildlife management, especially in association with declining and threatened species. Studies also show that we cannot rely on the hunting fraternity to make wise conservation decisions around threatened species and that, in fact, as species decline and become more threatened or even endangered, they become even more valuable and desired by hunters. We have to ask if we want to project to the next generation that the best way for us to interact with nature is via violent actions like this and if that will lead to more or less harmony in an already troubled world.

19. The effort to protect leopards from extinction is vital – we no longer have the luxury of time to use or abuse these big cats for our own desires. Poaching of leopards – primarily for the fur trade – continues at unsustainable rates, and the African leopard is under immense threats from habitat loss and human conflict. To allow the trophy hunting of leopards for recreational purposes to continue unchecked is scientifically and ethically unjustified.

20. In my opinion, leopards across their African range are in danger of extinction and the U.S. Fish and Wildlife Service should strictly regulate the import of hunting trophies and other leopard parts in order to not continue to contribute to the decline of this endangered species.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is, in my professional opinion, true and correct.



Dereck Joubert

Executed on 1st day of July, 2016.

ANNEX C

CITES Establishment of Leopard Export Quotas 1987-2013

Resolution Conf. 5.13 a) recommends that the following states export not more than the indicated number of leopard skins in any one calendar year:

State	Quota
Botswana	80
Kenya	80
Malawi	20
Mozambique	60
United Republic of Tanzania	250
Zambia	300
Zimbabwe	350

Source: https://cites.org/sites/default/files/eng/cop/06/doc/E06-27.pdf, 1987.

Resolution Conf. 6.9, paragraph a), recommends that the following states export not more than the indicated number of leopard skins in any one calendar year:

State	Quota
Botswana	80
Central African Republic	40
Ethiopia	500
Kenya	80
Malawi	20
Mozambique	60
United Republic of Tanzania	250
Zambia	300
Zimbabwe	500

Source: https://cites.org/sites/default/files/eng/cop/07/doc/E07-27.pdf, 1989.

Resolution Conf. 7.7, paragraph a), recommends that the following states export not more than the indicated number of leopard skins in any one calendar year:

State	Quota
Botswana	100
Central African Republic	40
Ethiopia	500
Kenya	80
Malawi	20
Mozambique	60
South Africa	50
United Republic of Tanzania	250
Zambia	300
Zimbabwe	500

Source: https://cites.org/sites/default/files/eng/cop/08/doc/E-20.pdf, 1992.

STATE	QUOTA
Botswana	100
* Central African Republic	40
* Ethiopia	500
* Kenya	80
Malawi	50
Namibia	100
* Mozambique	60
* South Africa	50
United Republic of Tanzania	250
Zambia	300
Zimbabwe	500

Source: Proposal by Botswana, Malawi, Namibia, Zambia and Zimbabwe to transfer *Panthera pardus* from CITES Appendix I to Appendix II and to establish export quotas for eleven countries https://cites.org/sites/default/files/eng/cop/08/prop/E08-Prop-EQ1_to_EQ5_Panthera.PDF, 1992. The proposal was rejected by vote but the quotas approved.[1]

State	Quota
Botswana	100
Central African Republic	40
Ethiopia	500
Kenya	80
Malawi	50
Mozambique	60
Namibia	100
South Africa	75
United Republic of Tanzania	250
Zambia	300
Zimbabwe	500

Source: In session document, https://cites.org/sites/default/files/eng/cop/08/E-In-session.pdf, 1992.

The delegation of Botswana stated that in February 1994 they had submitted a special report to the Secretariat requesting an increase in their annual quota from 100 to 130 for the period 1995-1997. The Secretariat acknowledged receipt of the report and agreed that the increase in quota was justified but needed the approval of the Parties.

Source: https://cites.org/sites/default/files/eng/cop/09/E9-ComI.pdf, 1994.

Reported Exports of Leopard (*Panthera pardus*) Hunting Trophies and Skins

Country	1994			1995			1996	
	Quota	Special reports (exports)	Annual reports (exports)	Quota	Special reports (exports)	Annual reports (exports)	Quota	Special reports (exports)
Botswana	100	41	42 (42)	130	68	25 (25)	130	32
Central African Republic	40	19	19 (19)	40	8	7 (13)	40	n.a.
Ethiopia	500	2	1 (1)	500	0	0 (0)	500	2
Kenya	80	0	2 / (2)	80	0	0 (1)	80	0
Malawi	20	6	6 / (6)	50	8	/ (7)	50	1
Mozambique	60	15	4 (4)	60	23	14 (9)	60	18
Namibia	100	49	/ (47)	100	30	/ (36)	100	21
South Africa	50	28	/ (116)	75	55	n.a.	75	31
United Republic of Tanzania	250	185	275 (270)	250	175	223 (231)	250	250
Zambia	300	44	43	300	38	38	300	47
Zimbabwe	500	382	/ (142)	500	311	n.a.	500	n.a.

n.a. means the report in question was not submitted
( ) figures in brackets are from the CITES annual reports database maintained by WCMC

Source: https://cites.org/sites/default/files/eng/cop/10/doc/E10-41to43.pdf, 1997

[1] https://cites.org/sites/default/files/eng/cop/08/E-Com-I.pdf

Reported exports of leopard (*Panthera pardus*) whole skins and nearly whole skins

Party [quota]	1999	2000	2001
Botswana [130]	115	124	54
Central African Republic [40]	11	22	26
Ethiopia [500]	0	0	0
Kenya [80]	1	0	0
Malawi [50]	0	no report	no report
Mozambique [60]	42	51	26
Namibia [100]	45	61	55
South Africa [75]	15	37	35
United Republic of Tanzania [250]	259 *(includes 23 specimens collected in previous years)*	248	260 *(includes 16 specimens collected in previous years)*
Zambia [300]	76	55	10
Zimbabwe [500]	131	185	275

Source: https://cites.org/sites/default/files/eng/cop/12/doc/E12-23-1-1.pdf, 2002.

State	Quota
Botswana	130
Central African Republic	40
Ethiopia	500
Kenya	80
Malawi	50
Mozambique	120
Namibia	250
South Africa	150
Uganda	28
United Republic of Tanzania	500
Zambia	300
Zimbabwe	500

Source: https://cites.org/sites/default/files/eng/cop/16/doc/E-CoP16-52.pdf

State	Quota
Botswana	130
Central African Republic	40
Ethiopia	500
Kenya	80
Malawi	50
Mozambique	120
Namibia	250
South Africa	150
Uganda	28
United Republic of Tanzania	500
Zambia	300
Zimbabwe	500

Source: Resolution Conf. 10.14 (Rev. CoP16), https://cites.org/eng/res/10/10-14R16.php

ANNEX D

Information from the CITES Trade Database

Table 1: International trade in leopards and their parts for all sources and all purposes.

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Totals
bodies	7	0	9	10	22	19	24	24	9	11	135
bone pieces	0	0	0	2	0	0	0	0	0	0	2
bones	0	1	2	299	8	12	41	16	13	13	405
carvings	1	1	1	0	4	1	1	3	1	0	13
claws	0	70	20	3	64	18	65	72	68	1	381
cloth	0	0	0	0	0	0	0	1	0	0	1
derivatives	3,470	1,770	3,146	1,722	1,593	821	1,442	2	1	1	13,968
feet	0	2	0	29	0	0	0	4	0	0	35
garments	2	2	2	1	6	6	0	5	5	2	31
hair	0	6	0	10	209	0	2	2	8	1	238
hair products	0	0	0	0	0	0	0	1	0	0	1
leather products (L)	0	8	0	0	2	1	0	1	0	0	12
leather products (S)	3	2	4	2	3	6	2	3	262	0	287
live	37	44	45	42	48	75	79	68	68	44	550
medicine	0	0	0	0	0	0	0	383	56	99	538
plates	2	0	0	2	0	0	0	0	0	0	4
shoes	0	0	4	0	0	0	0	0	0	0	4
skeletons	1	0	0	0	0	0	1	0	0	0	2
skin pieces	9	1	1	65	10	2	2	17	8	4	119
skins	72	162	61	74	233	234	353	466	228	45	1,928
skulls	26	132	17	48	238	277	437	479	277	114	2,045
specimens	132	108	119	262	361	445	324	1,421	143	1,037	4,352
tails	0	0	0	0	0	2	0	0	0	10	12
teeth	31	4	9	2	1	40	31	4	13	11	146
trophies	1,229	1,126	1,060	1,279	1,400	990	769	985	722	651	10,211
unspecified	1	0	0	0	0	0	0	0	0	0	1
Grand Total:	5,023	3,439	4,500	3,852	4,202	2,949	3,573	3,957	1,882	2,044	35,421

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, all sources, all purposes, on 04/04/2016.

Table 2: International trade in wild source leopards and their parts for all purposes.

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	6	0	7	10	21	19	19	20	9	10	121
bones	0	1	0	259	6	12	41	16	13	13	361
carvings	0	0	0	0	0	0	0	0	1	0	1
claws	0	66	18	0	62	12	63	72	67	0	360
derivatives	521	246	154	4	20	20	50	0	0	0	1015
feet	0	2	0	0	0	0	0	4	0	0	6
garments	0	0	0	0	0	1	0	1	0	1	3
hair	0	6	0	10	209	0	0	2	7	1	235
leather	0	0	0	0	1	0	0	0	0	0	1

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
products (large)											
leather products (small)	0	0	0	0	1	0	0	0	0	0	1
live	5	5	5	2	7	2	13	11	9	2	61
plates	1	0	0	2	0	0	0	0	0	0	3
shoes	0	0	2	0	0	0	0	0	0	0	2
skeletons	1	0	0	0	0	0	1	0	0	0	2
skin pieces	4	0	0	2	4	1	1	12	1	3	28
skins	46	148	36	46	210	222	345	442	214	34	1743
skulls	25	128	16	47	235	270	437	477	276	112	2023
specimens	132	108	119	257	18	442	291	1419	106	905	3797
tails	0	0	0	0	0	1	0	0	0	10	11
teeth	31	4	8	0	0	18	27	4	4	4	100
trophies	1211	1098	1041	1255	1387	977	748	968	706	643	10034
unspecified	1	0	0	0	0	0	0	0	0	0	1
Grand Total	1984	1812	1406	1894	2181	1997	2036	3448	1413	1738	19909

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, wild sources, all purposes, on 03/23/2016.

Table 3. Imports of wild source leopards and their parts for all purposes, by country.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
leather products (small)		AE	0	0	0	0	0	1	0	0	0	0	
live		AE	0	2	0	0	0	0	0	0	0	0	
skins		AE	0	1	1	0	0	0	1	5	0	0	
skulls		AE	0	0	0	0	0	0	3	0	0	1	
trophies		AE	4	6	6	2	1	4	7	1	3	1	
skins		AR	0	0	0	0	0	1	0	3	1	0	
skulls		AR	0	0	0	0	0	1	0	4	4	1	
trophies		AR	1	4	7	1	8	2	4	10	5	4	
bodies		AT	0	0	0	0	0	1	0	0	0	0	
skins		AT	7	14	15	0	3	4	4	3	4	0	
skulls		AT	6	0	11	0	3	4	3	3	3	0	
teeth		AT	0	0	8	0	0	0	0	0	0	0	
trophies		AT	17	27	15	22	21	11	12	18	15	14	
trophies		AT	0	0	0	0	0	0	1	0	0	0	
hair		AU	0	0	0	0	0	0	0	2	0	0	
leather products (small)		AU	0	1	0	0	0	0	0	0	0	0	
skins		AU	1	9	1	0	1	5	2	1	0	0	
skulls		AU	0	0	0	0	0	4	2	1	0	0	
trophies		AU	0	4	0	2	1	0	1	2	0	1	
skins		BE	0	0	0	0	3	1	0	1	0	0	
skulls		BE	0	0	0	0	2	3	0	1	0	0	
trophies		BE	11	6	11	10	10	11	4	4	2	1	
skins		BG	0	1	0	0	0	1	0	1	0	0	
skulls		BG	0	0	0	0	0	2	0	1	0	0	
trophies		BG	4	6	7	3	1	5	3	6	1	2	

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
trophies		BH	0	1	0	0	0	0	0	0	0	0	
feet		BR	0	2	0	0	0	0	0	0	0	0	
skins		BR	0	3	0	0	1	0	0	0	0	0	
skulls		BR	0	0	0	0	1	1	0	0	0	0	
teeth		BR	0	4	0	0	0	0	0	0	0	0	
trophies		BR	1	1	0	1	1	1	0	0	0	4	
skulls		BS	0	0	0	0	2	0	0	0	0	0	
trophies		BS	0	1	0	1	1	0	0	0	0	0	
skins		BW	0	0	0	0	0	0	1	2	1	0	
skulls		BW	0	0	0	0	0	0	1	2	5	0	
trophies		BW	1	0	0	0	0	0	0	0	5	0	
bodies		CA	0	0	0	7	9	0	6	4	1	5	
bones		CA	0	1	0	2	2	0	2	0	0	0	
skin pieces		CA	0	0	0	0	0	0	1	0	0	0	
skins		CA	15	24	0	18	33	10	10	12	3	3	
skulls		CA	8	19	0	30	39	12	15	11	4	5	
skulls		CA	0	0	0	0	1	0	0	0	0	0	
trophies		CA	19	17	3	15	17	22	9	11	10	15	
CA total			42	61	3	72	101	44	43	38	18	28	450
skins		CG	0	0	0	0	0	0	0	0	0	2	
bodies		CH	2	0	0	0	0	0	0	0	0	1	
claws		CH	0	0	0	0	0	0	18	0	0	0	
hair		CH	0	6	0	0	0	0	0	0	0	0	
skins		CH	1	0	2	1	2	1	4	4	1	0	
skulls		CH	1	0	0	1	3	1	4	4	1	0	
specimens	ml	CH	0	5	0	0	0	0	0	0	0	0	
specimens		CH	0	100	46	25	0	0	0	27	6	3	
teeth		CH	0	0	0	0	0	0	0	4	4	0	
trophies		CH	10	2	10	4	6	0	21	3	7	5	
skulls		CL	0	0	0	0	0	1	0	0	0	0	
trophies		CL	4	0	1	1	0	1	0	0	3	0	
bodies		CN	1	0	1	0	0	1	2	2	1	0	
skins		CN	0	0	0	1	0	0	0	2	0	0	
skulls		CN	1	0	0	0	0	0	0	0	0	0	
specimens	g	CN	0	0	0	0	0	0	0	0	0	36	
specimens		CN	5	0	0	1	1	5	0	0	0	1	
trophies		CN	3	1	1	2	1	6	0	2	2	0	
skulls		CO	0	0	0	0	1	1	0	1	0	0	
trophies		CO	0	1	0	0	1	5	0	1	0	1	
skins		CR	1	0	0	0	0	0	0	0	0	0	
trophies		CR	1	3	0	2	0	0	1	1	0	0	
trophies		CS	1	0	0	1	0	0	0	0	0	0	
live		CU	0	0	0	0	0	0	0	6	6	0	
bodies		CZ	0	0	0	0	0	0	1	1	0	0	
skins		CZ	0	0	0	0	0	1	4	3	4	0	
skulls		CZ	0	0	0	0	0	1	4	3	4	0	
trophies		CZ	9	7	2	5	4	4	7	7	7	3	
bodies		DE	0	0	0	1	0	1	0	0	0	0	2
bones		DE	0	0	0	257	2	0	0	2	0	3	
claws		DE	0	0	0	0	18	0	0	0	0	0	
skin pieces		DE	0	0	0	0	2	0	0	0	0	0	
skins		DE	1	0	7	0	5	3	14	15	8	0	53

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
skulls		DE	0	0	0	0	5	1	13	19	8	0	
specimens	ml	DE	0	0	0	0	0	0	0	60	0	0	
specimens		DE	126	0	53	44	1	100	5	1233	0	901	
teeth		DE	31	0	0	0	0	0	0	0	0	0	
trophies		DE	66	65	42	38	67	37	32	51	38	36	472
DE Total			224	65	102	340	100	142	64	1380	54	940	3411
bodies		DK	0	0	0	0	0	1	2	1	2	0	
bones		DK	0	0	0	0	0	2	4	0	0	0	
derivatives		DK	10	0	0	0	0	0	0	0	0	0	
skins		DK	0	0	0	2	0	2	5	1	2	1	
skulls		DK	0	1	0	1	2	4	8	1	2	2	
teeth		DK	0	0	0	0	0	0	27	0	0	0	
trophies		DK	7	10	11	11	24	23	45	6	3	6	
trophies		EC	0	0	2	0	0	0	1	0	0	0	
skins		EE	0	1	0	0	0	0	0	0	0	0	
skulls		EE	0	1	0	0	0	0	0	0	0	0	
trophies		EE	1	1	0	1	0	0	0	0	1	1	
trophies		EG	0	1	0	0	0	0	0	0	0	0	
bodies		ES	0	0	0	0	0	2	0	1	0	0	3
skeletons		ES	0	0	0	0	0	0	1	0	0	0	3
skins		ES	0	3	0	0	19	27	32	12	7	1	6
skulls		ES	0	4	1	0	20	28	38	14	8	3	
trophies		ES	90	91	100	76	72	54	40	29	28	22	602
ES Total			90	98	101	76	111	111	111	56	43	26	823
skins		FI	0	0	0	0	0	0	2	1	0	0	
skulls		FI	0	0	0	0	0	1	3	1	1	0	
trophies		FI	6	5	3	3	24	6	5	5	2	5	
bodies		FR	0	0	0	0	3	0	0	0	0	0	3
carvings		FR	0	0	0	0	0	0	0	0	0.33	0	0
hair	kg	FR	0.486	0	0	0	0	0	0	0	0	0	0
skeletons		FR	1	0	0	0	0	0	0	0	0	0	1
skins		FR	4	1	1	0	29	26	19	23	11	3	117
skulls		FR	1	1	0	0	30	29	18	26	17	9	131
tails		FR	0	0	0	0	0	1	0	0	0	0	1
teeth	g	FR	65	0	0	0	0	0	0	0	0	0	0
trophies	kg	FR	0	0	4	0	0	0	0	0	0	0	0
trophies		FR	191	73	64	186	110	97	43	91	45	35	935
FR Total													1188
bodies		GB	0	0	0	0	4	3	1	2	4	0	
claws		GB	0	0	0	0	0	0	0	0	5	0	
derivatives		GB	0	0	0	0	0	0	50	0	0	0	
garments		GB	0	0	0	0	0	0	0	1	0	0	
hair		GB	0	0	0	0	209	0	0	0	0	0	
skin pieces		GB	0	0	0	0	0	0	0	5	0	0	
skins		GB	0	3	0	8	9	4	9	5	5	0	
skulls		GB	0	2	0	3	8	7	9	9	4	1	
specimens		GB	0	8	0	0	0	0	0	4	1	0	
trophies		GB	6	6	7	12	6	6	4	7	3	7	
live		GM	0	0	0	2	0	0	0	0	0	0	
bodies		HK	0	0	1	0	0	0	0	0	0	0	
leather products (small)		HK	0	0	0	0	1	0	0	0	0	0	

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
skins		HK	0	0	0	0	1	0	0	0	0	0	
skulls		HK	0	0	0	0	1	0	0	0	0	0	
skins		HN	0	0	0	0	0	0	0	0	1	0	
skulls		HN	0	0	0	0	0	0	0	0	1	0	
trophies		HR	6	3	3	3	4	1	1	0	0	1	
skins		HU	0	0	0	0	8	0	3	2	5	0	
skulls		HU	0	0	0	0	8	0	3	2	5	1	
trophies		HU	0	0	6	11	21	11	12	16	13	11	
trophies		ID	0	0	0	0	0	0	0	0	0	1	
trophies		IE	1	0	3	0	0	0	0	0	0	0	
specimens	ml	IL	0	0	0	0	0	0	0	0	1.5	0	
specimens		IL	0	0	0	0	0	0	0	1	0	0	
bodies		IS	0	0	1	0	0	0	0	0	0	0	
skins		IS	0	0	0	0	0	0	0	0	3	1	
skulls		IS	0	0	0	0	0	0	0	0	3	1	
trophies		IS	0	0	0	1	2	0	1	1	1	0	
bodies		IT	0	0	0	0	0	1	0	0	0	0	
bones		IT	0	0	0	0	0	2	0	0	0	0	
skins	kg	IT	0	0	0	0	0	0	1	0	0	0	
skins		IT	0	0	0	0	5	5	4	3	2	0	
skulls	kg	IT	0	0	0	0	0	0	1	0	0	0	
skulls		IT	0	0	0	0	6	6	10	5	7	1	
trophies		IT	20	12	15	18	23	18	22	19	15	7	
skins		JM	0	0	0	0	0	0	2	0	0	0	
skulls		JM	0	0	0	0	0	0	2	0	0	0	
trophies		JM	1	0	1	0	0	0	0	0	0	0	
live		JO	0	0	0	0	1	0	0	0	0	0	
skins		JO	0	0	0	0	1	0	0	0	0	0	
hair	kg	JP	0	0	0	0.2	0	0	0	0	0	0	
specimens	g	JP	0	300	0	0	0	0	0	0	0	0	
specimens	kg	JP	0	0.3	0	0	0	15	0	0	0	0	
specimens		JP	0	0	20	0	0	0	0	0	0	0	
skins		KE	0	0	0	0	0	0	1	0	0	0	
specimens		KE	0	0	0	0	0	0	0	1	0	0	
bodies		KR	3	0	0	0	0	0	1	0	0	0	
live		KR	0	0	0	0	2	0	0	0	0	0	
bodies		KW	0	0	0	0	1	0	0	0	0	0	
specimens		KW	1	0	0	0	0	0	0	0	0	0	
trophies		KW	0	0	2	1	0	0	0	0	0	0	
live		KZ	0	0	0	0	0	0	1	1	0	0	
bodies		LB	0	0	1	0	0	0	0	1	0	0	
skins		LB	0	0	0	0	1	0	0	0	0	0	
skulls		LB	0	0	0	0	0	2	0	1	0	0	
trophies		LB	1	0	1	2	1	2	4	0	1	0	
trophies		LI	1	0	0	0	0	0	0	0	0	0	
skins		LK	0	0	0	0	2	0	0	0	0	0	
skins		LT	0	0	0	0	0	0	0	1	1	0	
skulls		LT	0	0	0	0	0	0	0	1	1	0	
trophies		LT	1	1	2	2	5	3	0	2	2	4	
skins		LU	0	0	0	0	0	0	1	0	0	0	
skulls		LU	0	0	0	0	0	0	2	0	0	0	
trophies		LU	2	1	6	4	0	4	4	0	1	3	

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
derivatives		LV	0	0	0	0	0	2	0	0	0	0	
trophies		LV	2	4	3	4	2	1	0	1	3	3	
leather products (small)		LY	0	0	1	0	1	1	0	0	0	0	
skins		LY	0	0	1	0	1	0	0	0	0	0	
bodies		MA	0	0	0	0	0	0	1	0	0	0	
skins		MA	0	0	0	0	0	0	3	0	0	0	
skulls		MA	0	0	0	0	0	0	2	0	0	0	
trophies		MA	0	2	0	1	1	1	2	0	0	1	
trophies		MC	0	0	0	0	0	0	0	0	0	1	
skins		MG	0	0	0	0	0	0	0	1	0	0	
skulls		MG	0	0	0	0	0	0	1	1	0	0	
trophies		MG	0	0	0	0	0	0	1	0	0	0	
skulls		MU	0	0	0	0	0	0	0	1	0	0	
trophies		MU	0	0	0	0	0	0	0	1	0	0	
live		MW	0	0	0	0	0	0	6	2	0	0	
bodies		MX	0	0	0	0	1	0	0	0	0	0	
bones		MX	0	0	0	0	0	2	2	1	0	0	
claws		MX	0	0	0	0	0	0	0	18	18	0	
derivatives		MX	0	0	0	0	0	2	0	0	0	0	
skins		MX	0	0	0	0	3	4	3	4	5	1	
skulls		MX	0	2	0	0	3	5	11	4	4	2	
trophies		MX	40	68	54	64	50	47	38	49	33	31	
trophies		MX	0	0	0	0	0	0	1	0	0	0	
MX Total			40	70	54	64	57	60	55	76	60	34	570
skins		MZ	0	0	1	0	1	0	1	0	0	0	
skulls		MZ	0	0	0	0	0	0	1	0	0	2	
trophies		MZ	0	0	0	0	0	2	0	1	0	0	
bodies		NA	0	0	0	1	0	0	0	0	0	0	
skins		NA	0	0	0	0	0	0	2	2	0	0	
skulls		NA	0	1	0	0	0	0	2	2	0	0	
trophies		NA	3	5	0	2	1	1	1	1	1	0	
skins		NC	1	0	0	0	0	0	0	0	0	0	
trophies		NC	0	0	0	0	0	1	0	0	0	1	
bodies		NG	0	0	0	0	0	0	2	0	0	0	
skins		NG	0	0	0	0	0	0	0	6	0	0	
skulls		NG	0	0	0	0	0	0	2	0	0	0	
trophies		NG	0	0	0	0	0	0	0	4	0	0	
live		NI	0	0	0	0	0	0	1	0	0	0	
trophies		NI	0	0	0	0	0	0	0	1	0	0	
bodies		NL	0	0	0	0	0	1	0	0	0	0	
hair		NL	0	0	0	10	0	0	0	0	0	0	
skins		NL	3	0	0	0	1	0	2	1	0	0	
skulls		NL	0	0	0	1	2	0	2	0	0	0	
trophies		NL	2	1	0	0	3	2	0	0	0	2	
bodies		NO	0	0	0	0	0	0	0	0	0	3	
skins		NO	0	0	0	0	1	2	2	1	0	1	
skulls		NO	0	0	0	1	2	3	4	1	0	3	
specimens		NO	0	0	0	0	0	0	0	1	0	0	
trophies		NO	2	5	2	7	5	6	6	3	3	3	
trophies		NP	0	0	1	0	0	0	0	0	0	0	
bodies		NZ	0	0	0	0	2	0	0	1	0	0	

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
hair		NZ	0	0	0	0	0	0	0	0	0	1	
skin pieces		NZ	0	0	0	0	0	0	0	1	0	0	
skins		NZ	1	2	0	0	1	1	0	0	1	0	
skulls		NZ	0	0	0	0	2	1	1	2	1	0	
trophies		NZ	2	1	0	1	4	6	3	3	1	2	
skins		PA	0	0	0	0	0	0	0	0	2	0	
skulls		PA	0	0	0	0	0	0	0	1	3	0	
trophies		PA	0	0	0	0	0	1	0	1	1	0	
leather products (large)		PH	0	0	0	0	1	0	0	0	0	0	
skulls		PH	0	0	0	0	1	2	2	0	0	0	
trophies		PH	1	0	0	3	41	5	2	0	0	0	
live		PK	0	0	0	0	0	0	0	0	0	2	
skulls		PK	0	0	0	0	1	0	1	2	0	0	
trophies		PK	3	1	1	0	1	0	5	3	0	0	
trophies		PK	0	0	0	0	0	0	1	0	0	0	
bodies		PL	0	0	0	0	0	0	0	0	1	0	
skins		PL	0	0	0	0	2	0	1	2	0	0	
skulls		PL	0	0	0	0	2	0	1	1	0	0	
trophies		PL	5	10	8	8	8	6	8	6	6	6	
leather products (small)		PT	0	1	0	0	0	0	0	0	0	0	
skins		PT	0	0	0	0	0	1	5	5	2	0	
skulls		PT	0	0	0	0	3	6	10	7	2	0	
trophies		PT	18	12	12	7	16	6	9	5	2	1	
trophies		PY	0	0	0	0	0	0	0	0	0	3	
skulls		QA	0	0	0	0	0	0	0	2	2	4	
trophies		QA	2	0	0	0	0	2	3	4	3	0	
skins		RO	0	0	0	0	0	0	0	1	0	0	
skulls		RO	0	0	0	0	0	0	0	1	0	0	
trophies		RO	1	0	4	2	1	1	0	0	2	1	
trophies		RS	0	1	1	2	1	1	1	0	2	0	
bodies		RU	0	0	3	0	1	2	1	1	0	1	
live		RU	0	0	0	0	4	2	4	0	0	0	
skins		RU	0	0	0	0	7	6	8	7	2	1	
skulls		RU	0	0	0	0	6	5	11	6	2	7	
trophies		RU	15	8	18	36	40	35	29	43	21	36	
live		SA	1	0	0	0	0	0	0	0	3	0	
trophies		SA	0	0	4	0	1	0	0	0	0	0	
skins		SB	0	0	0	0	0	0	1	0	0	0	
skulls		SB	0	0	0	0	0	0	1	0	0	0	
skins		SD	0	0	0	0	0	0	0	0	1	0	
skulls		SD	0	0	0	0	0	0	0	0	1	0	
trophies		SD	0	0	0	0	0	0	0	0	0	2	
bodies		SE	0	0	0	0	0	0	0	1	0	0	
claws		SE	0	0	0	0	0	0	0	16	0	0	
skins		SE	0	0	0	0	0	4	1	6	2	0	
skulls		SE	0	0	0	0	0	2	3	6	4	1	
teeth		SE	0	0	0	0	0	18	0	0	0	0	
trophies		SE	2	7	9	5	29	7	3	8	12	3	
bones		SG	0	0	0	0	0	0	0	0	2	0	

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
skulls		SG	0	0	0	0	0	0	0	0	1	0	
trophies		SG	0	1	0	0	0	0	0	0	1	0	
trophies		SI	1	4	5	2	4	1	0	2	0	0	
bones		SK	0	0	0	0	0	0	0	0	0	1	
skins		SK	0	0	0	0	0	0	0	0	0	4	
skulls		SK	0	0	0	0	0	0	0	0	0	4	
trophies		SK	3	3	2	8	5	2	5	5	5	2	
trophies		SL	0	1	0	0	1	2	1	2	0	0	
live		SV	0	0	0	0	0	0	0	1	0	0	
trophies		SV	0	0	1	0	0	0	0	0	0	0	
live		SY	1	3	3	0	0	0	0	0	0	0	
skins		SY	0	1	0	0	0	0	0	0	0	0	
skins		SZ	0	2	4	4	0	0	0	0	0	0	
trophies		SZ	6	0	0	2	1	0	0	0	0	2	
live		TJ	2	0	0	0	0	0	0	0	0	0	
specimens		TN	0	0	0	1	0	0	0	0	0	0	
skins		TR	1	0	0	0	0	0	0	0	0	0	
trophies		TR	0	0	0	1	1	0	1	0	0	0	
skins		TW	0	0	0	0	0	0	1	0	0	0	
skins		TZ	0	0	0	0	0	1	1	0	0	0	
skulls		TZ	0	0	0	0	0	5	0	0	0	0	
trophies		TZ	1	1	1	1	1	5	0	0	0	0	
bodies		UA	0	0	0	1	0	0	0	0	0	0	
skulls		UA	0	0	0	0	0	1	0	0	0	0	
trophies		UA	0	1	2	1	1	1	0	0	2	3	
bodies		US	0	0	0	0	0	6	2	5	0	0	13
bones		US	0	0	0	0	2	4	31	9	11	9	66
claws		US	0	66	18	0	44	12	27	38	44	0	249
derivatives		US	511	246	154	4	20	16	0	0	0	0	951
garments		US	0	0	0	0	0	1	0	0	0	1	2
hair		US	0	0	0	0	0	0	0	0	7	0	7
leather products (small)		US	0	0	1	0	0	0	0	0	0	0	1
plates		US	1	0	0	2	0	0	0	0	0	0	3
shoes		US	0	0	2	0	0	0	0	0	0	0	2
skin pieces		US	4	0	0	2	0	1	0	2	1	3	13
skins		US	4	29	3	12	47	83	153	262	108	11	712
skulls		US	2	46	4	9	70	96	186	275	129	47	864
specimens	g	US	0	0	0	0	0	0	0	0	16	0	0
specimens	ml	US	0	0	0	0	0	6	0	0	0	0	0
specimens		US	0	0	0	186	0	286	286	150	39	0	947
specimens		US	0	0	0	0	0	51	0	0	0	0	51
tails		US	0	0	0	0	0	0	0	0	0	10	10
teeth		US	0	0	0	0	0	0	0	0	0	4	4
trophies		US	507	524	506	581	648	447	298	474	352	319	4656
trophies		US	0	0	0	0	0	1	0	0	0	0	1
unspecified		US	1	0	0	0	0	0	0	0	0	0	1
US Total													8553
trophies		VG	0	1	0	0	0	0	0	0	0	0	
skins		XX	0	0	0	0	1	1	0	1	0	2	
skulls		XX	0	0	0	0	0	1	0	0	0	0	
trophies		XX	15	2	0	0	0	3	0	1	0	2	

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
skins		YE	0	1	0	0	0	0	0	0	0	0	
skins		YU	0	0	0	0	0	0	0	0	1	0	
skulls		YU	0	0	0	0	0	0	0	0	1	0	
bones		ZA	0	0	0	0	0	2	2	4	0	0	8
claws		ZA	0	0	0	0	0	0	18	0	0	0	18
feet		ZA	0	0	0	0	0	0	0	4	0	0	4
live		ZA	1	0	2	0	0	0	1	1	0	0	5
skin pieces		ZA	0	0	0	0	2	0	0	4	0	0	6
skins		ZA	6	52	0	0	22	28	41	40	27	3	219
skulls		ZA	6	51	0	1	11	34	56	51	44	17	271
specimens	ml	ZA	0	0.5	0	0	0	0	0	0	0	0	0
specimens		ZA	0	0	0	0	16	0	0	2	60	0	78
trophies		ZA	89	74	73	74	85	48	44	55	43	30	615
ZA Total													1224
skulls		ZM	0	0	0	0	0	0	0	1	0	0	
trophies		ZM	0	0	0	0	0	0	2	2	0	1	
skins		ZW	0	1	0	0	0	0	2	3	6	0	
skulls		ZW	0	0	0	0	0	0	2	3	6	0	
trophies		ZW	5	5	3	2	4	2	0	0	0	1	

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" to U.S. of *Panthera pardus*, wild sources, all purposes, on 06/06/2016.

Table 5. Exports of wild source leopards and their parts for all purposes, by country.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
leather products (small)		AE	0	0	1	0	1	1	0	0	0	0	
live		AE	0	0	0	0	1	0	0	0	3	0	
skins		AE	6	2	1	0	3	0	0	0	0	0	
skulls		AE	6	0	0	0	0	0	0	0	0	0	
specimens		AE	0	0	35	1	0	0	0	2	0	0	
trophies		AE	2	0	0	0	0	0	1	0	0	0	
trophies		AR	0	0	0	0	0	0	2	0	3	0	
skulls		AT	0	0	0	1	0	0	0	0	0	0	
trophies		AT	4	0	0	3	1	0	2	1	1	1	
skins		AU	0	1	0	0	0	0	1	1	0	0	
trophies		AU	0	0	1	0	0	0	0	0	0	0	
bodies		BE	0	0	0	0	0	0	1	0	0	1	
trophies		BE	0	0	0	0	0	0	0	0	1	0	
trophies		BH	0	0	2	0	0	0	0	0	1	0	
trophies		BR	0	0	0	0	1	0	0	0	0	0	
bodies		BW	0	0	1	0	0	0	0	0	0	0	
claws		BW	0	0	0	0	0	0	0	16	0	0	
hair		BW	0	6	0	0	0	0	0	0	0	0	
skins		BW	0	2	2	0	3	0	3	6	0	0	
skulls		BW	0	0	0	0	2	0	21	22	13	1	
specimens	ml	BW	0	5	0	0	0	0	0	0	0	0	
specimens		BW	0	4	11	25	16	0	0	27	60	0	
trophies	kg	BW	0	0	4	0	0	0	0	0	0	0	
trophies		BW	54	47	50	58	39	34	19	30	33	3	
bodies		CA	0	0	0	0	0	0	1	1	0	0	
garments		CA	0	0	0	0	0	1	0	0	0	0	

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
plates		CA	0	0	0	2	0	0	0	0	0	0	
skins		CA	0	0	0	5	0	0	0	1	0	0	
skulls		CA	0	0	0	2	0	0	0	1	0	0	
trophies		CA	0	0	0	1	0	0	0	2	0	0	
skins		CD	0	0	0	3	2	0	0	5	0	0	
bones		CF	0	0	0	0	2	0	2	0	0	0	
claws		CF	0	0	0	0	18	0	18	0	0	0	
skins		CF	1	0	1	0	0	1	1	0	0	0	
skulls		CF	0	0	0	0	0	3	1	0	0	0	
specimens		CF	0	0	0	0	0	0	0	0	6	3	
trophies		CF	37	28	28	33	90	66	17	23	4	0	
bodies		CH	0	0	0	0	0	0	0	0	3	0	
skin pieces		CH	0	0	0	0	0	0	0	0	0	1	
skins		CH	0	0	7	0	0	0	0	0	0	0	
specimens		CH	125	0	0	0	0	0	0	2	1	0	
trophies		CH	4	0	0	0	0	0	0	0	0	0	
trophies		CL	0	0	0	0	0	4	0	0	0	0	
skins		CM	1	0	0	0	0	0	0	0	0	0	
derivatives		CN	18	202	85	4	0	14	0	0	0	0	
live		CZ	0	0	0	0	0	0	1	1	0	0	
bodies		DE	0	0	3	0	0	0	0	0	0	0	
derivatives		DE	0	0	3	0	0	0	0	0	0	0	
live		DE	1	0	0	0	0	0	0	0	0	0	
skins		DE	0	2	0	0	0	0	0	0	0	0	
skulls		DE	0	0	0	0	0	0	0	0	4	0	
trophies		DE	2	1	0	6	1	0	5	1	8	1	
hair	kg	DJ	0.486	0	0	0	0	0	0	0	0	0	
teeth	g	DJ	65	0	0	0	0	0	0	0	0	0	
trophies		DK	0	0	0	0	0	0	0	0	0	1	
skins		ES	0	0	0	0	0	0	0	0	0	1	
trophies		ES	0	0	1	0	0	0	0	0	0	1	
skins		ET	0	0	0	0	3	0	1	1	0	0	
skulls		ET	0	0	0	0	3	0	0	1	0	0	
trophies		ET	3	2	0	2	1	2	1	0	1	2	
bodies		FI	0	0	0	0	0	0	0	0	0	1	
trophies		FI	1	1	0	0	0	0	0	0	0	0	
bodies		FR	2	0	1	0	2	0	3	2	0	1	
claws		FR	0	0	0	0	0	0	18	0	0	0	
leather products (small)		FR	0	0	0	0	1	0	0	0	0	0	
skins		FR	1	0	0	0	0	0	3	0	0	0	
skulls		FR	0	0	0	0	3	2	5	1	0	0	
trophies		FR	6	6	9	6	9	9	24	11	16	7	
skin pieces		GA	0	0	0	0	0	0	0	5	0	0	
specimens		GA	0	0	0	0	0	0	0	0	20	0	
bodies		GB	0	0	0	0	1	0	0	0	0	0	
leather products (small)		GB	0	0	1	0	0	0	0	0	0	0	
skin pieces		GB	0	0	0	0	0	0	0	2	0	0	
skins		GB	3	2	0	0	0	1	0	0	0	0	
skulls		GB	0	0	0	0	1	1	0	0	0	0	

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
trophies		GB	2	1	1	0	0	0	0	0	0	0	
skin pieces		GH	0	0	0	2	0	0	0	0	0	0	
specimens		GQ	0	0	0	0	0	0	5	0	0	0	
live		GT	0	0	0	0	0	0	0	1	0	0	
specimens		IL	0	0	0	0	0	0	0	1	0	0	
live		IN	2	0	0	0	0	0	0	0	0	0	
plates		IN	1	0	0	0	0	0	0	0	0	0	
live		IR	0	0	0	0	0	2	0	0	0	0	
skins		IR	1	0	0	0	0	0	0	0	0	0	
skins		IT	0	0	0	0	0	0	0	0	1	0	
trophies		IT	1	1	0	0	1	0	0	1	0	0	
live		JO	0	0	3	0	0	0	0	0	0	0	
derivatives		JP	477	0	0	0	0	0	0	0	0	0	
skins		KE	0	0	0	0	1	0	1	0	0	2	
specimens	ml	KE	0	0.5	0	0	0	0	0	0	1.5	0	
specimens		KE	0	0	0	0	0	0	0	1	0	0	
specimens		KE	0	0	0	0	0	51	0	0	0	0	
trophies		KE	0	0	0	0	1	0	1	0	0	0	
live		KG	0	0	0	0	0	0	5	1	0	0	
specimens	kg	KH	0	0	0	0	0	15	0	0	0	0	
derivatives		KW	10	0	0	0	0	0	0	0	0	0	
skin pieces		LA	1	0	0	0	0	0	0	0	0	0	
unspecified		LA	1	0	0	0	0	0	0	0	0	0	
specimens		LR	0	0	0	0	0	0	0	0	0	1	
skins		LT	0	1	0	0	0	0	0	0	0	0	
leather products (small)		LY	0	0	0	0	0	1	0	0	0	0	
skins		LY	0	0	1	0	0	0	0	0	0	0	
live		ML	0	0	0	2	0	0	0	0	0	0	
skins		MW	0	0	0	0	2	0	0	1	0	0	
trophies		MX	0	1	0	0	0	0	0	3	0	0	
bodies		MZ	0	0	0	0	0	0	0	0	0	1	
skeletons		MZ	0	0	0	0	0	0	1	0	0	0	
skin pieces		MZ	0	0	0	0	4	0	0	4	0	0	
skins		MZ	1	6	1	0	11	7	70	92	62	4	
skulls		MZ	1	5	0	0	4	7	76	92	70	13	
trophies		MZ	76	58	59	52	56	49	21	56	31	49	
bodies		NA	0	0	1	2	1	13	3	1	0	4	25
bones		NA	0	0	0	0	4	0	2	0	2	6	14
claws		NA	0	22	0	0	0	4	0	0	18	0	44
hair		NA	0	0	0	0	0	0	0	0	0	1	1
live		NA	0	0	0	0	0	0	0	6	6	0	12
skin pieces		NA	0	0	0	0	0	0	1	0	0	0	1
skins		NA	7	18	12	1	14	8	14	5	2	1	82
skulls		NA	6	12	8	2	12	5	8	6	4	4	67
specimens	ml	NA	0	0	0	0	0	6	0	60	0	0	66
specimens		NA	0	0	0	0	0	100	0	1233	1	900	2234
teeth		NA	31	0	8	0	0	18	27	0	0	0	84
trophies		NA	168	197	176	226	343	150	100	111	100	105	1676
trophies		NA	0	0	0	0	0	1	1	0	0	0	2
NA Total													4308
claws		NL	0	0	0	0	0	0	0	0	8	0	

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
skins		NL	0	0	3	7	0	0	0	0	0	0	
skins		NO	0	0	0	0	0	0	0	0	2	0	
skulls		NO	0	0	0	0	0	0	0	0	2	0	
trophies		NO	0	0	0	1	1	0	0	2	0	0	
skins		NZ	1	6	1	4	0	1	0	0	0	0	
trophies		NZ	0	0	0	0	0	0	0	0	0	1	
derivatives		PH	0	13	6	0	0	0	0	0	0	0	
trophies		PT	1	0	0	0	0	0	0	0	0	0	
trophies		QA	0	0	0	0	0	0	2	0	0	0	
hair	kg	RU	0	0	0	0.2	0	0	0	0	0	0	
live		RU	0	0	0	0	2	0	0	0	0	0	
skins		RU	0	0	0	0	0	1	0	0	0	0	
specimens	g	RU	0	0	0	0	0	0	0	0	0	36	
specimens		RU	0	0	20	186	0	286	286	0	0	0	
live		SA	0	2	0	0	0	0	0	0	0	0	
skin pieces		SA	2	0	0	0	0	0	0	0	0	0	
live		SD	2	3	2	0	0	0	0	0	0	0	
shoes		SD	0	0	2	0	0	0	0	0	0	0	
skins		SD	0	0	0	0	0	0	1	0	0	0	
specimens		SN	0	0	0	0	0	0	0	0	18	0	
skins		SY	0	1	0	0	0	0	0	0	0	0	
skins		SZ	0	0	0	0	0	0	0	4	0	0	
specimens		SZ	0	0	0	0	0	0	0	2	0	0	
live		TH	0	0	0	0	2	0	0	0	0	0	
live		TM	0	0	0	0	2	0	0	0	0	0	
skins		TN	0	0	0	1	0	0	0	0	0	0	
skulls		TN	0	0	0	1	0	0	0	0	0	0	
derivatives		TW	0	13	0	0	0	0	0	0	0	0	
skin pieces		TW	1	0	0	0	0	0	0	0	0	0	
skins		TW	0	0	0	0	0	0	0	1	0	0	
trophies		TW	0	0	0	0	3	0	0	0	0	0	
bodies		TZ	0	0	0	0	0	0	0	2	3	0	5
bones		TZ	0	0	0	0	0	3	2	0	8	0	13
feet		TZ	0	2	0	0	0	0	0	0	0	0	2
hair		TZ	0	0	0	10	0	0	0	0	0	0	10
live		TZ	0	0	0	0	0	0	1	0	0	0	1
skins		TZ	11	25	1	1	135	108	56	79	39	7	462
skulls		TZ	6	19	2	1	134	114	54	73	41	6	450
skulls		TZ	0	0	0	0	1	0	0	0	0	0	1
specimens		TZ	1	0	0	0	0	0	0	0	0	0	1
tails		TZ	0	0	0	0	0	1	0	0	0	0	1
trophies		TZ	340	301	260	371	275	200	138	201	145	178	2409
TZ Total													3355
skins		UG	0	0	0	0	0	1	0	1	1	0	
skulls		UG	0	0	0	0	0	0	0	1	1	0	
specimens		UG	1	0	0	0	0	0	0	0	0	0	
trophies		UG	0	0	0	0	5	0	1	0	0	2	
bodies		US	0	0	0	4	2	0	1	0	0	0	
carvings		US	0	0	0	0	0	0	0	0	0.33	0	
hair		US	0	0	0	0	0	0	0	2	0	0	
skins		US	2	0	0	0	1	0	2	0	1	0	
skulls		US	0	0	0	4	0	0	1	1	0	1	

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
specimens	g	US	0	300	0	0	0	0	0	0	0	0	
specimens	kg	US	0	0.3	0	0	0	0	0	0	0	0	
specimens		US	0	0	0	0	1	1	0	0	0	0	
trophies		US	3	5	3	6	8	8	2	14	6	1	
bodies		UY	0	0	0	0	1	0	0	0	0	0	
skins		UY	0	0	0	0	1	0	0	0	0	0	
derivatives		VN	16	18	60	0	0	0	0	0	0	0	
skins		XX	0	0	0	0	0	1	0	0	1	0	
skulls		XX	0	0	0	0	0	0	0	0	1	0	
trophies		XX	0	0	0	0	0	0	1	0	0	5	
bodies		ZA	1	0	0	2	9	6	9	13	3	2	45
bones		ZA	0	1	0	2	0	8	35	8	2	5	61
claws		ZA	0	44	18	0	36	8	26	18	18	0	168
derivatives		ZA	0	0	0	0	20	6	50	0	0	0	76
garments		ZA	0	0	0	0	0	0	0	1	0	1	2
hair		ZA	0	0	0	0	209	0	0	0	0	0	209
leather products (large)		ZA	0	0	0	0	1	0	0	0	0	0	1
leather products (small)		ZA	0	2	0	0	0	0	0	0	0	0	2
live		ZA	0	0	0	0	0	0	6	2	0	2	10
skins		ZA	5	40	1	7	9	67	84	53	4	5	275
skulls		ZA	3	53	3	6	37	101	145	75	26	68	517
specimens		ZA	4	0	0	1	1	2	0	151	0	1	160
teeth		ZA	0	4	0	0	0	0	0	0	0	4	8
trophies		ZA	113	103	111	147	184	143	125	128	108	109	1271
ZA Total													2805
bodies		ZM	0	0	0	0	0	0	1	0	0	0	
bones		ZM	0	0	0	257	0	1	0	0	0	0	
hair		ZM	0	0	0	0	0	0	0	0	7	0	
skins		ZM	4	8	3	6	7	5	13	4	2	0	
skulls		ZM	1	7	0	2	5	7	25	5	4	1	
specimens	g	ZM	0	0	0	0	0	0	0	0	16	0	
specimens		ZM	0	104	53	44	0	0	0	0	0	0	
trophies		ZM	74	62	69	92	88	94	88	165	60	5	
trophies		ZM	0	0	0	0	0	0	2	0	0	0	
bodies		ZW	3	0	1	2	5	0	0	1	0	0	12
bones		ZW	0	0	0	0	0	0	0	8	1	2	11
claws		ZW	0	0	0	0	8	0	1	38	23	0	70
feet		ZW	0	0	0	0	0	0	0	4	0	0	4
skeletons		ZW	1	0	0	0	0	0	0	0	0	0	1
skin pieces		ZW	0	0	0	0	0	1	0	1	1	2	5
skins	kg	ZW	0	0	0	0	0	0	1	0	0	0	0
skins		ZW	2	34	2	11	18	21	95	188	101	14	486
skulls	kg	ZW	0	0	0	0	0	0	1	0	0	0	0
skulls		ZW	2	32	3	28	33	30	101	199	112	18	558
specimens		ZW	1	0	0	0	0	2	0	0	0	0	3
tails		ZW	0	0	0	0	0	0	0	0	0	10	10
teeth		ZW	0	0	0	0	0	0	0	4	4	0	8
trophies		ZW	320	284	271	251	280	217	195	219	188	175	2400
ZW Total													3568

Source: UNEP-WCMC CITES Trade Database searched by "gross exports" to U.S. of *Panthera pardus*, wild sources, all purposes, on 06/06/2016.

Table 6: International trade in "captive-bred" leopards and their parts for all purposes.

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	0	0	0	0	0	0	5	2	0	1	8
live	32	38	34	39	41	70	67	53	56	43	473
skins	0	1	0	0	14	0	0	0	2	1	18
specimens	0	3	0	5	343	0	32	2	37	132	554
trophies	0	0	2	2	1	0	2	1	3	0	11
Grand Total	32	42	36	46	399	70	106	58	98	177	1064

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, captive sources, all purposes, on 03/23/2016.

Table 7: International trade in "captive-bred" leopards and their parts for all purposes: Exporting countries.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
bodies		BE	0	0	0	0	0	0	2	1	0	1
bodies		DE	0	0	0	0	0	0	3	0	0	0
bodies		NL	0	0	0	0	0	0	0	1	0	0
live		BE	4	1	1	0	1	0	2	2	6	0
live		BW	0	0	0	0	0	4	0	0	0	0
live		BY	0	0	0	0	0	1	0	0	0	0
live		CH	0	1	0	3	2	0	0	0	1	0
live		CN	3	0	0	0	0	0	0	0	0	0
live		CY	0	0	0	0	3	0	0	0	0	0
live		CZ	1	0	2	3	1	1	1	2	4	0
live		DE	1	0	1	0	1	3	5	4	0	0
live		DK	0	3	0	0	0	0	1	0	2	3
live		EE	0	0	0	0	1	0	0	1	2	0
live		ES	0	0	0	0	0	0	0	0	0	4
live		FR	1	0	2	6	0	1	1	2	2	0
live		GA	0	0	0	0	0	0	0	0	2	4
live		GB	0	2	0	2	0	0	1	1	0	0
live		GE	0	0	0	0	0	0	0	0	0	1
live		GT	0	0	0	0	0	0	0	1	1	0
live		HU	2	3	1	1	0	2	0	0	0	0
live		ID	2	0	0	0	2	1	2	0	0	0
live		IR	0	0	0	0	0	2	0	0	0	0
live		IT	0	0	0	0	0	0	0	0	0	1
live		JO	0	0	0	0	1	0	0	0	0	0
live		KG	0	0	0	0	0	0	0	0	1	0
live		KR	0	0	0	0	0	1	0	0	0	0
live		KZ	0	2	3	0	0	0	0	0	0	0
live		LB	0	0	0	0	0	0	0	1	0	0
live		LV	0	0	0	0	0	0	2	0	0	0
live		MC	1	1	2	0	0	0	0	0	0	0
live		MX	0	0	0	6	0	11	1	0	0	7
live		NL	0	0	0	0	0	0	1	0	0	0
live		PL	0	0	0	0	0	0	0	0	1	0
live		PT	0	0	0	0	3	0	0	2	0	0
live		RO	2	0	0	0	0	0	0	0	9	0
live		RS	0	0	0	0	0	3	0	0	0	2

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
live		RU	1	0	0	1	3	4	19	0	0	1
live		SE	0	0	0	0	0	0	2	0	0	0
live		SG	1	1	0	0	0	0	0	0	0	0
live		SI	0	2	0	0	0	0	0	0	0	0
live		SK	1	0	0	0	0	0	0	0	0	0
live		SZ	0	0	0	0	1	0	0	0	0	0
live		TH	0	2	0	0	0	0	0	0	0	0
live		TN	0	0	0	0	2	0	0	0	0	0
live		TR	0	0	0	1	0	0	0	5	1	0
live		UA	0	2	1	0	3	0	0	0	0	0
live		US	0	1	4	0	0	0	0	0	0	0
live		UZ	0	0	0	0	0	0	0	0	2	0
live		XX	0	0	1	3	1	0	0	1	0	0
live		ZA	0	1	0	5	0	7	0	2	0	3
live		ZW	0	0	0	0	0	0	0	0	0	3
skins		CH	0	1	0	0	1	0	0	0	0	0
skins		MZ	0	0	0	0	2	0	0	0	0	0
skins		NL	0	0	0	0	0	0	0	0	0	1
skins		SZ	0	0	0	0	1	0	0	0	0	0
skins		ZA	0	0	0	0	0	0	0	0	2	0
specimens	flasks	SG	0	3	0	0	0	0	0	0	0	0
specimens		AE	0	0	0	5	0	0	20	0	2	2
specimens		DK	0	0	0	0	0	0	0	2	0	0
specimens		NA	0	0	0	0	0	0	0	0	33	128
specimens		RU	0	0	0	0	343	0	0	0	0	0
specimens		US	0	0	0	0	0	0	5	0	0	0
trophies		NA	0	0	1	0	0	0	0	0	0	0
trophies		NL	0	0	0	0	0	0	0	1	0	0
trophies		TZ	0	0	0	1	0	0	0	0	1	0
trophies		ZA	0	0	1	1	1	0	0	0	2	0
trophies		ZW	0	0	0	0	0	0	1	0	0	0

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, captive sources, all purposes, on 06/06/2016.

Table 8: International trade in "captive-born" leopards and their parts for all purposes.

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live	3	1	9	1	1	5	0	2	2	1	25
skulls	0	0	0	0	1	0	0	0	0	0	1
trophies	0	0	1	1	0	0	0	0	4	0	6
Grand Total	3	1	10	2	2	5	0	2	6	1	32

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, F1 sources, all purposes, on 03/23/2016.

Table 9: International trade in "pre-Convention" leopards and their parts from "pre-Convention" for all purposes.

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	0	0	1	0	1	0	1	2	0	0	5
carvings	0	1	1	0	4	1	1	2	1	0	11
claws	0	0	2	0	0	4	0	0	1	0	7
derivatives	0	0	5	2	0	2	0	2	1	1	13
garments	1	2	1	1	0	3	0	1	2	0	11

leather products (large)	0	0	0	0	1	1	0	1	0	0	3
leather products (small)	3	0	2	0	0	0	0	2	1	0	8
skin pieces	3	0	0	2	2	0	1	2	2	1	13
skins	10	6	14	14	7	8	4	21	10	7	101
skulls	1	0	0	0	0	3	0	1	1	1	7
specimens	0	0	0	0	0	1	1	0	0	0	2
tails	0	0	0	0	0	1	0	0	0	0	1
teeth	0	0	0	0	0	1	2	0	6	5	14
trophies	2	0	1	1	3	1	6	3	2	2	21
Grand Total	20	9	27	20	18	26	16	37	27	17	217

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, pre-Convention sources, all purposes, on 03/23/2016.

Table 10: International trade in "ranched" leopards and their parts for all purposes.

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live	0	0	0	0	0	0	0	8	4	0	8
skins	0	1	0	0	0	0	0	0	0	0	1
skulls	0	1	0	0	0	0	0	0	0	0	1
trophies	0	1	0	1	0	0	0	0	0	0	1
Grand Total	0	3	0	1	0	0	0	8	4	0	16

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, ranched sources, all purposes, on 03/23/2016.

Table 11: International trade in leopards and their parts from "confiscations/seizures" and for all purposes.

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	1	0	0	0	0	0	0	0	0	0	1
bone pieces	0	0	0	2	0	0	0	0	0	0	2
bones	0	0	2	40	4	0	0	0	4	0	50
carvings	1	0	0	0	0	0	0	0	0	0	1
claws	0	4	0	3	2	2	2	0	0	1	14
cloth	0	0	0	0	0	0	0	1	0	0	1
derivatives	2939	1504	2987.5	1712	1573	799	1392	0	0	0	12906.5
feet	0	0	0	29	0	0	0	0	0	0	29
garments	1	0	2	0	2	2	0	1	2	1	11
hair	0	0	0	0	0	0	2	0	1	0	3
hair products	0	0	0	0	0	0	0	1	0	0	1
leather products (large)	0	8	0	0	0	0	0	0	0	0	8
leather products (small)	0	0	0	2	1	4	2	0	260	0	269
medicine	0	0	0	0	0	0	0	383	56	99	538
plates	1	0	0	0	0	0	0	0	0	0	1
shoes	0	0	2	0	0	0	0	0	0	0	2
skin pieces	2	1	1	61	1	1	0	3	4	0	74

skins	10	4	4	8	2	5	1	1	2	1	38
skulls	0	2	1	1	2	3	0	1	0	1	11
specimens	0	0	0	0	0	0	0	1	0	0	1
teeth	0	0	1	2	1	21	2	0	1	0	28
trophies	22	35	19	31	15	11	14	18	10	5	180
Grand Total	2977	1558	3019.5	1891	1603	848	1415	410	340	108	14169.5

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, seized/confiscated sources, all purposes, on 03/23/2016.

Table 12: International trade in leopards and their parts from "source unknown" and for all purposes.

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	BE	0	0	0	0	0	0	1	0	0	0	1
derivatives	CN	0	0	7	4	0	14	0	0	0	0	25
leather products (small)	GB	0	0	1	0	0	0	0	0	0	0	1
live	KG	0	0	0	0	0	0	5	1	0	0	6
plates	IN	1	0	0	0	0	0	0	0	0	0	1
skin pieces	GB	0	0	0	0	0	0	0	2	0	0	2
skins	CH	0	0	7	0	0	0	0	0	0	0	7
skins	GB	2	0	0	0	0	0	0	0	0	0	2
skins	LT	0	1	0	0	0	0	0	0	0	0	1
skins	NL	0	0	0	7	0	0	0	0	0	0	7
skins	RU	0	0	0	0	0	1	0	0	0	0	1
skulls	GB	0	0	0	0	0	1	0	0	0	0	1
specimens	AE	0	0	35	0	0	0	0	0	0	0	35
trophies	GB	0	0	1	0	0	0	0	0	0	0	1
Grand Total												91

Source: UNEP-WCMC CITES Trade Database searched by "gross exports" of *Panthera pardus*, unknown sources, all purposes, on 03/23/2016.

Table 13: International trade in leopards and their parts for "commercial" purposes and from all sources.

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	0	0	1	0	1	0	5	3	0	1	11
carvings	0	1	1	0	1	0	1	3	0	0	7
claws	0	4	0	2	0	0	0	0	1	0	7
cloth	0	0	0	0	0	0	0	1	0	0	1
derivatives	512	244	847	568	317	147	0	2	1	0	2638
feet	0	0	0	29	0	0	0	0	0	0	29
garments	1	2	1	0	1	2	0	4	3	0	14
leather products (large)	0	0	0	0	1	0	0	0	0	0	1
leather products (small)	0	0	2	1	1	1	1	0	260	0	266
live	6	4	4	5	2	5	1	1	7	4	39
medicine	0	0	0	0	0	0	0	260	26	45	331
skin pieces	4	0	0	55	2	0	0	3	4	1	69
skins	7	5	24	5	4	4	3	10	6	4	72
skulls	3	0	0	0	2	1	1	1	0	0	8

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
specimens	0	0	0	0	0	0	2	0	0	0	2
teeth	0	0	0	2	0	1	1	0	8	2	14
trophies	1	1	2	3	2	1	0	1	1	1	13
Grand Total	534	261	882	670	334	162	15	289	317	58	3522

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, hunting trophy purpose, on 03/23/2016.

Table 14: International trade in leopards and their parts for "commercial" purposes and from all sources: Importing countries (range States in bold).

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
AE	2	2	1	0	2	1	0	0	4	1	13
AL	0	0	1	0	0	0	0	0	0	0	1
AU	0	0	0	2	0	0	2	1	5	0	10
CA	4	0	0	0	0	1	0	1	0	0	6
CH	2	0	7	1	0	1	2	5	1	0	19
CN	0	0	2	1	2	0	4	3	4	1	17
DE	0	1	7	0	1	1	0	0	1	1	12
EG	0	0	0	0	0	3	0	0	0	0	3
ES	0	0	0	0	2	1	0	0	0	0	3
FR	0	0	0	0	0	0	0	4	5	0	9
GB	0	1	0	1	0	1	0	0	0	0	3
HK	0	0	0	0	2	0	0	2	0	0	4
HU	0	0	0	0	0	0	0	0	1	0	1
ID	0	0	0	0	1	0	0	0	2	0	3
IN	0	1	0	0	0	1	0	0	0	0	2
IS	0	0	1	0	0	0	0	0	0	0	1
JP	3	0	0	0	0	0	0	0	0	0	3
KR	0	0	0	0	0	0	1	1	0	2	4
LY	0	0	1	0	1	0	0	0	0	0	2
MO	0	0	0	0	1	0	0	0	0	0	1
MX	0	0	1	1	1	0	0	0	0	0	3
NZ	0	0	0	3	0	0	0	0	0	0	3
PK	0	0	0	1	0	0	0	0	0	0	1
QA	0	0	0	0	0	0	0	1	3	3	7
RU	0	0	0	0	0	0	0	4	0	0	4
SA	0	0	0	2	0	0	0	0	0	0	2
SG	0	0	0	0	0	0	0	0	0	1	1
SY	0	0	3	0	0	0	0	0	0	0	3
TR	0	0	7	0	0	0	0	0	0	0	7
TW	0	0	1	0	0	0	0	0	0	0	1
UA	0	1	0	0	0	0	0	0	0	0	1
UG	0	0	0	0	0	1	0	0	0	0	1
US	522	253	850	657	320	151	5	265	289	46	3358
ZA	0	2	0	1	1	0	1	2	2	3	12
ZW	1	0	0	0	0	0	0	0	0	0	1
Grand Total	534	261	882	670	334	162	15	289	317	58	3522

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, commercial purposes, on 03/23/2016.

Table 15. International trade in leopards and their parts for commercial purposes, where specimens were confiscated or seized, by importing country.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
claws		US	0	4	0	2	0	0	0	0	0	0	
cloth		US	0	0	0	0	0	0	0	1	0	0	
derivatives	g	US	0	562	0	0	0	435	0	0	0	0	997
derivatives		US	35	238	847	568	317	146	0	0	0	0	2151
feet		US	0	0	0	29	0	0	0	0	0	0	
garments		AU	0	0	0	0	0	0	0	0	1	0	
garments		DE	0	0	0	0	0	0	0	0	1	0	
garments		US	1	0	0	0	1	0	0	1	0	0	
leather products (small)		US	0	0	0	1	0	0	1	0	260	0	
medicine		US	0	0	0	0	0	0	0	260	26	45	331
skin pieces		AU	0	0	0	0	0	0	0	0	1	0	
skin pieces		US	1	0	0	55	0	0	0	1	1	0	
skins		IS	0	0	1	0	0	0	0	0	0	0	
skins		NZ	0	0	0	3	0	0	0	0	0	0	
skins		US	2	0	0	0	0	2	0	1	0	0	
skulls		US	0	0	0	0	0	1	0	0	0	0	
teeth		US	0	0	0	2	0	1	0	0	1	0	

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus*, commercial purposes, purpose is confiscated or seized, on 06/06/2016.

Table 16. Gross exports of *Panthera pardus* derivatives and medicines to the U.S., commercial purposes, where the source is confiscated or seized.

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
derivatives	CH	0	0	0	0	10	0	0	0	0	0	10
derivatives	CN	0	201	847	568	307	146	0	0	0	0	2069
derivatives	KR	0	7	0	0	0	0	0	0	0	0	7
derivatives	VN	29	0	0	0	0	0	0	0	0	0	29
derivatives	XX	6	30	0	0	0	0	0	0	0	0	36
medicine	CN	0	0	0	0	0	0	0	260	26	0	286
medicine	HK	0	0	0	0	0	0	0	0	0	45	45
Totals		35	238	847	568	317	146	0	260	26	45	2482

Source: UNEP-WCMC CITES Trade Database searched by "gross exports" of *Panthera pardus* to the U.S. for commercial purposes, where the specimens were confiscated or seized, on 03/23/2016.

Table 17. International trade in leopards and their parts for commercial purposes, where specimens were confiscated or seized, by exporting country.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
cloth		AE	0	0	0	0	0	0	0	1	0	0	
garments		CA	0	0	0	0	1	0	0	0	0	0	
skins		CD	0	0	0	0	0	1	0	0	0	0	
derivatives		CH	0	0	0	0	10	0	0	0	0	0	
skins		CH	0	0	1	0	0	0	0	0	0	0	
skin pieces		CI	0	0	0	0	0	0	0	0	1	0	
teeth		CI	0	0	0	0	0	1	0	0	1	0	
derivatives	g	CN	0	0	0	0	0	435	0	0	0	0	435
derivatives		CN	0	201	847	568	307	146	0	0	0	0	2069

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
leather products (small)		CN	0	0	0	0	0	0	0	0	260	0	260
medicine		CN	0	0	0	0	0	0	0	260	26	0	286
skins		CN	0	0	0	3	0	0	0	0	0	0	3
garments		FR	1	0	0	0	0	0	0	0	0	0	
skins		FR	2	0	0	0	0	0	0	0	0	0	
garments		GB	0	0	0	0	0	0	0	1	0	0	
skin pieces		GB	0	0	0	1	0	0	0	0	0	0	
skins		GB	0	0	0	0	0	0	0	1	0	0	
medicine		HK	0	0	0	0	0	0	0	0	0	45	
leather products (small)		IR	0	0	0	0	0	0	1	0	0	0	
derivatives		KR	0	7	0	0	0	0	0	0	0	0	
claws		NA	0	4	0	0	0	0	0	0	0	0	
skins		NA	0	0	0	0	0	1	0	0	0	0	
skulls		NA	0	0	0	0	0	1	0	0	0	0	
skin pieces		NG	0	0	0	0	0	0	0	1	0	0	
derivatives	g	TW	0	562	0	0	0	0	0	0	0	0	
skin pieces		UG	1	0	0	0	0	0	0	0	0	0	
teeth		UG	0	0	0	2	0	0	0	0	0	0	
garments		US	0	0	0	0	0	0	0	0	2	0	
skin pieces		US	0	0	0	0	0	0	0	0	1	0	
derivatives		VN	29	0	0	0	0	0	0	0	0	0	
derivatives		XX	6	30	0	0	0	0	0	0	0	0	
claws		ZA	0	0	0	2	0	0	0	0	0	0	
feet		ZA	0	0	0	29	0	0	0	0	0	0	
leather products (small)		ZA	0	0	0	1	0	0	0	0	0	0	
skin pieces		ZA	0	0	0	54	0	0	0	0	0	0	

Source: UNEP-WCMC CITES Trade Database searched by "gross exports" of *Panthera pardus*, commercial purposes, purpose is confiscated or seized, on 06/06/2016.

Table 18: International trade in leopards and their parts for "commercial" purposes and from all sources: Exporting countries (range States in bold).

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
AE	0	0	1	0	2	0	0	1	0	0	4
AR	0	2	0	0	0	0	0	0	0	0	2
AT	0	0	1	0	0	0	0	0	0	0	1
AU	0	1	0	1	0	0	0	1	1	0	4
BE	2	1	1	0	1	0	2	1	6	1	15
CA	0	0	0	0	1	0	0	0	0	0	1
CD	0	0	0	0	0	1	0	0	0	0	1
CH	0	0	15	0	11	1	0	0	2	0	29
CI	0	0	0	0	0	1	0	0	2	0	3

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
CN	0	207	847	571	307	146	0	260	286	0	2624
CZ	0	0	0	1	0	0	1	1	0	0	3
DE	7	4	8	1	1	1	5	2	1	1	31
ES	0	0	0	0	0	0	0	0	0	1	1
ET	0	0	0	1	0	0	0	0	0	0	1
FR	3	0	0	1	3	2	2	5	0	3	19
GB	1	0	4	1	2	0	2	13	7	0	30
HK	0	0	0	0	0	0	0	0	0	45	45
ID	3	0	0	0	0	0	0	0	0	0	3
IN	0	1	0	0	0	0	0	0	0	0	1
IR	0	0	0	0	0	0	1	0	0	0	1
JO	0	0	3	0	1	0	0	0	0	0	4
JP	477	0	0	0	0	0	0	0	0	0	477
KR	0	7	0	0	0	0	0	0	0	0	7
KZ	0	1	0	0	0	0	0	0	0	0	1
LT	0	1	0	0	0	0	0	0	0	0	1
LY	0	0	1	0	0	1	0	0	0	0	2
MZ	1	0	0	1	0	0	0	0	1	0	3
NA	0	5	0	0	0	2	0	0	0	0	7
NG	0	0	0	0	0	0	0	1	0	0	1
NL	0	0	0	0	0	0	0	0	3	1	4
TZ	4	0	1	0	3	0	2	1	0	0	11
UA	0	1	0	0	0	0	0	0	0	0	1
UG	1	0	0	2	0	1	0	0	0	0	4
US	0	0	0	2	0	0	0	3	8	2	15
VN	29	0	0	0	0	0	0	0	0	0	29
XX	6	30	0	0	0	0	0	0	0	0	36
ZA	0	0	0	88	0	5	0	0	0	0	93
ZM	0	0	0	0	0	1	0	0	0	1	2
ZW	0	0	0	0	2	0	0	0	0	3	5
Grand Total	534	261	882	670	334	162	15	289	317	58	3522

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, commercial purposes, on 03/23/2016.

Table 19: International trade in leopards and their parts for "hunting trophy" purposes from all sources.

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	2	0	3	8	15	18	12	14	4	8	84
bones	0	1	0	2	6	12	41	16	13	13	104
claws	0	66	18	0	62	12	45	72	59	0	334
derivatives	0	0	0	0	20	6	0	0	0	0	26
feet	0	2	0	0	0	0	0	4	0	0	6
garments	0	0	0	0	0	0	0	0	0	1	1
hair	0	0	0	0	0	0	0	0	0	1	1
leather products (large)	0	8	0	0	0	0	0	0	0	0	8
leather products (small)	0	1	0	0	0	0	0	0	0	0	1
live	0	0	0	0	0	2	0	0	0	0	2
plates	0	0	0	2	0	0	0	0	0	0	2

Term	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skeletons	1	0	0	0	0	0	1	0	0	0	2
skin pieces	0	0	0	0	4	1	1	5	1	2	14
skins	22	112	6	23	191	215	336	423	209	27	1564
skulls	11	131	6	42	229	267	431	473	273	111	1974
tails	0	0	0	0	0	1	0	0	0	10	11
teeth	31	4	0	0	0	18	27	4	4	4	92
trophies	1202	1099	1010	1115	1277	929	696	888	645	634	9495
Grand Total	1269	1424	1043	1192	1804	1481	1590	1899	1208	811	13721

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, all sources, hunting trophy purpose, on 03/23/2016.

Table 20: International trade in leopards and their parts for "hunting trophy" purposes and from all sources: Importing countries (range States in bold).

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
AE	0	1	1	2	1	0	10	0	3	2	20
AR	1	4	7	1	8	4	4	17	10	5	61
AT	23	26	9	21	23	19	19	24	20	13	197
AU	0	4	0	2	0	6	4	3	0	1	20
BE	11	6	11	10	14	15	4	6	2	1	80
BG	4	6	7	3	1	8	3	8	1	2	43
BH	0	1	0	0	0	0	0	0	0	0	1
BR	1	10	0	1	3	2	0	0	0	4	21
BW	1	0	0	0	0	0	2	4	5	0	12
BY	0	0	0	1	0	0	0	0	0	0	1
CA	33	59	3	70	97	44	43	31	20	24	424
CH	14	2	12	2	11	2	9	15	12	5	84
CL	4	0	0	0	0	2	0	0	3	0	9
CN	1	1	0	1	0	3	0	1	1	0	8
CO	0	1	0	0	2	6	0	2	0	1	12
CR	2	1	0	2	0	0	1	1	0	0	7
CS	1	0	0	0	0	0	0	0	0	0	1
CZ	9	7	2	5	4	6	16	14	15	3	81
DE	96	64	39	38	95	38	55	86	54	39	604
DK	7	11	11	14	26	32	91	9	7	9	217
EC	0	0	2	0	0	0	0	0	0	0	2
EE	1	3	0	1	0	0	0	0	1	1	7
EG	0	1	0	0	0	0	0	0	0	0	1
ES	90	98	101	76	109	111	110	56	33	26	810
FI	6	4	3	3	24	5	10	7	3	5	70
FR	191	73	42	47	114	114	47	72	38	39	777
GB	6	11	7	16	27	18	22	23	18	8	156
HN	0	0	0	0	0	0	0	0	2	0	2
HR	6	3	3	3	4	1	1	0	0	1	22
HU	0	0	6	11	37	11	18	20	23	12	138
ID	0	0	0	0	0	0	0	0	0	1	1
IE	1	0	3	0	0	0	0	0	0	0	4
IS	0	0	0	1	2	0	1	1	7	2	14
IT	20	12	15	18	34	32	38	27	21	8	225
JM	1	0	1	0	0	0	4	0	0	0	6
KW	0	0	2	1	1	0	0	0	0	0	4
LB	1	0	0	0	0	0	2	0	1	0	4
LT	1	1	2	2	5	3	0	4	4	4	26

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
LU	2	1	6	4	0	4	7	0	1	3	28
LV	2	4	3	4	2	3	0	1	3	3	25
MA	0	2	0	1	0	0	0	0	0	0	3
MC	0	0	0	0	0	0	0	0	0	1	1
MG	0	0	0	0	0	0	2	2	0	0	4
MU	0	0	0	0	0	0	0	2	0	0	2
MX	39	70	53	63	56	61	61	76	60	34	573
MZ	0	0	0	0	0	2	2	1	0	2	7
NA	3	2	0	2	0	1	4	5	0	0	17
NC	0	0	0	0	0	1	0	0	0	1	2
NI	0	0	0	0	0	0	0	1	0	0	1
NL	5	1	0	1	4	3	4	0	0	2	20
NO	2	5	2	8	8	11	12	5	3	10	66
NP	0	0	1	0	0	0	0	0	0	0	1
NZ	2	0	0	1	4	6	4	7	3	3	30
PA	0	0	0	0	0	1	0	2	6	0	9
PH	1	0	0	3	2	4	4	0	0	0	14
PK	3	1	1	0	2	0	6	5	0	0	18
PL	5	10	8	8	12	6	10	8	6	6	79
PT	18	13	12	7	19	13	24	17	6	1	130
QA	2	0	0	0	0	2	1	6	5	4	20
RO	1	0	4	2	1	1	0	2	2	1	14
RS	0	1	1	2	1	1	1	0	2	0	9
RU	15	8	21	31	48	48	46	53	11	40	321
SA	0	0	4	0	1	0	0	0	0	0	5
SB	0	0	0	0	0	0	2	0	0	0	2
SD	0	0	0	0	0	0	0	0	0	2	2
SE	2	6	9	5	29	31	7	34	14	4	141
SG	0	1	0	0	0	0	0	0	3	0	4
SI	1	4	5	1	2	1	0	2	0	0	16
SK	3	3	2	8	5	2	5	5	5	11	49
SL	0	1	0	0	1	2	1	2	0	0	7
SV	0	0	1	0	0	0	0	0	0	0	1
SZ	2	0	3	2	1	0	0	0	0	2	10
TR	0	0	0	1	1	0	1	0	0	0	3
TZ	1	1	1	1	1	11	1	0	0	0	17
UA	0	1	2	2	1	2	0	0	2	3	13
US	522	693	538	606	840	663	707	1074	644	408	6695
VG	0	1	0	0	0	0	0	0	0	0	1
XX	15	2	0	0	0	5	0	1	0	2	25
YU	0	0	0	0	0	0	0	0	2	0	2
ZA	87	178	74	75	117	112	158	148	114	50	1113
ZM	0	0	0	0	0	0	2	3	0	1	6
ZW	4	5	3	2	4	2	4	6	12	1	43
Grand Total	1269	1424	1043	1192	1804	1481	1590	1899	1208	811	13,721

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, all sources, hunting trophy purpose, on 03/23/2016.

Table 21: International trade in leopards and their parts for "hunting trophy" purposes from all sources: Exporting countries (range States in bold).

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
AE	2	0	0	0	0	0	0	0	0	0	2
AR	0	0	0	0	0	0	2	0	3	0	5
AT	3	0	0	1	1	0	2	1	1	1	10
AU	0	0	1	0	0	0	0	0	0	0	1
BE	0	0	0	0	0	0	0	0	1	0	1
BH	0	0	2	0	0	0	0	0	0	0	2
BR	0	0	0	0	1	0	0	0	0	0	1
BW	54	51	59	58	40	34	42	66	28	4	436
CA	0	0	0	4	0	0	0	4	0	0	8
CF	38	28	29	17	110	70	29	23	3	0	347
CH	4	0	0	0	0	0	0	0	0	0	4
CL	0	0	0	0	0	4	0	0	0	0	4
DE	2	0	3	1	0	0	0	1	8	1	16
DK	0	0	0	0	0	0	0	0	0	1	1
ES	0	0	1	0	0	0	0	0	0	2	3
ET	3	2	0	1	6	2	2	2	1	2	21
FI	1	1	0	0	0	0	0	0	0	1	3
FR	4	1	2	1	3	0	0	3	0	0	14
GB	2	0	0	0	2	0	0	0	0	0	4
IR	0	0	0	0	0	2	0	0	0	0	2
IT	1	1	0	0	1	0	0	1	0	0	4
MX	0	0	0	0	0	2	0	3	0	0	5
MZ	73	68	58	42	71	60	168	241	161	67	1009
NA	208	236	174	216	362	202	154	122	122	121	1917
NZ	0	0	0	0	0	0	0	0	0	1	1
PT	1	0	0	0	0	0	0	0	0	0	1
QA	0	0	0	0	0	0	2	0	0	0	2
TN	0	0	0	2	0	0	0	0	0	0	2
TW	0	0	0	0	3	0	0	0	0	0	3
TZ	351	344	239	294	511	394	235	310	222	188	3088
UG	0	0	0	0	5	0	1	2	0	2	10
US	2	5	3	12	10	8	5	15	6	2	68
UY	0	0	0	0	1	0	0	0	0	0	1
XX	0	0	0	0	0	1	1	0	0	2	4
ZA	114	254	131	160	242	331	422	286	159	192	2291
ZM	77	77	72	96	101	105	128	170	65	4	895
ZW	329	356	269	287	334	266	397	649	428	220	3535
Grand Total	1269	1424	1043	1192	1804	1481	1590	1899	1208	811	13721

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, hunting trophy purpose, on 03/23/2016.

Table 22: International trade in leopards trophies for "personal" purposes from all sources: Importing countries (range States in bold).

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies	AE	4	7	5	0	0	4	0	1	2	0	
trophies	AT	3	2	6	12	4	1	2	0	2	2	34
trophies	AU	2	0	0	0	1	0	1	0	0	1	
trophies	BG	0	1	0	0	1	0	0	0	0	0	
trophies	BH	0	2	0	0	0	0	0	0	0	0	
trophies	BS	0	1	0	1	1	0	0	0	0	0	
trophies	CA	3	0	0	0	1	0	0	1	0	2	

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies	CH	0	0	0	2	0	0	20	0	1	0	23
trophies	CL	0	0	1	1	0	0	0	0	0	0	
trophies	CN	0	0	0	0	0	0	0	2	0	0	
trophies	CR	0	2	0	0	0	0	0	0	0	0	
trophies	CS	0	0	0	1	0	0	0	0	0	0	
trophies	DE	4	0	3	0	3	3	0	1	0	0	
trophies	EC	0	0	0	0	0	0	1	0	0	0	
trophies	EE	0	0	0	1	0	0	0	0	0	0	
trophies	ES	0	0	0	0	0	0	3	1	11	0	15
trophies	FI	0	1	0	0	0	1	0	0	0	0	
trophies	FR	0	0	34	141	75	62	16	75	28	27	458
trophies	GB	0	0	0	1	0	0	0	0	0	0	
trophies	IM	0	0	0	0	0	0	0	0	0	1	
trophies	IS	0	0	0	0	1	0	0	0	0	0	
trophies	IT	0	0	0	0	0	0	0	0	2	0	
trophies	LB	0	0	1	3	2	2	2	0	0	0	
trophies	LI	1	0	0	0	0	0	0	0	0	0	
trophies	MA	0	0	0	1	1	1	2	0	0	1	
trophies	MX	1	0	1	2	0	0	0	1	0	0	
trophies	NG	0	0	0	0	0	0	0	4	0	0	
trophies	NL	0	0	1	0	1	0	0	0	0	0	
trophies	NZ	0	1	0	0	0	1	0	0	0	0	
trophies	PH	0	0	0	0	41	5	0	0	0	0	46
trophies	PK	0	0	0	0	0	0	1	0	0	0	
trophies	PL	0	0	0	0	0	0	0	1	0	0	
trophies	QA	0	0	0	0	0	0	1	0	0	0	
trophies	RU	0	0	0	5	5	2	2	4	14	5	37
trophies	SE	0	1	0	0	0	0	0	3	0	0	
trophies	SG	0	0	0	0	1	0	0	0	1	0	
trophies	SI	0	0	0	1	2	0	0	0	0	0	
trophies	SZ	4	0	0	0	0	0	0	0	0	0	
trophies	US	3	3	3	2	1	0	0	11	7	1	31
trophies	**ZA**	0	0	0	0	0	0	2	9	0	0	
Total		25	21	55	174	141	82	53	114	68	40	773

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus* trophies, all sources, hunting trophy purpose, on 06/06/2016.

Table 23: International trade in leopards trophies for "personal" purposes from all sources: Exporting countries (range States in bold).

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies	AE	0	0	0	0	0	0	1	0	0	0	
trophies	AR	0	0	0	0	0	0	2	0	0	0	
trophies	AU	0	0	0	0	0	0	0	1	0	0	
trophies	BH	0	0	0	0	0	0	0	0	1	0	
trophies	**BW**	0	0	0	2	4	0	3	22	21	1	53
trophies	**CF**	0	0	13	16	19	18	10	8	1	0	85
trophies	DE	0	0	0	5	0	0	3	0	5	1	
trophies	**ET**	0	4	0	0	1	0	0	0	0	1	
trophies	FR	0	3	0	0	0	0	0	0	0	0	
trophies	GB	0	1	0	0	0	0	0	1	0	0	
trophies	**KE**	0	0	0	0	1	0	1	0	0	0	
trophies	MX	0	1	0	0	0	0	0	0	0	0	

trophies	**MZ**	4	0	1	12	2	4	2	6	1	6	38
trophies	**NA**	3	2	8	27	19	7	6	4	7	3	86
trophies	NL	0	0	0	0	0	0	0	1	0	0	
trophies	NO	0	0	0	1	1	0	0	2	0	0	
trophies	NZ	0	0	0	0	0	0	0	0	0	1	
trophies	**TZ**	6	4	22	94	36	35	16	54	17	19	303
trophies	**UG**	0	0	0	0	1	0	0	0	0	0	
trophies	US	0	0	0	0	0	1	0	0	0	0	
trophies	**ZA**	3	4	2	7	44	11	0	0	4	2	77
trophies	**ZM**	2	0	2	2	5	2	3	4	4	1	
trophies	**ZW**	7	2	7	8	8	4	6	11	7	5	65

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus* trophies, all sources, hunting trophy purpose, on 06/06/2016.

Table 24: International trade in leopards and their parts for "scientific" purposes from all sources

Term	Unit	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies		0	0	0	0	0	0	1	0	0	0	1
bones		0	0	0	257	0	0	0	0	0	0	257
derivatives		0	0	0	0	0	0	50	0	0	0	50
hair	kg	0.486	0	0	0.2	0	0	0	0	0	0	0.686
hair		0	6	0	10	209	0	0	2	7	0	234
live		2	0	0	0	1	1	0	0	0	0	4
skin pieces		0	0	0	1	0	0	0	0	0	0	1
skins		0	0	0	7	0	0	0	0	0	0	7
specimens	flasks	0	3	0	0	0	0	0	0	0	0	3
specimens	g	0	300	0	0	0	0	0	0	16	36	352
specimens	kg	0	0.3	0	0	0	15	0	0	0	0	15.3
specimens	ml	0	5.5	0	0	0	6	0	60	1.5	0	73
specimens		126	108	99	260	360	437	311	1384	140	1034	4259
teeth	g	65	0	0	0	0	0	0	0	0	0	65

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, all sources, scientific purpose, on 06/06/2016.

Table 25: International trade in leopards and their parts for "scientific" purposes from all sources: Importing countries (range States in bold).

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
hair		AU	0	0	0	0	0	0	0	2	0	0
hair		CH	0	6	0	0	0	0	0	0	0	0
specimens	ml	CH	0	5	0	0	0	0	0	0	0	0
specimens		CH	0	100	46	30	0	0	0	0	6	3
specimens	g	CN	0	0	0	0	0	0	0	0	0	36
bones		DE	0	0	0	257	0	0	0	0	0	0
specimens	ml	DE	0	0	0	0	0	0	0	60	0	0
specimens		DE	126	0	53	44	1	100	30	1233	0	901
hair	kg	FR	0.486	0	0	0	0	0	0	0	0	0
teeth	g	FR	65	0	0	0	0	0	0	0	0	0
derivatives		GB	0	0	0	0	0	0	50	0	0	0
hair		GB	0	0	0	0	209	0	0	0	0	0
specimens	flasks	GB	0	3	0	0	0	0	0	0	0	0
specimens		GB	0	8	0	0	343	0	0	0	0	0
live		GT	0	0	0	0	0	1	0	0	0	0
specimens	ml	IL	0	0	0	0	0	0	0	0	1.5	0

live		JO	0	0	0	0	1	0	0	0	0	0
hair	kg	JP	0	0	0	0.2	0	0	0	0	0	0
live		JP	2	0	0	0	0	0	0	0	0	0
specimens	g	JP	0	300	0	0	0	0	0	0	0	0
specimens	kg	JP	0	0.3	0	0	0	15	0	0	0	0
bodies		KR	0	0	0	0	0	0	1	0	0	0
hair		NL	0	0	0	10	0	0	0	0	0	0
specimens		NO	0	0	0	0	0	0	0	1	0	0
hair		US	0	0	0	0	0	0	0	0	7	0
skin pieces		US	0	0	0	1	0	0	0	0	0	0
skins		US	0	0	0	7	0	0	0	0	0	0
specimens	g	US	0	0	0	0	0	0	0	0	16	0
specimens	ml	US	0	0	0	0	0	6	0	0	0	0
specimens		US	0	0	0	186	0	286	281	150	39	0
specimens		US	0	0	0	0	0	51	0	0	0	0
specimens	ml	**ZA**	0	0.5	0	0	0	0	0	0	0	0
specimens		**ZA**	0	0	0	0	16	0	0	0	95	130

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, all sources, scientific purpose, on 06/06/2016.

Table 26: International trade in leopards and their parts for "scientific" purposes from all sources: Exporting countries (range States in bold).

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
live		AE	0	0	0	0	1	0	0	0	0	0
specimens		AE	0	0	35	5	0	0	20	0	2	0
bodies		BE	0	0	0	0	0	0	1	0	0	0
hair		**BW**	0	6	0	0	0	0	0	0	0	0
specimens	ml	**BW**	0	5	0	0	0	0	0	0	0	0
specimens		**BW**	0	4	11	25	16	0	0	0	60	0
specimens		**CF**	0	0	0	0	0	0	0	0	6	3
specimens		CH	125	0	0	0	0	0	0	0	0	0
hair	kg	DJ	0.486	0	0	0	0	0	0	0	0	0
teeth	g	DJ	65	0	0	0	0	0	0	0	0	0
specimens		DK	0	0	0	0	0	0	0	2	0	0
specimens		GA	0	0	0	0	0	0	0	0	20	0
specimens		GQ	0	0	0	0	0	0	5	0	0	0
live		ID	2	0	0	0	0	0	0	0	0	0
specimens	ml	**KE**	0	0.5	0	0	0	0	0	0	1.5	0
specimens		**KE**	0	0	0	0	0	51	0	0	0	0
specimens	kg	KH	0	0	0	0	0	15	0	0	0	0
specimens		LR	0	0	0	0	0	0	0	0	0	1
live		MX	0	0	0	0	0	1	0	0	0	0
specimens	ml	**NA**	0	0	0	0	0	6	0	60	0	0
specimens		**NA**	0	0	0	0	0	100	0	1233	34	1030
skin pieces		NL	0	0	0	1	0	0	0	0	0	0
skins		NL	0	0	0	7	0	0	0	0	0	0
hair	kg	RU	0	0	0	0.2	0	0	0	0	0	0
specimens	g	RU	0	0	0	0	0	0	0	0	0	36
specimens		RU	0	0	0	186	343	286	286	0	0	0
specimens	flasks	SG	0	3	0	0	0	0	0	0	0	0
specimens		SN	0	0	0	0	0	0	0	0	18	0
hair		**TZ**	0	0	0	10	0	0	0	0	0	0
specimens		**UG**	1	0	0	0	0	0	0	0	0	0
hair		US	0	0	0	0	0	0	0	2	0	0

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
specimens	g	US	0	300	0	0	0	0	0	0	0	0
specimens	kg	US	0	0.3	0	0	0	0	0	0	0	0
specimens		US	0	0	0	0	1	0	0	0	0	0
derivatives		**ZA**	0	0	0	0	0	0	50	0	0	0
hair		**ZA**	0	0	0	0	209	0	0	0	0	0
specimens		**ZA**	0	0	0	0	0	0	0	149	0	0
bones		**ZM**	0	0	0	257	0	0	0	0	0	0
hair		**ZM**	0	0	0	0	0	0	0	0	7	0
specimens	g	**ZM**	0	0	0	0	0	0	0	0	16	0
specimens		**ZM**	0	104	53	44	0	0	0	0	0	0

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, scientific purpose, on 06/06/2016.

Table 26: International trade in leopards and their parts for "breeding in captivity" purposes from all sources: Exporting countries (range States in bold).

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live	AE	0	0	0	1	0	5	0	1	0	0	7
live	BE	0	1	0	0	1	0	0	0	4	0	6
live	CA	0	0	0	1	0	0	0	0	0	0	1
live	CZ	0	0	0	0	0	0	0	1	3	0	4
live	DE	1	0	0	0	1	0	1	0	0	0	3
live	FR	0	0	0	0	0	0	0	1	0	0	1
live	GB	0	0	0	0	0	0	1	0	0	0	1
live	ID	0	0	0	0	0	0	2	0	0	0	2
live	ML	0	0	0	2	0	0	0	0	0	0	2
live	**SZ**	0	0	0	0	1	0	0	0	0	0	1
live	UA	0	0	0	0	1	0	0	0	0	0	1
live	YE	0	0	6	0	0	0	0	0	0	0	6
live	**ZA**	1	2	2	1	0	0	1	1	0	0	8
Total												43

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, breeding in captivity purpose, on 06/06/2016.

Table 27: International trade in leopards and their parts for "breeding in captivity" purposes from all sources: Importing countries.

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live	AE	2	3	8	0	0	0	0	0	3	0	16
live	AM	0	0	0	0	1	5	0	0	0	0	6
live	BH	0	0	0	0	0	0	1	0	0	0	1
live	EG	0	0	0	0	0	0	0	1	0	0	1
live	GA	0	0	0	0	0	0	3	1	0	0	4
live	GM	0	0	0	2	0	0	0	0	0	0	2
live	JP	0	0	0	0	0	0	1	0	0	0	1
live	PK	0	0	0	1	0	0	0	0	0	0	1
live	RU	0	0	0	0	0	0	0	2	0	0	2
live	SA	0	0	0	0	0	0	0	0	4	0	4
live	SY	0	0	0	0	1	0	0	0	0	0	1
live	TH	0	0	0	2	1	0	0	0	0	0	3
live	ZA	0	0	0	0	1	0	0	0	0	0	1

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, all sources, breeding in captivity purpose, on 06/06/2016.

Table 28: International trade in leopards and their parts for "educational" purposes from all sources: Exporting countries.

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	BW	0	0	1	0	0	0	0	0	0	0	1
bodies	ZA	1	0	0	0	0	1	2	4	1	0	9
bodies	ZW	0	0	1	0	0	0	0	0	0	0	1
derivatives	DK	0	0	635	0	0	0	0	0	0	0	635
derivatives	SL	0	0	5	0	0	0	0	0	0	0	5
leather products (small)	AE	0	0	0	0	0	1	0	0	0	0	1
live	CY	0	0	0	0	3	0	0	0	0	0	3
live	GT	0	0	0	0	0	0	0	1	0	0	1
skins	AE	0	1	1	1	3	1	0	0	0	0	7
skins	CH	0	1	1	0	0	0	0	0	0	0	2
skins	TZ	0	0	0	0	0	0	0	1	0	0	1
skins	US	0	0	0	0	0	0	1	0	1	0	2
skulls	GB	0	0	0	0	0	1	0	0	0	0	1
skulls	TN	0	0	0	1	0	0	0	0	0	0	1
skulls	TZ	0	0	0	0	0	0	0	1	0	0	1
skulls	ZA	1	0	0	0	0	0	0	2	0	0	3
specimens	AE	0	0	0	1	0	0	0	0	0	0	1
specimens	TH	0	0	0	0	0	0	1	0	0	0	1
specimens	ZA	4	0	0	1	1	2	0	0	0	1	9
specimens	ZW	0	0	0	0	0	2	0	0	0	0	2
teeth	SY	0	0	0	0	0	12	0	0	0	0	12
trophies	ZA	2	0	1	1	1	1	0	1	2	0	9
trophies	ZW	0	0	2	0	0	2	0	0	0	0	4
Total												712

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, breeding in educational purpose, on 06/06/2016.

Table 29: International trade in leopards and their parts for "law enforcement/judicial/forensic" purposes from all sources: Exporting countries.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
skin pieces		GA	0	0	0	0	0	0	0	5	0	0
skins	kg	GA	0	0	0	0	0	0	0	0.19	0	0
skins		GB	1	0	0	0	0	0	0	0	0	0
skins		NL	0	0	3	0	0	0	0	0	0	0
skins		SZ	0	0	0	0	0	0	0	2	0	0
specimens		SZ	0	0	0	0	0	0	0	2	0	0

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, law enforcement/judicial/forensic purpose, on 06/06/2016.

Table 29: International trade in leopards and their parts for "medical" purposes from all sources: Exporting countries.

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
specimens	AE	0	0	0	0	0	0	0	0	0	2
specimens	BW	0	0	0	0	0	0	0	27	0	0

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, medical purpose, on 06/06/2016.

Table 30: International trade in leopards and their parts for "reintroduction or introduction into the wild" purposes from all sources: Exporting countries.

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
live	TM	0	0	0	0	2	0	0	0	0	0
live	ZA	0	0	0	0	0	0	6	6	0	0

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, reintroduction or introduction into the wild purpose, on 06/06/2016.

Table 31: International trade in leopards and their parts for "personal" purposes from all sources.

Term	Unit	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies		3	0	3	2	5	0	4	3	4	2	26
bone pieces		0	0	0	2	0	0	0	0	0	0	2
bones		0	0	2	40	2	0	0	0	6	0	50
carvings		1	0	0	0	3	1	0	0	0	0	5
claws		0	0	2	1	2	6	20	0	0	1	32
derivatives	kg	0	0	0.04	0.062	2.9562	11.35	0	0	0	0	14.4082
derivatives	g	0	0	0	0	120	2315	0	0	0	0	2435
derivatives		1091	1386	1588.5	1096	1256	666	1392	0	0	1	8476.5
garments		1	0	2	0	1	4	0	1	2	1	12
hair		0	0	0	0	0	0	2	0	1	0	3
hair products		0	0	0	0	0	0	0	1	0	0	1
leather products (large)		0	0	0	0	1	1	0	1	0	0	3
leather products (small)		3	1	2	1	0	4	1	2	1	0	15
live		3	0	0	0	4	0	0	0	0	0	7
medicine	kg	0	0	0	0	0	0	0	0	0	1.45	1.45
medicine		0	0	0	0	0	0	0	123	30	54	207
plates		2	0	0	0	0	0	0	0	0	0	2
shoes		0	0	4	0	0	0	0	0	0	0	4
skin pieces	kg	0	0	0	0	10	0	0	0	0	0	10
skin pieces		5	0	1	8	1	1	1	4	3	1	25
skins	kg	0	0	0	0	0	0	0	0	0	1.9	1.9
skins		24	34	27	22	16	12	10	25	11	10	191
skulls	kg	0	0	0	0	0	0	0	0	0	0.65	0.65
skulls		10	1	11	3	6	6	7	2	3	3	52
specimens		2	0	0	0	0	1	0	5	1	0	9
tails		0	0	0	0	0	1	0	0	0	0	1
teeth		0	0	9	0	1	9	3	0	0	1	23
trophies		25	21	55	174	141	82	53	114	68	40	773
unspecified		1	0	0	0	0	0	0	0	0	0	1
Total #		1171	1443	1706.5	1349	1439	794	1493	281	130	114	9920.5
Total g		0	0	0	0	120	2315	0	0	0	0	2435
Total kg		0	0	0.04	0.062	12.9562	11.35	0	0	0	4	28.4082

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, personal purpose, on 06/06/2016.

Table 32: International trade in leopards and their parts for "personal" purposes from all sources: Exporting countries.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
bodies		BE	0	0	0	0	0	0	0	0	0	1
bodies		CA	0	0	0	0	0	0	1	1	0	0
bodies		CH	0	0	1	0	0	0	0	0	3	0
bodies		FR	3	0	1	0	0	0	3	1	0	1
bodies		NA	0	0	1	1	0	0	0	0	0	0
bodies		NL	0	0	0	0	0	0	0	1	0	0
bodies		US	0	0	0	1	0	0	0	0	0	0
bodies		ZA	0	0	0	0	5	0	0	0	1	0
bone pieces		ZA	0	0	0	2	0	0	0	0	0	0
bones		CN	0	0	2	40	0	0	0	0	0	0
bones		NA	0	0	0	0	0	0	0	0	2	0
bones		TZ	0	0	0	0	0	0	0	0	4	0
bones		ZA	0	0	0	0	2	0	0	0	0	0
carvings		JE	0	0	0	0	0	1	0	0	0	0
carvings		NZ	0	0	0	0	3	0	0	0	0	0
carvings		ZA	1	0	0	0	0	0	0	0	0	0
claws		CR	0	0	0	0	0	0	1	0	0	0
claws		FR	0	0	0	0	0	0	18	0	0	0
claws		KH	0	0	0	0	0	0	1	0	0	0
claws		NP	0	0	0	0	0	0	0	0	0	1
claws		US	0	0	2	0	0	0	0	0	0	0
claws		VN	0	0	0	1	1	2	0	0	0	0
claws		ZA	0	0	0	0	1	4	0	0	0	0
derivatives		AU	0	0	0	4	0	0	0	0	0	0
derivatives		CA	0	61	0	0	0	1	0	0	0	0
derivatives		CI	0	5	0	0	0	0	0	0	0	0
derivatives	g	CN	0	0	0	0	120	2200	0	0	0	0
derivatives	kg	CN	0	0	0.04	0.026	2.9562	11.35	0	0	0	0
derivatives		CN	1019	1166	1344.5	858	1241	632	1392	0	0	0
derivatives		DE	0	1	3	0	0	0	0	0	0	0
derivatives		GB	0	0	0	6	0	0	0	0	0	0
derivatives		HK	0	30	5	65	6	25	0	0	0	0
derivatives	kg	ID	0	0	0	0.036	0	0	0	0	0	0
derivatives		ID	0	0	0	2	0	0	0	0	0	0
derivatives		JP	0	0	1	0	0	0	0	0	0	0
derivatives		KH	0	0	49	24	0	7	0	0	0	0
derivatives		KR	15	0	0	0	2	0	0	0	0	0
derivatives		LA	0	10	0	0	0	0	0	0	0	0
derivatives	g	MY	0	0	0	0	0	115	0	0	0	0
derivatives		MY	0	0	0	13	2	0	0	0	0	0
derivatives		NG	0	0	3	0	0	0	0	0	0	0
derivatives		PH	0	13	6	0	0	0	0	0	0	0
derivatives		PT	0	0	3	0	0	0	0	0	0	0
derivatives		SG	0	0	0	62	2	0	0	0	0	0
derivatives		TH	0	0	0	16	0	0	0	0	0	0
derivatives		TW	0	13	0	0	0	0	0	0	0	0
derivatives		US	0	0	0	0	0	0	0	0	0	1
derivatives		VN	16	37	60	20	3	0	0	0	0	0

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
derivatives		XX	41	50	114	26	0	1	0	0	0	0
garments		AT	0	0	1	0	0	0	0	0	0	0
garments		CA	0	0	0	0	1	3	0	0	0	0
garments		DK	0	0	0	0	0	0	0	0	1	0
garments		GB	0	0	0	0	0	0	0	0	1	1
garments		MX	0	0	1	0	0	0	0	0	0	0
garments		ZA	1	0	0	0	0	1	0	1	0	0
hair		GB	0	0	0	0	0	0	0	0	1	0
hair		KH	0	0	0	0	0	0	2	0	0	0
hair products		NG	0	0	0	0	0	0	0	1	0	0
leather products (large)		CA	0	0	0	0	0	1	0	0	0	0
leather products (large)		GB	0	0	0	0	0	0	0	1	0	0
leather products (large)		ZA	0	0	0	0	1	0	0	0	0	0
leather products (small)		AU	0	0	1	0	0	0	0	0	0	0
leather products (small)		GB	3	0	1	0	0	0	0	1	0	0
leather products (small)		GH	0	0	0	1	0	0	0	0	0	0
leather products (small)		LR	0	0	0	0	0	0	1	0	0	0
leather products (small)		NZ	0	0	0	0	0	0	0	1	0	0
leather products (small)		SD	0	0	0	0	0	4	0	0	0	0
leather products (small)		ZA	0	1	0	0	0	0	0	0	1	0
live		BE	2	0	0	0	0	0	0	0	0	0
live		SD	1	0	0	0	0	0	0	0	0	0
live		UA	0	0	0	0	2	0	0	0	0	0
live		ZA	0	0	0	0	2	0	0	0	0	0
medicine	kg	CN	0	0	0	0	0	0	0	0	0	1.45
medicine		CN	0	0	0	0	0	0	0	123	29	6
medicine		HK	0	0	0	0	0	0	0	0	1	48
plates		CH	1	0	0	0	0	0	0	0	0	0
plates		IN	1	0	0	0	0	0	0	0	0	0
shoes		SD	0	0	4	0	0	0	0	0	0	0
skin pieces		CH	0	0	0	0	0	0	0	0	0	1
skin pieces		CN	0	0	1	0	0	0	0	0	0	0

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
skin pieces	kg	FR	0	0	0	0	10	0	0	0	0	0
skin pieces		GB	0	0	0	0	0	0	0	2	0	0
skin pieces		GH	0	0	0	2	0	0	0	0	0	0
skin pieces		LA	1	0	0	0	0	0	0	0	0	0
skin pieces		NG	0	0	0	0	1	1	0	0	0	0
skin pieces		NI	1	0	0	0	0	0	0	0	0	0
skin pieces		NZ	0	0	0	0	0	0	1	0	0	0
skin pieces		PH	0	0	0	0	0	0	0	0	1	0
skin pieces		SA	2	0	0	0	0	0	0	0	0	0
skin pieces		TH	0	0	0	0	0	0	0	1	0	0
skin pieces		TW	1	0	0	0	0	0	0	0	0	0
skin pieces		ZA	0	0	0	6	0	0	0	1	2	0
skins		AE	6	0	0	0	0	0	0	0	0	0
skins		AU	0	0	0	0	0	0	2	0	0	0
skins	kg	BE	0	0	0	0	0	0	0	0	0	1.9
skins		CA	0	0	0	2	0	2	0	1	2	0
skins		CD	1	0	0	3	1	0	0	5	0	0
skins		CH	0	0	0	0	0	0	1	0	0	0
skins		CI	2	0	0	0	0	0	0	0	0	0
skins		CM	1	0	0	0	0	0	0	0	0	0
skins		CY	0	0	1	0	0	0	0	0	0	0
skins		DE	0	2	0	0	0	0	0	0	0	0
skins		FR	0	0	0	1	0	0	2	0	0	0
skins		GB	3	4	4	0	0	0	0	2	1	1
skins		GH	1	0	0	0	0	0	0	0	0	0
skins		HK	0	0	0	1	0	0	0	0	0	0
skins		IE	0	0	1	0	0	0	0	0	0	0
skins		IR	1	0	0	0	0	0	0	0	0	0
skins		KE	0	0	0	0	1	0	0	0	0	0
skins		LR	0	0	0	1	0	0	0	0	0	0
skins		ML	0	1	0	0	0	0	0	0	0	0
skins		MW	0	0	0	0	2	0	0	1	0	0
skins		MZ	0	1	0	0	5	0	0	0	0	0
skins		NA	2	8	12	0	0	1	1	0	0	0
skins		NG	1	2	0	0	0	1	0	0	1	0
skins		NL	0	0	0	0	0	0	0	0	0	2
skins		NO	0	0	0	0	1	0	0	0	1	0
skins		NP	2	0	0	0	0	0	0	0	0	0
skins		NZ	0	4	0	6	1	2	0	4	0	0
skins		PT	0	0	0	0	0	0	1	0	0	0
skins		SA	0	0	1	0	0	0	0	0	0	0
skins		SD	0	0	0	0	0	0	1	0	0	0
skins		SG	0	0	0	0	0	1	0	0	0	0
skins		SZ	0	0	0	0	1	0	0	2	0	0
skins		TZ	0	3	1	0	0	0	0	0	0	2
skins		UY	0	0	0	0	1	0	0	0	0	0
skins		XX	0	0	0	0	1	0	0	0	0	0
skins		ZA	0	5	2	3	0	5	2	0	4	4
skins		ZM	2	2	3	4	0	0	0	0	0	0
skins		ZW	2	2	2	1	2	0	0	10	2	1
skulls		AE	6	0	0	0	0	0	0	0	0	0
skulls		AT	0	0	0	1	0	0	0	0	0	0

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
skulls		CA	0	0	0	1	0	0	0	0	0	0
skulls		CG	0	0	0	0	1	0	0	0	0	0
skulls		CH	0	0	0	0	0	1	0	0	0	0
skulls		FR	0	0	0	0	1	2	5	1	0	0
skulls		MX	0	0	0	0	0	1	0	0	0	0
skulls		NA	1	0	8	0	0	0	0	1	0	0
skulls		NO	0	0	0	0	0	0	0	0	2	0
skulls		TZ	0	0	1	0	0	0	0	0	0	1
skulls	kg	ZA	0	0	0	0	0	0	0	0	0	0.65
skulls		ZA	0	1	0	0	3	1	2	0	1	1
skulls		ZM	1	0	0	0	0	0	0	0	0	0
skulls		ZW	2	0	2	1	1	1	0	0	0	1
specimens		AE	0	0	0	0	0	0	0	2	0	0
specimens		CH	0	0	0	0	0	0	0	2	1	0
specimens		TZ	1	0	0	0	0	0	0	0	0	0
specimens		US	0	0	0	0	0	1	0	0	0	0
specimens		ZA	0	0	0	0	0	0	0	1	0	0
specimens		ZW	1	0	0	0	0	0	0	0	0	0
tails		ZA	0	0	0	0	0	1	0	0	0	0
teeth		FR	0	0	0	0	0	1	1	0	0	0
teeth		KE	0	0	0	0	0	0	1	0	0	0
teeth		NA	0	0	8	0	0	0	0	0	0	0
teeth		NG	0	0	0	0	0	8	0	0	0	0
teeth		US	0	0	0	0	0	0	0	0	0	1
teeth		VN	0	0	0	0	1	0	1	0	0	0
teeth		ZW	0	0	1	0	0	0	0	0	0	0
trophies		AE	0	0	0	0	0	0	1	0	0	0
trophies		AR	0	0	0	0	0	0	2	0	0	0
trophies		AU	0	0	0	0	0	0	0	1	0	0
trophies		BH	0	0	0	0	0	0	0	0	1	0
trophies		BW	0	0	0	2	4	0	3	22	21	1
trophies		CF	0	0	13	16	19	18	10	8	1	0
trophies		DE	0	0	0	5	0	0	3	0	5	1
trophies		ET	0	4	0	0	1	0	0	0	0	1
trophies		FR	0	3	0	0	0	0	0	0	0	0
trophies		GB	0	1	0	0	0	0	0	1	0	0
trophies		KE	0	0	0	0	1	0	1	0	0	0
trophies		MX	0	1	0	0	0	0	0	0	0	0
trophies		MZ	4	0	1	12	2	4	2	6	1	6
trophies		NA	3	2	8	27	19	7	6	4	7	3
trophies		NL	0	0	0	0	0	0	0	1	0	0
trophies		NO	0	0	0	1	1	0	0	2	0	0
trophies		NZ	0	0	0	0	0	0	0	0	0	1
trophies		TZ	6	4	22	94	36	35	16	54	17	19
trophies		UG	0	0	0	0	1	0	0	0	0	0
trophies		US	0	0	0	0	0	1	0	0	0	0
trophies		ZA	3	4	2	7	44	11	0	0	4	2
trophies		ZM	2	0	2	2	5	2	3	4	4	1
trophies		ZW	7	2	7	8	8	4	6	11	7	5
unspecified		LA	1	0	0	0	0	0	0	0	0	0

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, personal purpose, on 06/06/2016.

Table 33: International trade in leopards and their parts for "personal" purposes from all sources: Importing countries.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
bodies		CA	0	0	0	1	1	0	0	0	0	1
bodies		CH	2	0	0	0	0	0	0	0	0	1
bodies		CN	0	0	0	0	0	0	0	1	0	0
bodies		DE	0	0	1	1	0	0	0	0	0	0
bodies		FR	0	0	0	0	1	0	0	0	0	0
bodies		GB	0	0	0	0	0	0	0	0	3	0
bodies		IS	0	0	1	0	0	0	0	0	0	0
bodies		LB	0	0	1	0	0	0	0	1	0	0
bodies		MA	0	0	0	0	0	0	1	0	0	0
bodies		NG	0	0	0	0	0	0	2	0	0	0
bodies		NZ	0	0	0	0	2	0	0	0	0	0
bodies		PL	0	0	0	0	0	0	0	0	1	0
bodies		RU	0	0	0	0	1	0	0	0	0	0
bodies		US	1	0	0	0	0	0	1	1	0	0
bone pieces		US	0	0	0	2	0	0	0	0	0	0
bones		NZ	0	0	2	40	0	0	0	0	0	0
bones		SG	0	0	0	0	0	0	0	0	2	0
bones		US	0	0	0	0	2	0	0	0	4	0
carvings		GB	0	0	0	0	3	0	0	0	0	0
carvings		US	1	0	0	0	0	0	0	0	0	0
carvings		XX	0	0	0	0	0	1	0	0	0	0
claws		CA	0	0	2	0	0	0	0	0	0	0
claws		CH	0	0	0	0	0	0	18	0	0	0
claws		GB	0	0	0	0	0	4	0	0	0	0
claws		NZ	0	0	0	0	1	0	0	0	0	0
claws		US	0	0	0	1	1	2	2	0	0	1
derivatives	g	NZ	0	0	0	0	120	1815	0	0	0	0
derivatives	g	US	0	0	0	0	0	500	0	0	0	0
derivatives	kg	NZ	0	0	0.04	0.062	0.6262	11.35	0	0	0	0
derivatives	kg	US	0	0	0	0	2.33	0	0	0	0	0
derivatives		CA	0	0	0	2	0	0	0	0	0	0
derivatives		DE	0	0	0	0	0	0	0	0	0	1
derivatives		NZ	0	0	454.5	745	817	427	0	0	0	0
derivatives		US	1091	1386	1134	349	439	239	1392	0	0	0
garments		GB	0	0	0	0	0	0	0	1	0	0
garments		IT	0	0	0	0	0	1	0	0	0	0
garments		NO	0	0	0	0	0	0	0	0	1	0
garments		NZ	1	0	0	0	0	0	0	0	0	0
garments		US	0	0	2	0	1	3	0	0	1	1
hair		US	0	0	0	0	0	0	2	0	1	0
hair products		US	0	0	0	0	0	0	0	1	0	0
leather products (large)		NZ	0	0	0	0	0	0	0	1	0	0
leather products (large)		PH	0	0	0	0	1	0	0	0	0	0
leather products (large)		US	0	0	0	0	0	1	0	0	0	0
leather products		AU	0	1	0	0	0	0	0	0	1	0

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
(small)												
leather products (small)		NZ	3	0	1	0	0	0	0	0	0	0
leather products (small)		RU	0	0	1	0	0	0	0	0	0	0
leather products (small)		US	0	0	0	1	0	4	1	2	0	0
live		AE	2	0	0	0	4	0	0	0	0	0
live		SA	1	0	0	0	0	0	0	0	0	0
medicine	kg	US	0	0	0	0	0	0	0	0	0	1.45
medicine		US	0	0	0	0	0	0	0	123	30	54
plates		US	2	0	0	0	0	0	0	0	0	0
shoes		US	0	0	4	0	0	0	0	0	0	0
skin pieces	kg	US	0	0	0	0	10	0	0	0	0	0
skin pieces		GR	0	0	0	0	0	0	1	0	0	0
skin pieces		NZ	0	0	0	6	1	0	0	0	0	0
skin pieces		US	5	0	1	2	0	1	0	4	3	1
skins	kg	AU	0	0	0	0	0	0	0	0	0	1.9
skins		AE	0	0	0	0	0	0	1	5	0	0
skins		AR	0	2	0	0	0	0	0	0	0	0
skins		AT	4	14	15	0	0	0	0	0	1	0
skins		AU	3	10	2	5	1	6	0	1	0	0
skins		BE	0	0	0	0	1	0	0	0	0	0
skins		CA	2	1	0	0	1	0	0	0	0	1
skins		CG	0	0	0	0	0	0	0	0	0	2
skins		CH	0	0	0	2	0	0	0	3	1	0
skins		CN	0	0	0	1	0	0	1	2	0	2
skins		DE	1	0	0	0	0	1	2	0	1	0
skins		DK	0	0	0	0	1	0	0	0	0	0
skins		FR	2	0	0	0	1	1	0	1	2	2
skins		GB	0	0	0	2	4	1	1	0	0	0
skins		IN	2	0	0	0	0	0	0	0	0	0
skins		IT	0	0	0	1	0	0	0	0	0	0
skins		LK	0	0	0	0	2	0	0	0	0	0
skins		MA	0	0	0	0	0	0	3	0	0	0
skins		NC	1	0	0	0	0	0	0	0	0	0
skins		NG	0	0	0	0	0	0	0	6	0	0
skins		NL	0	0	0	0	1	0	0	1	0	0
skins		NZ	2	0	3	0	0	0	0	0	0	0
skins		PF	0	0	0	1	0	0	0	0	0	0
skins		PT	0	0	1	0	0	0	0	0	0	0
skins		RU	0	0	0	0	0	0	0	0	2	0
skins		SE	0	0	0	0	0	0	0	0	1	0
skins		SZ	0	2	4	4	0	0	0	0	0	0
skins		TR	1	0	0	0	0	0	0	0	0	0
skins		US	4	5	2	6	2	3	2	6	3	1
skins		XX	0	0	0	0	0	0	0	0	0	2
skins		ZA	2	0	0	0	2	0	0	0	0	0
skulls	kg	BE	0	0	0	0	0	0	0	0	0	0.65
skulls		AE	0	0	0	0	0	0	1	0	0	0
skulls		AT	3	0	11	0	0	0	0	0	0	0
skulls		AU	0	0	0	0	0	1	0	0	0	0
skulls		BE	0	0	0	0	0	0	0	0	0	1

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
skulls		BS	0	0	0	0	2	0	0	0	0	0
skulls		CA	0	0	0	0	2	0	0	0	0	1
skulls		CH	0	0	0	1	0	0	0	0	0	0
skulls		DE	0	0	0	0	0	0	1	0	0	0
skulls		FI	0	0	0	0	0	1	0	0	0	0
skulls		FR	1	0	0	0	0	0	0	0	0	1
skulls		LB	0	0	0	0	0	2	0	1	0	0
skulls		MA	0	0	0	0	0	0	2	0	0	0
skulls		NA	0	1	0	0	0	0	0	0	0	0
skulls		NG	0	0	0	0	0	0	2	0	0	0
skulls		NZ	0	0	0	0	1	0	0	0	0	0
skulls		RU	0	0	0	0	0	0	1	0	0	0
skulls		SE	0	0	0	0	0	0	0	0	2	0
skulls		SG	0	0	0	0	0	0	0	0	1	0
skulls		US	1	0	0	1	1	2	0	1	0	0
skulls		ZA	5	0	0	1	0	0	0	0	0	0
specimens		CN	1	0	0	0	0	1	0	0	0	0
specimens		GB	0	0	0	0	0	0	0	4	1	0
specimens		KW	1	0	0	0	0	0	0	0	0	0
specimens		US	0	0	0	0	0	0	0	1	0	0
tails		GB	0	0	0	0	0	1	0	0	0	0
teeth		AT	0	0	8	0	0	0	0	0	0	0
teeth		NZ	0	0	1	0	0	0	0	0	0	0
teeth		SG	0	0	0	0	0	0	0	0	0	1
teeth		US	0	0	0	0	1	9	3	0	0	0
trophies		AE	4	7	5	0	0	4	0	1	2	0
trophies		AT	3	2	6	12	4	1	2	0	2	2
trophies		AU	2	0	0	0	1	0	1	0	0	1
trophies		BG	0	1	0	0	1	0	0	0	0	0
trophies		BH	0	2	0	0	0	0	0	0	0	0
trophies		BS	0	1	0	1	1	0	0	0	0	0
trophies		CA	3	0	0	0	1	0	0	1	0	2
trophies		CH	0	0	0	2	0	0	20	0	1	0
trophies		CL	0	0	1	1	0	0	0	0	0	0
trophies		CN	0	0	0	0	0	0	0	2	0	0
trophies		CR	0	2	0	0	0	0	0	0	0	0
trophies		CS	0	0	0	1	0	0	0	0	0	0
trophies		DE	4	0	3	0	3	3	0	1	0	0
trophies		EC	0	0	0	0	0	0	1	0	0	0
trophies		EE	0	0	0	1	0	0	0	0	0	0
trophies		ES	0	0	0	0	0	0	3	1	11	0
trophies		FI	0	1	0	0	0	1	0	0	0	0
trophies		FR	0	0	34	141	75	62	16	75	28	27
trophies		GB	0	0	0	1	0	0	0	0	0	0
trophies		IM	0	0	0	0	0	0	0	0	0	1
trophies		IS	0	0	0	0	1	0	0	0	0	0
trophies		IT	0	0	0	0	0	0	0	0	2	0
trophies		LB	0	0	1	3	2	2	2	0	0	0
trophies		LI	1	0	0	0	0	0	0	0	0	0
trophies		MA	0	0	0	1	1	1	2	0	0	1
trophies		MX	1	0	1	2	0	0	0	1	0	0
trophies		NG	0	0	0	0	0	0	0	4	0	0

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
trophies		NL	0	0	1	0	1	0	0	0	0	0
trophies		NZ	0	1	0	0	0	1	0	0	0	0
trophies		PH	0	0	0	0	41	5	0	0	0	0
trophies		PK	0	0	0	0	0	0	1	0	0	0
trophies		PL	0	0	0	0	0	0	0	1	0	0
trophies		QA	0	0	0	0	0	0	1	0	0	0
trophies		RU	0	0	0	5	5	2	2	4	14	5
trophies		SE	0	1	0	0	0	0	0	3	0	0
trophies		SG	0	0	0	0	1	0	0	0	1	0
trophies		SI	0	0	0	1	2	0	0	0	0	0
trophies		SZ	4	0	0	0	0	0	0	0	0	0
trophies		US	3	3	3	2	1	0	0	11	7	1
trophies		ZA	0	0	0	0	0	0	2	9	0	0
unspecified		US	1	0	0	0	0	0	0	0	0	0

Source: UNEP-WCMC CITES Trade Database searched by "net imports" of *Panthera pardus*, all sources, personal purpose, on 06/06/2016.

Table 34: International trade in leopards and their parts for "circus and travelling exhibition" purposes from all sources: Exporting countries.

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Totals
bodies	BE	0	0	0	0	0	0	1	1	0	1	3
bodies	ZW	3	0	0	0	0	0	0	0	0	0	3
claws	NL	0	0	0	0	0	0	0	0	8	0	8
garments	US	0	0	0	1	0	0	0	0	0	0	1
leather products (small)	AU	0	0	0	0	0	0	0	0	1	0	1
live	BW	0	0	0	0	0	4	0	0	0	0	4
live	BY	0	0	0	0	0	2	0	0	0	0	2
live	CH	0	1	0	0	0	0	0	0	0	0	1
live	DE	0	0	1	0	0	0	3	0	0	0	4
live	FR	2	0	0	0	0	0	0	0	0	0	2
live	GE	0	0	0	0	0	0	0	0	0	1	1
live	GT	0	0	0	0	0	0	0	1	0	0	1
live	HU	0	0	0	0	0	2	0	0	0	0	2
live	JP	1	0	1	0	0	0	0	0	0	0	2
live	KG	0	0	0	0	0	0	5	1	1	0	7
live	LB	0	0	0	0	0	0	0	1	0	0	1
live	LV	0	0	0	0	0	0	2	0	0	0	2
live	MX	0	0	0	6	0	9	1	0	0	7	23
live	NL	0	0	0	0	0	0	1	0	0	0	1
live	RO	2	0	0	0	0	0	0	0	9	0	11
live	RU	1	0	2	0	3	6	15	0	0	1	28
live	TH	0	2	0	0	0	0	0	0	0	0	2
live	TR	0	0	0	1	0	0	0	5	1	0	7
live	UA	0	2	1	1	0	0	0	1	0	0	5
live	US	0	0	2	0	0	0	0	0	0	0	2
live	UZ	0	0	0	0	0	0	0	0	2	0	2
live	XX	0	0	0	2	1	0	0	0	0	0	3
skin pieces	BR	0	0	0	0	2	0	0	0	0	0	2
skin pieces	DE	0	0	0	1	0	0	0	0	0	0	1
skins	AT	0	0	0	2	0	0	0	0	0	0	2
skins	AU	0	0	0	0	0	0	0	1	0	0	1

skins	CH	0	0	0	0	1	0	0	0	0	0	1
skins	DE	0	0	0	1	0	0	0	0	0	0	1
skins	GB	0	0	0	0	0	0	0	1	0	0	1
skins	IT	0	0	0	0	0	0	0	0	1	0	1
skins	RU	0	0	0	0	0	1	0	0	0	0	1
skins	TW	0	0	0	0	0	0	0	1	0	0	1
specimens	NA	0	0	0	0	0	1	0	0	0	0	1
specimens	RU	0	0	20	0	0	0	0	0	0	0	20
teeth	FR	0	0	0	0	0	0	0	0	0	5	5
trophies	CH	0	0	0	1	0	0	0	0	0	0	1
Total												168

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, circus and travelling exhibition purpose, on 06/06/2016.

Table 35: International trade in leopards and their parts for "zoo" purposes from all sources: Exporting countries.

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live	BE	2	0	0	0	0	0	2	2	0	0	6
live	CH	0	0	0	3	2	0	0	0	0	0	5
live	CN	3	0	0	0	0	0	0	0	0	0	3
live	CZ	1	0	2	2	1	1	0	1	4	0	12
live	DE	0	0	0	0	1	3	0	4	0	0	8
live	DK	0	1	0	0	0	0	1	0	2	3	7
live	EE	0	0	0	0	1	0	1	1	2	0	5
live	ES	0	0	0	0	0	0	0	0	0	4	4
live	FR	0	0	2	6	0	1	1	2	2	1	15
live	GA	0	0	0	0	0	0	0	0	0	4	4
live	GB	0	2	1	2	0	0	0	1	0	0	6
live	GT	0	0	0	0	0	0	0	0	1	0	1
live	HU	2	3	1	1	0	0	1	0	0	0	8
live	ID	1	0	0	0	2	1	2	0	0	0	6
live	IN	2	0	0	0	0	0	0	0	0	0	2
live	IR	0	0	0	0	0	2	0	0	0	0	2
live	IT	0	0	0	0	0	0	0	0	0	1	1
live	JO	0	0	3	0	0	0	0	0	0	0	3
live	KR	0	0	0	0	0	1	0	0	0	0	1
live	KZ	0	2	3	0	1	0	0	1	0	0	7
live	MC	1	1	2	0	0	0	0	0	0	0	4
live	MX	0	0	0	0	0	2	0	0	0	0	2
live	NA	0	0	0	0	0	0	0	6	6	0	12
live	PL	0	0	0	0	0	0	0	0	1	0	1
live	PT	0	0	0	0	3	0	0	2	0	0	5
live	RS	0	0	0	0	0	3	0	0	0	2	5
live	RU	0	0	0	1	0	0	0	0	0	0	1
live	SD	1	3	2	0	0	0	0	0	0	0	6
live	SE	0	0	0	0	0	0	2	0	0	0	2
live	SG	1	1	0	0	0	0	0	0	0	0	2
live	SI	0	2	0	0	0	0	0	0	0	0	2
live	SK	1	0	0	0	0	0	0	0	0	0	1
live	TH	0	0	0	0	2	0	0	0	0	0	2
live	TN	0	0	0	0	2	0	0	0	0	0	2
live	UA	0	0	0	0	2	1	0	0	0	0	3
live	US	0	2	2	0	0	0	0	0	0	0	4

Term	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live	XX	0	0	1	1	0	0	0	1	0	0	3
live	ZA	0	0	0	3	2	3	0	1	3	6	18
trophies	ZA	0	0	1	0	0	0	0	0	0	0	1
Total												182

Source: UNEP-WCMC CITES Trade Database searched by "net exports" of *Panthera pardus*, all sources, zoo purpose, on 06/06/2016.

Table 36. Gross Imports of *Panthera pardus* from Botswana, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies		CN	0	0	1	0	0	0	0	0	0	0	1
claws		SE	0	0	0	0	0	0	0	16	0	0	16
hair		CH	0	6	0	0	0	0	0	0	0	0	6
live		ZA	0	0	0	0	0	4	0	0	0	0	4
skins		CH	0	0	2	0	0	0	0	0	0	0	2
skins		DK	0	0	0	0	0	0	1	0	0	0	1
skins		ES	0	0	0	0	0	0	1	0	0	0	1
skins		GB	0	0	0	0	1	0	0	0	0	0	1
skins		SE	0	0	0	0	0	0	0	1	0	0	1
skins		US	0	0	0	0	0	0	0	5	0	0	5
skins		ZA	0	2	0	0	2	0	1	0	0	0	5
skulls		DK	0	0	0	0	0	0	1	0	0	0	1
skulls		ES	0	0	0	0	0	0	4	1	0	0	5
skulls		FR	0	0	0	0	0	0	0	0	4	1	5
skulls		GB	0	0	0	0	1	0	0	0	0	0	1
skulls		IT	0	0	0	0	0	0	0	0	2	0	2
skulls		SE	0	0	0	0	0	0	0	1	0	0	1
skulls		US	0	0	0	0	0	0	1	11	6	0	18
skulls		ZA	0	1	0	0	1	0	15	9	1	0	27
specimens	ml	CH	0	5	0	0	0	0	0	0	0	0	5
specimens		CH	0	4	11	25	0	0	0	27	0	0	67
specimens		ZA	0	0	0	0	16	0	0	0	60	0	76
trophies	kg	FR	0	0	4	0	0	0	0	0	0	0	4
trophies		AE	0	0	0	2	0	0	0	0	0	0	2
trophies		DE	4	1	0	0	0	1	0	0	1	0	7
trophies		DK	0	0	0	0	0	0	1	0	0	0	1
trophies		ES	6	3	3	6	1	4	3	1	11	0	38
trophies		FR	3	1	1	2	4	0	0	0	5	1	17
trophies		GB	1	0	0	0	0	0	0	0	0	0	1
trophies		HU	0	0	0	1	1	0	0	0	4	0	6
trophies		IT	1	0	0	0	0	0	0	1	3	0	5
trophies		MX	3	4	6	2	1	0	0	0	0	0	16
trophies		RO	1	0	0	0	0	0	0	0	0	0	1
trophies		RU	1	0	0	3	1	1	2	2	0	0	10
trophies		SA	0	0	0	0	1	0	0	0	0	0	1
trophies		SE	0	0	3	0	0	0	0	1	0	0	4
trophies		US	21	35	35	33	28	15	1	13	8	2	191
trophies		ZA	13	4	5	11	2	13	12	12	1	0	73
bodies total			0	0	1	0	0	0	0	0	0	0	1
claws total			0	0	0	0	0	0	0	16	0	0	16
hair total			0	6	0	0	0	0	0	0	0	0	6

live total			0	0	0	0	0	4	0	0	0	0	4
skins total			0	2	2	0	3	0	3	6	0	0	16
skulls total			0	1	0	0	2	0	21	22	13	1	60
specimens total			0	4	11	25	16	0	0	27	60	0	143
specimens total	ml		0	5	0	0	0	0	0	0	0	0	5
trophies total			54	48	53	60	39	34	19	30	33	3	373
trophies total	kg		0	0	4	0	0	0	0	0	0	0	4
Grand Total	no		108	146	168	220	162	76	134	312	358	10	1084

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Botswana, all sources, all purposes, on 03/23/2016.

Table 37. Gross Imports of *Panthera pardus* from Cameroon, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins		DE	1	0	0	0	0	0	0	0	0	0	1

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Cameroon, all sources, all purposes, on 03/23/2016.

Table 38. Gross Imports of *Panthera pardus* from Central African Republic, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bones		DE	0	0	0	0	2	0	0	0	0	0	2
bones		ZA	0	0	0	0	0	0	2	0	0	0	2
claws		DE	0	0	0	0	18	0	0	0	0	0	18
claws		ZA	0	0	0	0	0	0	18	0	0	0	18
skins		FR	1	0	1	0	0	0	0	0	0	0	2
skins		ZA	0	0	0	0	0	1	1	0	0	0	2
skulls		FR	0	0	0	0	0	2	0	0	0	0	2
skulls		ZA	0	0	0	0	0	1	1	0	0	0	2
specimens		CH	0	0	0	0	0	0	0	0	6	3	9
trophies		AT	0	0	0	0	0	4	1	0	1	0	6
trophies		AU	0	0	0	0	0	0	0	1	0	0	1
trophies		BE	2	1	0	1	0	2	0	1	0	0	7
trophies		CH	2	0	2	0	0	0	0	0	0	0	4
trophies		CO	0	1	0	0	0	0	0	0	0	0	1
trophies		DE	0	0	0	0	2	0	0	1	1	0	4
trophies		DK	0	0	1	1	0	4	0	0	0	0	6
trophies		ES	0	1	0	1	0	0	1	0	0	0	3
trophies		FI	0	0	0	0	22	0	0	0	0	0	22
trophies		FR	31	19	22	27	34	44	10	12	1	0	200
trophies		HU	0	0	0	0	0	0	0	1	0	0	1
trophies		IT	0	1	0	0	2	0	0	0	0	0	3
trophies		LU	0	0	0	0	0	4	3	0	0	0	7
trophies		MA	0	2	0	0	0	0	0	0	0	0	2
trophies		MX	1	2	1	2	0	0	0	5	0	0	11
trophies		NZ	0	0	0	0	0	0	1	1	0	0	2
trophies		RU	0	1	2	1	0	2	1	0	0	0	7

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies		SE	1	0	0	0	22	4	0	0	0	0	27
trophies		US	0	0	0	0	2	0	0	0	0	0	2
trophies		ZA	0	0	0	0	6	2	0	1	1	0	10
Bones total			0	0	0	0	2	0	2	0	0	0	4
Claws total			0	0	0	0	18	0	18	0	0	0	36
Skins total			1	0	1	0	0	1	1	0	0	0	4
Skulls total			0	0	0	0	0	3	1	0	0	0	4
Specimens total			0	0	0	0	0	0	0	0	6	3	9
Trophies total			37	28	28	33	90	66	17	23	4	0	326
Grand Total			38	28	29	33	110	70	39	23	10	3	383

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Central African Republic, all sources, all purposes, on 03/23/2016.

Table 39. Gross Imports of *Panthera pardus* from Congo, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins		GB	0	0	0	2	0	0	0	0	0	0	2
skulls		US	0	0	0	0	1	0	0	0	0	0	1
Grand Total			0	0	0	2	1	0	0	0	0	0	3

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Congo, all sources, all purposes, on 03/23/2016.

Table 40. Gross Imports of *Panthera pardus* from Côte d'Ivoire, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
derivatives		US	0	5	0	0	0	0	0	0	0	0	5
skin pieces		US	0	0	0	0	0	0	0	0	1	0	1
skins		FR	2	0	0	0	0	0	0	0	0	0	2
teeth		US	0	0	0	0	0	1	0	0	1	0	2
Grand Total			2	5	0	0	0	1	0	0	2	0	10

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Côte d'Ivoire, all sources, all purposes, on 03/23/2016.

Table 41. Gross Imports of *Panthera pardus* from the Democratic Republic of the Congo, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins		AE	0	0	0	0	0	0	0	5	0	0	5
skins		BE	0	0	0	0	1	0	0	0	0	0	1
skins		CH	0	0	0	1	0	0	0	0	0	0	1
skins		GB	0	0	0	2	0	0	0	0	0	0	2
skins		US	1	0	0	0	0	1	0	0	0	0	2
skins		XX	0	0	0	0	1	0	0	0	0	0	1
Grand Total			1	0	0	3	2	1	0	5	0	0	12

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from the Democratic Republic of the Congo, all sources, all purposes, on 03/23/2016.

Table 42. Gross Imports of *Panthera pardus* from Ethiopia, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins		CA	0	0	0	0	3	0	0	0	0	0	3
skins		NO	0	0	0	0	0	0	0	0	0	1	1
skins		TZ	0	0	0	0	0	0	1	0	0	0	1
skins		ZA	0	0	0	0	0	0	0	1	0	0	1
skulls		CA	0	0	0	0	3	0	0	0	0	0	3
skulls		ZA	0	0	0	0	0	0	0	1	0	0	1
trophies		AE	0	2	0	0	0	0	0	0	0	0	2
trophies		BH	0	2	0	0	0	0	0	0	0	0	2
trophies		DE	2	0	0	0	0	0	0	0	1	0	3
trophies		DK	0	1	0	0	0	0	0	0	0	0	1
trophies		FR	1	1	0	0	1	0	0	0	0	1	4
trophies		IT	0	0	0	0	0	1	0	0	0	0	1
trophies		MX	0	0	0	1	0	0	1	0	0	1	3
trophies		TZ	0	0	0	0	0	1	0	0	0	0	1
trophies		ZA	0	0	0	1	0	0	0	0	0	0	1
Skins Total			0	0	0	0	3	0	1	1	0	1	6
Skulls Total			0	0	0	0	3	0	0	1	0	0	4
Trophies Total			3	6	0	2	1	2	1	0	1	2	18
Grand Total			3	6	0	2	7	2	2	2	1	3	28

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Ethiopia, all sources, all purposes, on 03/23/2016.

Table 43. Gross Imports of *Panthera pardus* from Gabon, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live		TN	0	0	0	0	0	0	0	0	4	4	8
skin pieces		GB	0	0	0	0	0	0	0	5	0	0	5
skins		HU	2	0	0	0	0	0	0	0	0	0	2
specimens		US	0	0	0	0	0	0	0	0	20	0	20
Grand Total			2	0	0	0	0	0	0	5	24	4	35

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Gabon, all sources, all purposes, on 03/23/2016.

Table 44. Gross Imports of *Panthera pardus* from Ghana, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
leather products (small)		US	0	0	0	1	0	0	0	0	0	0	1
skin pieces		US	0	0	0	2	0	0	0	0	0	0	2
skins		US	1	0	0	0	0	0	0	0	0	0	1
Grand Total			1	0	0	3	0	0	0	0	0	0	4

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Ghana, all sources, all purposes, on 03/23/2016.

Table 45. Gross Imports of *Panthera pardus* from Kenya, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins		AU	0	0	0	0	1	0	0	0	0	0	1
skins		GB	0	0	0	0	0	0	1	0	0	0	1
skins		XX	0	0	0	0	0	0	0	0	0	2	2
specimens	ml	IL	0	0	0	0	0	0	0	0	1.5	0	1.5
specimens	ml	ZA	0	0.5	0	0	0	0	0	0	0	0	0.5
specimens		IL	0	0	0	0	0	0	0	1	0	0	1
specimens		US	0	0	0	0	0	51	0	0	0	0	51
teeth		US	0	0	0	0	0	0	1	0	0	0	1
trophies		AU	0	0	0	0	1	0	1	0	0	0	2
Skins Total			0	0	0	0	1	0	1	0	0	2	4
Specimens Total			0	0	0	0	0	51	0	1	0	0	52
Specimens Total	ml		0	0.5	0	0	0	0	0	0	1.5	0	2
Teeth Total			0	0	0	0	0	0	1	0	0	0	1
Trophies Total			0	0	0	0	1	0	1	0	0	0	2
Grand Total	no		0	0	0	0	2	51	3	1	0	2	59

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Kenya, all sources, all purposes, on 03/23/2016.

Table 46. Gross Imports of *Panthera pardus* from Liberia, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
leather products (small)		US	0	0	0	0	0	0	1	0	0	0	1
skins		US	0	0	0	1	0	0	0	0	0	0	1
specimens		DE	0	0	0	0	0	0	0	0	0	1	1
Grand Total			0	0	0	1	0	0	1	0	0	1	3

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Liberia, all sources, all purposes, on 03/23/2016.

Table 47. Gross Imports of *Panthera pardus* from Malawi, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins		LK	0	0	0	0	2	0	0	0	0	0	2
skins		NL	0	0	0	0	0	0	0	1	0	0	1
Grand Total			0	0	0	0	2	0	0	1	0	0	3

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Malawi, all sources, all purposes, on 03/23/2016.

Table 48. Gross Imports of *Panthera pardus* from Mali, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live		GM	0	0	0	2	0	0	0	0	0	0	2
skins		US	0	1	0	0	0	0	0	0	0	0	1
Grand Total			0	1	0	2	0	0	0	0	0	0	3

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Mali, all sources, all purposes, on 03/23/2016.

Table 49. Gross Imports of *Panthera pardus* from Mozambique, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies		NO	0	0	0	0	0	0	0	0	0	1	1
skeletons		ES	0	0	0	0	0	0	1	0	0	0	1
skin pieces		DE	0	0	0	0	2	0	0	0	0	0	2
skin pieces		ZA	0	0	0	0	2	0	0	4	0	0	6
skins		AR	0	0	0	0	0	0	0	0	1	0	1
skins		CA	0	0	0	0	0	0	0	0	0	1	1
skins		CH	1	0	0	0	0	0	3	2	0	0	6
skins		DE	0	0	0	0	0	0	3	2	0	0	5
skins		ES	0	0	0	0	0	0	7	1	5	1	14
skins		FR	0	0	0	0	0	1	2	8	1	1	13
skins		GB	0	0	0	0	0	0	4	2	0	0	6
skins		HU	0	0	0	0	0	0	1	0	0	0	1
skins		IS	0	0	0	0	0	0	0	0	3	1	4
skins		IT	0	0	0	0	0	0	0	1	0	0	1
skins		MX	0	0	0	0	0	0	0	1	1	0	2
skins		MZ	0	0	0	0	1	0	0	0	0	0	1
skins		NA	0	0	0	0	0	0	2	2	0	0	4
skins		NL	0	0	0	0	0	0	2	0	0	0	2
skins		NO	0	0	0	0	1	1	0	0	0	0	2
skins		PT	1	0	0	0	0	0	3	4	2	0	10
skins		RU	0	0	0	0	0	0	1	0	0	0	1
skins		SE	0	0	0	0	0	0	0	1	0	0	1
skins		SZ	0	0	1	0	2	0	0	0	0	0	3
skins		US	0	0	0	0	0	1	34	48	22	0	105
skins		XX	0	0	0	0	0	1	0	0	0	0	1
skins		ZA	0	5	0	0	9	3	6	17	22	0	62
skins		ZW	0	1	0	0	0	0	2	3	5	0	11
skulls		AR	0	0	0	0	0	0	0	1	1	0	2
skulls		CA	0	0	0	0	0	0	0	0	0	1	1
skulls		CH	1	0	0	0	0	0	3	2	0	0	6
skulls		DE	0	0	0	0	0	0	3	2	0	0	5
skulls		ES	0	0	0	0	0	0	8	2	5	1	16
skulls		FR	0	0	0	0	0	1	2	8	1	1	13
skulls		GB	0	0	0	0	0	0	4	4	0	0	8
skulls		HU	0	0	0	0	0	0	1	0	0	0	1
skulls		IS	0	0	0	0	0	0	0	0	3	1	4
skulls		IT	0	0	0	0	0	0	0	1	1	0	2
skulls		MX	0	0	0	0	0	0	0	1	1	0	2
skulls		NA	0	0	0	0	0	0	2	2	0	0	4
skulls		NL	0	0	0	0	0	0	2	0	0	0	2
skulls		NO	0	0	0	0	1	1	0	0	0	1	3
skulls		PT	0	0	0	0	0	0	3	5	2	0	10
skulls		RU	0	0	0	0	0	0	1	0	0	0	1
skulls		SE	0	0	0	0	0	0	0	1	0	0	1
skulls		US	0	0	0	0	3	1	37	41	23	0	105

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skulls		XX	0	0	0	0	0	1	0	0	0	0	1
skulls		ZA	0	5	0	0	0	3	8	19	28	8	71
skulls		ZW	0	0	0	0	0	0	2	3	5	0	10
trophies		AR	0	0	0	0	0	0	0	1	0	0	1
trophies		BG	0	0	0	0	0	0	0	1	0	0	1
trophies		CA	0	0	0	0	0	0	0	0	0	1	1
trophies		DE	0	0	1	0	0	1	0	2	1	3	8
trophies		DK	1	1	0	0	0	0	0	0	0	0	2
trophies		ES	15	11	8	4	10	5	2	7	0	3	65
trophies		FR	0	3	2	14	4	4	2	6	2	5	42
trophies		GB	0	0	0	1	1	0	0	0	0	1	3
trophies		HU	0	0	0	0	1	1	0	0	0	0	2
trophies		IS	0	0	0	0	0	0	0	0	1	0	1
trophies		LT	0	0	0	0	0	0	0	0	0	1	1
trophies		LU	0	0	0	0	0	0	0	0	0	2	2
trophies		MX	2	8	12	6	1	0	0	1	1	1	32
trophies		NA	1	1	0	0	0	0	0	1	0	0	3
trophies		NO	0	0	0	0	1	1	0	0	0	1	3
trophies		PL	0	0	0	0	0	1	0	0	1	0	2
trophies		PT	6	7	6	4	8	4	2	3	2	1	43
trophies		RU	0	0	0	0	0	2	1	0	0	0	3
trophies		SZ	4	0	0	0	0	0	0	0	0	0	4
trophies		US	6	4	14	15	21	16	7	18	12	20	133
trophies		XX	15	0	0	0	0	3	0	0	0	2	20
trophies		ZA	21	19	13	6	9	9	9	19	11	8	124
trophies		ZW	5	4	3	2	0	2	0	0	0	0	16
Bodies Total			0	0	0	0	0	0	0	0	0	1	1
Skeletons Total			0	0	0	0	0	0	1	0	0	0	1
Skin Pieces Total			0	0	0	0	4	0	0	4	0	0	8
Skins Total			2	6	1	0	13	7	70	92	62	4	257
Skulls Total			1	5	0	0	4	7	76	92	70	13	268
Trophies Total			76	58	59	52	56	49	23	59	31	49	512
Grand Total			79	69	60	52	77	63	170	247	163	67	1047

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Mozambique, all sources, all purposes, on 03/23/2016.

Table 50. Gross Imports of *Panthera pardus* from Namibia, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies		AT	0	0	0	0	0	1	0	0	0	0	1
bodies		CA	0	0	0	0	1	0	1	1	0	2	5
bodies		DE	0	0	0	1	0	1	0	0	0	0	2
bodies		ES	0	0	0	0	0	1	0	0	0	0	1
bodies		GB	0	0	0	0	0	3	1	0	0	0	4
bodies		IS	0	0	1	0	0	0	0	0	0	0	1

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies		IT	0	0	0	0	0	1	0	0	0	0	1
bodies		NL	0	0	0	0	0	1	0	0	0	0	1
bodies		NO	0	0	0	0	0	0	0	0	0	2	2
bodies		RU	0	0	0	0	0	2	1	0	0	0	3
bodies		UA	0	0	0	1	0	0	0	0	0	0	1
bodies		US	0	0	0	0	0	3	0	0	0	0	3
bones		CA	0	0	0	0	2	0	2	0	0	0	4
bones		DE	0	0	0	0	0	0	0	0	0	3	3
bones		SG	0	0	0	0	0	0	0	0	2	0	2
bones		US	0	0	0	0	2	0	0	0	0	3	5
claws		US	0	26	0	0	0	4	0	0	18	0	48
hair		NZ	0	0	0	0	0	0	0	0	0	1	1
live		CU	0	0	0	0	0	0	0	6	6	0	12
skin pieces		CA	0	0	0	0	0	0	1	0	0	0	1
skins		AT	5	8	12	0	0	0	1	0	1	0	27
skins		CA	2	4	0	1	6	1	3	2	0	0	19
skins		CH	0	0	0	0	2	0	0	0	0	0	2
skins		DE	0	0	0	0	1	1	2	0	1	0	5
skins		ES	0	0	0	0	1	1	0	0	0	0	2
skins		FR	0	0	0	0	0	1	1	0	0	0	2
skins		GB	0	0	1	0	1	0	1	0	0	0	3
skins		RU	0	0	0	0	1	1	0	1	0	0	3
skins		SE	0	0	0	0	0	1	0	2	0	0	3
skins		SK	0	0	0	0	0	0	0	0	0	1	1
skins		US	0	1	0	0	1	1	2	0	0	0	5
skins		ZA	0	5	0	0	1	1	4	0	0	0	11
skulls		AT	4	0	8	0	0	0	0	0	0	0	12
skulls		CA	2	4	0	1	7	1	4	2	0	1	22
skulls		CH	0	0	0	0	2	0	0	0	0	0	2
skulls		DE	0	0	0	0	0	0	0	2	0	0	2
skulls		DK	0	1	0	0	0	0	0	0	0	0	1
skulls		GB	0	0	0	0	0	2	0	0	0	0	2
skulls		NL	0	0	0	1	2	0	0	0	0	0	3
skulls		PA	0	0	0	0	0	0	0	0	1	0	1
skulls		SE	0	0	0	0	0	0	0	2	0	0	2
skulls		SG	0	0	0	0	0	0	0	0	1	0	1
skulls		SK	0	0	0	0	0	0	0	0	0	1	1
skulls		US	0	2	1	0	3	2	0	1	0	1	10
skulls		ZA	0	5	0	0	0	1	4	0	2	1	13
specimens	ml	DE	0	0	0	0	0	0	0	60	0	0	60
specimens	ml	US	0	0	0	0	0	6	0	0	0	0	6
specimens		DE	0	0	0	0	0	100	0	1233	0	900	2233
specimens		TH	0	0	0	0	0	1	0	0	0	0	1
specimens		US	0	0	0	0	0	0	0	0	1	0	1
specimens		ZA	0	0	0	0	0	0	0	0	35	130	165
teeth		AT	0	0	8	0	0	0	0	0	0	0	8
teeth		DE	31	0	0	0	0	0	0	0	0	0	31
teeth		DK	0	0	0	0	0	0	27	0	0	0	27
teeth		SE	0	0	0	0	0	18	0	0	0	0	18
trophies		AR	0	0	0	1	4	1	1	1	1	3	12
trophies		AT	12	19	8	15	14	2	3	4	11	6	94
trophies		BE	2	0	2	0	0	0	1	0	0	0	5

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies		BG	4	3	3	2	1	3	1	3	0	0	20
trophies		BR	0	0	0	1	0	0	0	0	0	0	1
trophies		CA	1	3	0	1	5	3	3	3	1	6	26
trophies		CH	2	1	0	0	1	0	0	0	1	2	7
trophies		CR	1	2	0	0	0	0	0	0	0	0	3
trophies		CS	1	0	0	1	0	0	0	0	0	0	2
trophies		CZ	4	3	2	3	1	0	1	1	2	3	20
trophies		DE	38	43	29	28	43	17	3	23	16	19	259
trophies		DK	3	4	3	3	7	4	29	0	1	1	55
trophies		EE	0	0	0	1	0	0	0	0	0	0	1
trophies		EG	0	1	0	0	0	0	0	0	0	0	1
trophies		ES	5	8	14	12	15	4	3	4	0	4	69
trophies		FI	1	1	1	1	0	1	0	3	1	3	12
trophies		FR	18	2	2	18	18	7	6	4	7	2	84
trophies		GB	1	2	2	2	0	2	0	1	1	0	11
trophies		HR	1	2	3	3	4	1	1	0	0	0	15
trophies		HU	0	0	5	4	6	2	0	1	2	1	21
trophies		IT	0	1	1	2	5	4	0	2	1	0	16
trophies		LT	0	0	1	1	2	0	0	0	0	0	4
trophies		LU	1	1	0	2	0	0	1	0	0	0	5
trophies		LV	0	0	0	0	0	0	0	0	2	2	4
trophies		MX	1	6	6	4	7	0	2	2	9	4	41
trophies		NA	1	0	0	0	0	0	0	0	0	0	1
trophies		NL	0	0	0	0	2	2	0	0	0	0	4
trophies		NO	0	1	0	2	3	1	1	0	1	0	9
trophies		NZ	0	0	0	1	0	0	0	0	0	2	3
trophies		PA	0	0	0	0	0	0	0	0	1	0	1
trophies		PL	5	4	4	5	5	2	1	1	2	2	31
trophies		PT	4	1	1	0	2	0	0	0	0	0	8
trophies		RO	0	0	0	0	1	0	0	0	0	0	1
trophies		RS	0	1	0	1	0	0	0	0	0	0	2
trophies		RU	0	1	2	8	11	10	6	6	3	8	55
trophies		SE	0	2	5	3	3	0	0	2	0	1	16
trophies		SG	0	0	0	0	0	0	0	0	1	0	1
trophies		SI	1	2	2	2	4	1	0	2	0	0	14
trophies		SK	1	2	1	2	3	1	2	1	2	1	16
trophies		SL	0	0	0	0	0	2	1	2	0	0	5
trophies		SZ	2	0	0	0	0	0	0	0	0	0	2
trophies		UA	0	1	1	1	0	0	0	0	0	1	4
trophies		US	51	71	71	87	157	76	30	40	29	33	645
trophies		VG	0	1	0	0	0	0	0	0	0	0	1
trophies		XX	0	0	0	0	0	0	0	1	0	0	1
trophies		ZA	7	8	12	9	18	8	6	4	5	1	78
trophies		ZW	0	0	0	0	2	0	0	0	0	0	2
trophies		AT	0	0	0	0	0	0	1	0	0	0	1
trophies		US	0	0	0	0	0	1	0	0	0	0	1
Bodies Total			0	0	1	2	1	13	3	1	0	4	25
Bones Total			0	0	0	0	4	0	2	0	2	6	14
Claws Total			0	26	0	0	0	4	0	0	18	0	48
Hair Total			0	0	0	0	0	0	0	0	0	1	1

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Live Total			0	0	0	0	0	0	0	6	6	0	12
Skin Pieces Total			0	0	0	0	0	0	1	0	0	0	1
Skins Total			7	18	13	1	14	8	14	5	2	1	83
Skulls Total			6	12	9	2	14	6	8	7	4	4	72
Specimens Total			0	0	0	0	0	101	0	1233	36	1030	2400
Specimens Total	ml		0	0	0	0	0	6	0	60	0	0	66
Teeth Total			31	0	8	0	0	18	27	0	0	0	84
Trophies Total			168	197	181	226	344	155	103	111	100	105	1690
Grand Total	no		212	253	212	231	377	305	158	1363	168	1151	4430

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Namibia, all sources, all purposes, on 03/23/2016.

Table 51. Gross Imports of *Panthera pardus* from Nigeria, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
derivatives		US	0	0	3	0	0	0	0	0	0	0	3
hair products		US	0	0	0	0	0	0	0	1	0	0	1
skin pieces		US	0	0	0	0	1	1	0	1	0	0	3
skins		HU	0	1	0	0	0	0	0	0	0	0	1
skins		US	1	2	0	0	0	1	0	0	1	0	5
teeth		US	0	0	0	0	0	8	0	0	0	0	8
Skins Total			1	3	0	0	0	1	0	0	1	0	6
Grand Total			1	3	3	0	1	10	0	2	1	0	21

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Nigeria, all sources, all purposes, on 03/23/2016.

Table 52. Gross Imports of *Panthera pardus* from Senegal, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
specimens		US	0	0	0	0	0	0	0	0	18	0	18

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Senegal, all sources, all purposes, on 03/23/2016.

Table 53. Gross Imports of *Panthera pardus* from Sierra Leone, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
derivatives		DK	0	0	5	0	0	0	0	0	0	0	5

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Sierra Leone, all sources, all purposes, on 03/23/2016.

Table 54. Gross Imports of *Panthera pardus* from South Africa, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies		CA	0	0	0	1	1	0	4	2	1	2	11
bodies		CN	1	0	0	0	0	1	2	2	1	0	7
bodies		CZ	0	0	0	0	0	0	1	1	0	0	2
bodies		DK	0	0	0	0	0	1	1	0	0	0	2
bodies		ES	0	0	0	0	0	1	0	1	0	0	2
bodies		FR	0	0	0	0	2	0	0	0	0	0	2
bodies		GB	0	0	0	0	2	0	0	2	0	0	4
bodies		KW	0	0	0	0	1	0	0	0	0	0	1
bodies		MX	0	0	0	0	1	0	0	0	0	0	1
bodies		NA	0	0	0	1	0	0	0	0	0	0	1
bodies		NZ	0	0	0	0	2	0	0	1	0	0	3
bodies		PL	0	0	0	0	0	0	0	0	1	0	1
bodies		US	0	0	0	0	0	3	1	4	0	0	8
bone pieces		US	0	0	0	2	0	0	0	0	0	0	2
bones		CA	0	1	0	2	0	0	0	0	0	0	3
bones		DE	0	0	0	0	0	0	0	2	0	0	2
bones		DK	0	0	0	0	0	2	4	0	0	0	6
bones		MX	0	0	0	0	0	2	2	1	0	0	5
bones		SK	0	0	0	0	0	0	0	0	0	1	1
bones		US	0	0	0	0	2	4	29	5	2	4	46
carvings		US	1	0	0	0	0	0	0	0	0	0	1
claws		GB	0	0	0	0	0	4	0	0	0	0	4
claws		NZ	0	0	0	0	1	0	0	0	0	0	1
claws		US	0	44	18	2	36	8	26	18	18	0	170
derivatives		GB	0	0	0	0	0	0	50	0	0	0	50
derivatives		LV	0	0	0	0	0	2	0	0	0	0	2
derivatives		MX	0	0	0	0	0	2	0	0	0	0	2
derivatives		US	0	0	0	0	20	2	0	0	0	0	22
feet		US	0	0	0	29	0	0	0	0	0	0	29
garments		GB	0	0	0	0	0	0	0	1	0	0	1
garments		IT	0	0	0	0	0	1	0	0	0	0	1
garments		NZ	1	0	0	0	0	0	0	0	0	0	1
garments		US	0	0	0	0	0	0	0	0	0	1	1
hair		GB	0	0	0	0	209	0	0	0	0	0	209
leather products (large)		PH	0	0	0	0	1	0	0	0	0	0	1
leather products (small)		AU	0	1	0	0	0	0	0	0	1	0	2
leather products (small)		PT	0	1	0	0	0	0	0	0	0	0	1
leather products (small)		US	0	0	0	1	0	0	0	0	0	0	1
live		AE	2	2	2	0	2	0	0	0	0	0	8
live		BE	0	0	0	1	0	0	0	0	0	0	1
live		CA	0	0	0	0	0	0	0	0	0	2	2

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live		EG	0	0	0	0	0	7	0	2	1	2	12
live		ES	0	0	0	0	0	1	0	0	0	0	1
live		GA	0	0	0	0	0	0	3	3	4	0	10
live		JP	0	0	0	0	0	2	2	0	0	0	4
live		MW	0	0	0	0	0	0	6	6	0	0	12
live		PK	0	0	0	0	0	0	0	0	0	2	2
live		SA	0	0	0	2	0	0	0	0	0	0	2
live		TH	0	0	0	2	1	0	0	0	0	0	3
live		UG	0	0	0	0	0	1	0	0	0	0	1
skin pieces		NZ	0	0	0	6	0	0	0	0	0	0	6
skin pieces		US	0	0	0	54	0	0	0	1	2	0	57
skins		AT	0	0	0	0	0	0	0	0	1	0	1
skins		AU	2	3	0	1	0	3	1	0	0	0	10
skins		BE	0	0	0	0	0	0	0	1	0	0	1
skins		BR	0	1	0	0	0	0	0	0	0	0	1
skins		BW	0	0	0	0	0	0	0	1	0	0	1
skins		CA	1	5	0	6	4	0	0	2	0	1	19
skins		CG	0	0	0	0	0	0	0	0	0	2	2
skins		CH	0	0	0	1	0	0	0	0	0	0	1
skins		CR	1	0	0	0	0	0	0	0	0	0	1
skins		CZ	0	0	0	0	0	1	3	1	0	0	5
skins		DE	0	0	0	0	0	1	1	5	1	0	8
skins		DK	0	0	0	1	0	2	1	0	0	0	4
skins		EE	0	1	0	0	0	0	0	0	0	0	1
skins		ES	0	3	0	0	0	11	12	3	0	0	29
skins		FI	0	0	0	0	0	0	1	1	0	0	2
skins		FR	2	0	0	0	0	3	3	0	0	0	8
skins		GB	2	0	0	0	2	1	1	0	0	1	7
skins		IT	0	0	0	1	0	0	0	0	0	0	1
skins		MX	0	0	0	0	0	3	3	0	0	0	6
skins		MZ	0	0	1	0	0	0	1	0	0	0	2
skins		NL	1	0	0	0	1	0	0	0	0	0	2
skins		NO	0	0	0	0	0	1	2	1	0	0	4
skins		PA	0	0	0	0	0	0	0	0	1	0	1
skins		PL	0	0	0	0	0	0	0	1	0	0	1
skins		PT	0	0	1	0	0	1	2	0	0	0	4
skins		RU	0	0	0	0	0	1	2	0	2	0	5
skins		SE	0	0	0	0	0	1	0	0	0	0	1
skins		SK	0	0	0	0	0	0	0	0	0	1	1
skins		SZ	0	2	0	0	4	0	0	0	0	0	6
skins		TZ	0	0	0	0	0	1	0	0	0	0	1
skins		US	0	27	0	0	2	40	52	37	3	2	163
skulls	kg	BE	0	0	0	0	0	0	0	0	0	0.65	0.65
skulls		AE	0	0	0	0	0	0	3	0	0	1	4
skulls		AR	0	0	0	0	0	0	0	0	3	1	4
skulls		AU	0	0	0	0	0	1	1	1	0	0	3
skulls		BE	0	0	0	0	0	0	0	1	0	1	2
skulls		BR	0	0	0	0	0	1	0	0	0	0	1
skulls		BW	0	0	0	0	0	0	0	1	0	0	1
skulls		CA	1	2	0	4	5	0	4	4	1	2	23
skulls		CN	1	0	0	0	0	0	0	0	0	0	1
skulls		CO	0	0	0	0	1	1	0	1	0	0	3

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skulls		CZ	0	0	0	0	0	1	3	1	0	0	5
skulls		DE	0	0	0	0	0	0	1	6	1	0	8
skulls		DK	0	0	0	1	1	4	3	0	0	2	11
skulls		EE	0	1	0	0	0	0	0	0	0	0	1
skulls		ES	0	4	1	0	1	13	15	3	0	2	39
skulls		FI	0	0	0	0	0	0	2	1	1	0	4
skulls		FR	1	0	0	0	2	4	3	0	2	6	18
skulls		GB	0	1	0	1	2	3	2	2	0	0	11
skulls		HU	0	0	0	0	0	0	0	0	0	1	1
skulls		IT	0	0	0	0	1	1	4	3	2	1	12
skulls		MG	0	0	0	0	0	0	1	0	0	0	1
skulls		MX	0	2	0	0	1	4	7	0	0	0	14
skulls		MZ	0	0	0	0	0	0	1	0	0	2	3
skulls		NA	0	1	0	0	0	0	0	0	1	0	2
skulls		NO	0	0	0	0	1	2	4	0	0	1	8
skulls		NZ	0	0	0	0	1	1	1	1	0	0	4
skulls		PA	0	0	0	0	0	0	0	0	1	0	1
skulls		PH	0	0	0	0	1	2	2	0	0	0	5
skulls		PK	0	0	0	0	1	0	1	2	0	0	4
skulls		PT	0	0	0	0	3	6	7	0	0	0	16
skulls		QA	0	0	0	0	0	0	0	2	2	4	8
skulls		RU	0	0	0	0	0	1	4	0	0	6	11
skulls		SE	0	0	0	0	0	2	2	0	2	1	7
skulls		SK	0	0	0	0	0	0	0	0	0	1	1
skulls		TZ	0	0	0	0	0	5	0	0	0	0	5
skulls		UA	0	0	0	0	0	1	0	0	0	0	1
skulls		US	0	43	2	0	16	50	74	45	11	37	278
skulls		ZM	0	0	0	0	0	0	0	1	0	0	1
specimens		CN	4	0	0	1	1	2	0	0	0	1	9
specimens		NO	0	0	0	0	0	0	0	1	0	0	1
specimens		US	0	0	0	0	0	0	0	150	0	0	150
tails		GB	0	0	0	0	0	1	0	0	0	0	1
teeth		BR	0	4	0	0	0	0	0	0	0	0	4
teeth		US	0	0	0	0	0	0	0	0	0	4	4
trophies		AE	0	1	1	0	1	0	7	0	0	1	11
trophies		AR	0	0	3	0	1	0	2	1	4	1	12
trophies		AT	1	0	1	1	0	0	0	0	0	1	4
trophies		AU	2	0	0	0	0	0	0	1	0	0	3
trophies		BE	3	0	0	0	0	2	1	1	0	1	8
trophies		BR	1	1	0	0	0	1	0	0	0	2	5
trophies		BW	1	0	0	0	0	0	0	0	0	0	1
trophies		CA	1	0	1	4	1	0	2	2	6	4	21
trophies		CH	0	0	0	0	2	0	0	0	1	0	3
trophies		CL	2	0	0	0	0	0	0	0	0	0	2
trophies		CN	2	0	1	1	1	1	0	1	2	0	9
trophies		CO	0	0	0	0	1	1	0	1	0	1	4
trophies		CR	0	0	0	0	0	0	1	1	0	0	2
trophies		CZ	1	0	0	2	1	1	3	2	0	0	10
trophies		DE	2	1	1	0	2	0	4	7	5	3	25
trophies		DK	0	0	3	2	5	7	3	1	1	1	23
trophies		EE	0	1	0	0	0	0	0	0	1	0	2
trophies		ES	9	6	5	8	11	11	4	2	2	5	63

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies		FI	1	0	0	0	1	2	2	0	1	1	8
trophies		FR	3	6	1	7	1	6	3	2	4	2	35
trophies		GB	1	1	2	4	3	2	2	2	0	2	19
trophies		GT	0	0	1	0	0	0	0	0	0	0	1
trophies		HU	0	0	0	0	0	0	0	1	0	2	3
trophies		ID	0	0	0	0	0	0	0	0	0	1	1
trophies		IE	1	0	0	0	0	0	0	0	0	0	1
trophies		IS	0	0	0	1	1	0	1	1	0	0	4
trophies		IT	1	0	1	1	4	2	6	3	2	1	21
trophies		KW	0	0	2	1	0	0	0	0	0	0	3
trophies		LB	1	0	0	1	1	0	2	0	0	0	5
trophies		LT	0	0	0	0	1	2	0	0	1	1	5
trophies		LV	0	0	0	0	0	1	0	0	0	0	1
trophies		MG	0	0	0	0	0	0	1	0	0	0	1
trophies		MX	2	4	3	11	3	9	7	6	2	6	53
trophies		MZ	0	0	0	0	0	2	0	1	0	0	3
trophies		NA	1	4	0	0	1	0	1	0	1	0	8
trophies		NC	0	0	0	0	0	1	0	0	0	0	1
trophies		NL	2	0	1	0	1	0	0	0	0	0	4
trophies		NO	0	1	0	1	0	0	4	2	2	1	11
trophies		NP	0	0	1	0	0	0	0	0	0	0	1
trophies		NZ	1	0	0	0	2	4	1	2	0	0	10
trophies		PH	1	0	0	1	38	4	2	0	0	0	46
trophies		PK	2	1	1	0	1	0	1	3	0	0	9
trophies		PL	0	0	0	0	0	0	0	3	2	0	5
trophies		PT	0	1	2	1	6	2	7	0	0	0	19
trophies		QA	0	0	0	0	0	0	1	3	2	0	6
trophies		RO	0	0	1	1	0	0	0	0	0	0	2
trophies		RS	0	0	0	1	1	0	0	0	1	0	3
trophies		RU	4	0	1	0	2	2	5	9	4	18	45
trophies		SA	0	0	1	0	0	0	0	0	0	0	1
trophies		SE	0	3	1	0	0	3	2	0	2	0	11
trophies		SI	0	1	0	0	0	0	0	0	0	0	1
trophies		SK	0	1	0	0	0	0	0	1	2	0	4
trophies		SV	0	0	1	0	0	0	0	0	0	0	1
trophies		SZ	0	0	0	0	1	0	0	0	0	0	1
trophies		TZ	1	1	1	1	1	4	0	0	0	0	9
trophies		UA	0	0	0	0	0	1	0	0	0	0	1
trophies		US	68	85	76	98	89	74	53	69	64	53	729
trophies		ZM	0	0	0	0	0	0	1	1	0	0	2
trophies		ZW	0	0	0	0	1	0	0	0	0	1	2
Bodies Total			1	0	0	2	9	6	9	13	3	2	44
Bone Pieces Total			0	0	0	2	0	0	0	0	0	0	2
Bones Total			0	1	0	2	2	8	35	8	2	5	63
Carvings Total			1	0	0	0	0	0	0	0	0	0	0
Claws Total			0	44	18	2	37	12	26	18	18	0	175
Derivatives			0	0	0	0	20	6	50	0	0	0	76

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Total													
Feet Total			0	0	0	29	0	0	0	0	0	0	29
Garments Total			1	0	0	0	0	1	0	1	0	1	3
Hair Total			0	0	0	0	209	0	0	0	0	0	209
Leather Products (large) Total			0	0	0	0	1	0	0	0	0	0	1
Leather Products (small) Total			0	2	0	1	0	0	0	0	1	0	4
Live Total			2	2	2	5	3	11	11	11	5	6	56
Skin Pieces Total			0	0	0	60	0	0	0	1	2	0	63
Skins Total			9	42	2	10	13	70	85	53	8	7	290
Skulls Total			3	54	3	6	37	103	145	75	27	69	519
Skulls Total	kg		0	0	0	0	0	0	0	0	0	0.65	0.65
Specimens Total			4	0	0	1	1	2	0	151	0	1	156
Tails Total			0	0	0	0	0	1	0	0	0	0	1
Teeth Total			0	4	0	0	0	0	0	0	0	4	8
Trophies Total			115	119	113	148	185	145	129	129	112	109	1189
Grand Total	no		136	268	138	268	517	365	490	460	178	204	3024

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from South Africa, all sources, all purposes, on 03/23/2016.

Table 55. Gross Imports of *Panthera pardus* from Sudan, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
leather products (small)		US	0	0	0	0	0	4	0	0	0	0	4
live		SA	1	0	0	0	0	0	0	0	0	0	1
live		SY	1	3	0	0	0	0	0	0	0	0	4
live		ZA	0	0	2	0	0	0	0	0	0	0	2
shoes		US	0	0	4	0	0	0	0	0	0	0	4
skins		AE	0	0	0	0	0	0	1	0	0	0	1
Live Total			2	3	2	0	0	0	0	0	0	0	7
Grand Total			2	3	6	0	0	4	1	0	0	0	16

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Sudan, all sources, all purposes, on 03/23/2016.

Table 56. Gross Imports of *Panthera pardus* from Swaziland, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live		ZA	0	0	0	0	1	0	0	0	0	0	1
skins		CN	0	0	0	0	0	0	0	2	0	0	2
skins		ZA	0	0	0	0	7	0	0	2	0	0	9
specimens		ZA	0	0	0	0	0	0	0	2	0	0	2
Skins Total			0	0	0	0	7	0	0	4	0	0	11
Grand Total			0	0	0	0	8	0	0	6	0	0	14

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Swaziland, all sources, all purposes, on 03/23/2016.

Table 57. Gross Imports of *Panthera pardus* from Togo, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins		ES	1	0	0	0	0	0	0	0	0	0	1

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Togo, all sources, all purposes, on 03/23/2016.

Table 58. Gross Imports of *Panthera pardus* from the United Republic of Tanzania, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies		DK	0	0	0	0	0	0	0	1	2	0	3
bodies		GB	0	0	0	0	0	0	0	0	1	0	1
bodies		RU	0	0	0	0	0	0	0	1	0	0	1
bones		IT	0	0	0	0	0	2	0	0	0	0	2
bones		US	0	0	0	0	0	0	2	0	8	0	10
bones		ZA	0	0	0	0	0	1	0	0	0	0	1
feet		BR	0	2	0	0	0	0	0	0	0	0	2
hair		NL	0	0	0	10	0	0	0	0	0	0	10
live		NI	0	0	0	0	0	0	1	0	0	0	1
skin pieces		AT	0	1	0	0	0	0	0	0	0	0	1
skins		AR	0	0	0	0	0	1	0	0	0	0	1
skins		AT	0	3	1	0	3	4	0	0	1	0	12
skins		AU	0	0	0	0	0	2	1	0	0	0	3
skins		BE	0	0	0	0	2	1	0	0	0	0	3
skins		BG	0	1	0	0	0	1	0	0	0	0	2
skins		BR	0	0	0	0	1	0	0	0	0	0	1
skins		CA	8	3	0	1	8	1	1	5	0	0	27
skins		CH	0	0	0	0	0	1	1	1	1	0	4
skins		CZ	0	0	0	0	0	0	0	1	0	0	1
skins		DE	0	0	0	0	4	1	3	3	3	0	14
skins		DK	0	0	0	0	0	0	1	0	0	1	2
skins		ES	0	0	0	0	16	14	3	3	1	0	37
skins		FR	1	1	0	0	28	20	11	10	6	2	79
skins		GB	0	2	0	0	0	1	1	0	1	0	5
skins		HU	0	0	0	0	8	0	2	0	3	0	13
skins		IT	0	0	0	0	5	5	2	2	0	0	14
skins		JM	0	0	0	0	0	0	2	0	0	0	2
skins		MG	0	0	0	0	0	0	0	1	0	0	1
skins		MX	0	0	0	0	2	1	0	0	2	0	5
skins		NL	2	0	0	0	0	0	0	0	0	0	2
skins		NO	0	0	0	0	0	0	0	0	0	1	1

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins		PA	0	0	0	0	0	0	0	0	1	0	1
skins		PL	0	0	0	0	2	0	0	0	0	0	2
skins		RU	0	0	0	0	6	4	4	1	2	0	17
skins		SB	0	0	0	0	0	0	1	0	0	0	1
skins		SE	0	0	0	0	0	0	1	0	0	0	1
skins		US	0	0	0	0	41	40	10	47	14	3	155
skins		ZA	0	15	0	0	9	11	12	5	3	0	55
skins		ZW	0	0	0	0	0	0	0	0	1	0	1
skulls		AR	0	0	0	0	0	1	0	0	0	0	1
skulls		AT	0	0	1	0	3	4	0	0	1	0	9
skulls		AU	0	0	0	0	0	2	1	0	0	0	3
skulls		BE	0	0	0	0	2	1	0	0	0	0	3
skulls		BG	0	0	0	0	0	1	0	0	0	0	1
skulls		BR	0	0	0	0	1	0	0	0	0	0	1
skulls		CA	5	3	0	1	7	1	1	3	0	0	21
skulls		CH	0	0	0	0	0	1	1	1	1	0	4
skulls		CZ	0	0	0	0	0	0	0	1	0	0	1
skulls		DE	0	0	0	0	4	1	3	3	3	0	14
skulls		DK	0	0	0	0	0	0	1	0	0	0	1
skulls		ES	0	0	0	0	16	14	3	3	1	0	37
skulls		FR	0	1	0	0	28	22	11	10	5	1	78
skulls		GB	0	0	0	0	0	1	1	0	1	0	3
skulls		HU	0	0	0	0	8	0	2	0	3	0	13
skulls		IT	0	0	0	0	5	5	2	1	0	0	13
skulls		JM	0	0	0	0	0	0	2	0	0	0	2
skulls		MG	0	0	0	0	0	0	0	1	0	0	1
skulls		MX	0	0	0	0	2	1	0	0	2	0	5
skulls		NO	0	0	0	0	0	0	0	0	0	1	1
skulls		PA	0	0	0	0	0	0	0	0	1	0	1
skulls		PL	0	0	0	0	2	0	0	0	0	0	2
skulls		RU	0	0	0	0	6	4	4	1	2	0	17
skulls		SB	0	0	0	0	0	0	1	0	0	0	1
skulls		US	1	0	1	0	41	40	10	43	14	1	151
skulls		ZA	0	15	0	0	9	15	11	6	6	4	66
skulls		ZW	0	0	0	0	0	0	0	0	1	0	1
skulls		CA	0	0	0	0	1	0	0	0	0	0	1
specimens		KW	1	0	0	0	0	0	0	0	0	0	1
tails		FR	0	0	0	0	0	1	0	0	0	0	1
trophies		AE	0	1	0	0	0	0	0	1	1	0	3
trophies		AR	0	2	2	0	2	1	0	0	0	0	7
trophies		AT	0	2	4	1	3	3	4	6	1	4	28
trophies		BE	3	3	5	7	9	3	0	0	0	0	30
trophies		BG	0	1	0	0	1	1	0	1	1	0	5
trophies		BR	0	0	0	0	1	0	0	0	0	0	1
trophies		BY	0	0	0	1	0	0	0	0	0	0	1
trophies		CA	4	2	0	1	1	0	0	0	1	0	9
trophies		CH	2	0	8	1	0	0	0	0	0	0	11
trophies		CN	1	1	0	0	0	2	0	0	0	0	4
trophies		CZ	1	1	0	0	0	0	0	3	0	0	5
trophies		DE	11	8	7	5	11	7	8	6	3	7	73
trophies		DK	0	1	1	1	2	2	2	0	0	1	10
trophies		ES	27	40	40	19	16	20	11	4	6	6	189

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies		FI	2	2	0	0	0	1	0	1	0	0	6
trophies		FR	102	30	28	106	37	32	16	53	16	19	439
trophies		GB	0	0	0	0	0	0	0	0	0	2	2
trophies		HR	4	1	0	0	0	0	0	0	0	1	6
trophies		HU	0	0	0	4	9	4	8	6	5	7	43
trophies		IE	0	0	3	0	0	0	0	0	0	0	3
trophies		IT	14	8	8	7	7	7	8	9	6	5	79
trophies		JM	1	0	0	0	0	0	0	0	0	0	1
trophies		LT	0	0	0	0	2	1	0	0	0	0	3
trophies		LU	1	0	2	1	0	0	0	0	1	1	6
trophies		LV	2	0	0	1	0	0	0	1	0	0	4
trophies		MX	20	26	22	27	21	16	15	7	14	13	181
trophies		NL	0	1	0	0	0	0	0	0	0	2	3
trophies		NO	1	3	1	2	0	0	0	0	0	0	7
trophies		PL	0	1	0	1	2	0	1	0	0	0	5
trophies		PT	1	0	0	0	0	0	0	0	0	0	1
trophies		RO	0	0	2	1	0	0	0	0	1	1	5
trophies		RS	0	0	1	0	0	1	1	0	0	0	3
trophies		RU	1	3	7	8	12	10	8	9	0	4	62
trophies		SE	0	0	0	1	1	0	0	0	0	0	2
trophies		SK	0	0	0	0	0	0	0	1	0	0	1
trophies		TR	0	0	0	1	1	0	0	0	0	0	2
trophies		US	137	149	107	173	134	84	59	98	80	97	1118
trophies		ZA	7	19	13	17	8	6	0	4	12	10	96
trophies		ZM	0	0	0	0	0	0	0	0	0	1	1
Bodies Total			0	0	0	0	0	0	0	2	3	0	5
Bones Total			0	0	0	0	0	3	2	0	8	0	13
Feet Total			0	2	0	0	0	0	0	0	0	0	2
Hair Total			0	0	0	10	0	0	0	0	0	0	10
Live Total			0	0	0	0	0	0	1	0	0	0	1
Skin Pieces Total			0	1	0	0	0	0	0	0	0	0	1
Skins Total			11	25	1	1	135	108	56	79	39	7	462
Skulls Total			6	19	2	1	135	114	54	73	41	7	452
Specimens Total			1	0	0	0	0	0	0	0	0	0	1
Tails Total			0	0	0	0	0	1	0	0	0	0	1
Trophies Total			342	305	261	386	280	201	141	210	148	181	2455
Grand Total			360	352	264	398	550	427	254	364	239	195	3403

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from the United Republic of Tanzania, all sources, all purposes, on 03/23/2016.

Table 59. Gross Imports of *Panthera pardus* from Zambia, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies		DK	0	0	0	0	0	0	1	0	0	0	1
bones		DE	0	0	0	257	0	0	0	0	0	0	257
bones		ZA	0	0	0	0	0	1	0	0	0	0	1

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
hair		US	0	0	0	0	0	0	0	0	7	0	7
skins		CA	2	3	0	0	4	1	2	0	0	0	12
skins		ES	0	0	0	0	0	0	2	0	0	0	2
skins		GB	0	1	0	2	3	1	0	1	1	0	9
skins		LU	0	0	0	0	0	0	1	0	0	0	1
skins		MX	0	0	0	0	0	0	0	0	1	0	1
skins		SZ	0	0	3	4	0	0	0	0	0	0	7
skins		US	2	0	0	0	0	0	0	0	0	0	2
skins		ZA	0	4	0	0	0	3	8	3	0	0	18
skulls		BW	0	0	0	0	0	0	0	0	1	0	1
skulls		CA	0	1	0	0	4	1	2	0	0	0	8
skulls		DK	0	0	0	0	0	0	1	0	0	0	1
skulls		GB	0	1	0	2	1	1	0	1	1	0	7
skulls		IT	0	0	0	0	0	0	2	0	0	0	2
skulls		LU	0	0	0	0	0	0	2	0	0	0	2
skulls		MX	0	0	0	0	0	0	4	0	0	0	4
skulls		US	1	1	0	0	0	0	6	0	1	0	9
skulls		ZA	0	4	0	0	0	5	8	4	1	1	23
specimens	g	US	0	0	0	0	0	0	0	0	16	0	16
specimens		CH	0	96	0	0	0	0	0	0	0	0	96
specimens		DE	0	0	53	44	0	0	0	0	0	0	97
specimens		GB	0	8	0	0	0	0	0	0	0	0	8
trophies		AT	0	0	0	1	1	1	0	6	1	1	11
trophies		AU	0	0	0	1	0	0	0	0	0	1	2
trophies		BE	0	0	2	0	0	1	1	2	1	0	7
trophies		BW	0	0	0	0	0	0	0	0	1	0	1
trophies		CA	2	1	0	0	3	14	2	0	1	0	23
trophies		CZ	0	0	0	0	0	2	0	0	1	0	3
trophies		DE	0	0	0	1	4	6	6	4	2	0	23
trophies		DK	0	0	1	1	0	0	6	2	1	0	11
trophies		ES	4	2	4	8	6	2	6	3	3	0	38
trophies		FI	0	0	1	0	0	0	0	0	0	0	1
trophies		FR	3	2	0	4	5	2	2	4	3	0	25
trophies		GB	2	2	2	3	2	1	1	2	0	0	15
trophies		HU	0	0	1	2	3	4	3	6	0	0	19
trophies		IT	0	0	1	1	1	1	2	1	2	1	10
trophies		JM	0	0	1	0	0	0	0	0	0	0	1
trophies		LT	0	0	1	1	0	0	0	0	0	0	2
trophies		LV	0	4	3	3	2	0	0	0	0	0	12
trophies		MX	1	0	0	3	7	6	11	11	1	0	40
trophies		NO	0	0	0	0	0	1	1	0	0	0	2
trophies		PK	0	0	0	0	0	0	3	0	0	0	3
trophies		PT	1	0	2	0	0	0	0	0	0	0	3
trophies		RU	1	0	3	5	1	0	0	3	0	0	13
trophies		SE	0	0	0	0	1	1	0	0	4	0	6
trophies		SI	0	0	3	0	0	0	0	0	0	0	3
trophies		SK	0	0	0	3	2	0	3	2	0	0	10
trophies		SL	0	0	0	0	1	0	0	0	0	0	1
trophies		SZ	0	0	0	2	0	0	0	0	0	0	2
trophies		UA	0	0	1	0	1	0	0	0	0	0	2
trophies		US	54	46	39	48	42	48	36	112	39	2	466
trophies		ZA	7	6	6	7	9	4	6	7	3	0	55

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies		ZW	0	1	0	0	0	0	0	0	0	0	1
trophies		MX	0	0	0	0	0	0	1	0	0	0	1
trophies		PK	0	0	0	0	0	0	1	0	0	0	1
Bodies Total			0	0	0	0	0	0	1	0	0	0	1
Bones Total			0	0	0	257	0	1	0	0	0	0	258
Hair Total			0	0	0	0	0	0	0	0	7	0	7
Skins Total			4	8	3	6	7	5	13	4	2	0	52
Skulls Total			1	7	0	2	5	7	25	5	4	1	57
Specimens Total			0	104	53	44	0	0	0	0	0	0	201
Specimens Total	g		0	0	0	0	0	0	0	0	16	0	16
Trophies Total			75	64	71	94	91	94	91	165	63	5	813
Grand Total			80	183	127	403	103	107	130	174	76	6	1389

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Zambia, all sources, all purposes, on 03/23/2016.

Table 60. Gross Imports of *Panthera pardus* from Zimbabwe, 2005-2014, all purposes and all sources.

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies		CA	0	0	0	2	4	0	0	0	0	0	6
bodies		GB	0	0	0	0	1	0	0	0	0	0	1
bodies		HK	0	0	1	0	0	0	0	0	0	0	1
bodies		KR	3	0	0	0	0	0	0	0	0	0	3
bodies		SE	0	0	0	0	0	0	0	1	0	0	1
bones		US	0	0	0	0	0	0	0	4	1	2	7
bones		ZA	0	0	0	0	0	0	0	4	0	0	4
claws		GB	0	0	0	0	0	0	0	0	5	0	5
claws		MX	0	0	0	0	0	0	0	18	18	0	36
claws		US	0	0	0	0	8	0	1	20	0	0	29
derivatives		AT	0	0	1	0	0	0	0	0	0	0	1
feet		ZA	0	0	0	0	0	0	0	4	0	0	4
leather products (large)		US	0	8	0	0	0	0	0	0	0	0	8
live		ZA	0	0	0	0	0	0	0	0	0	3	3
skeletons		FR	1	0	0	0	0	0	0	0	0	0	1
skin pieces		NZ	0	0	0	0	0	0	0	1	0	0	1
skin pieces		US	0	0	0	0	0	1	0	0	1	2	4
skins	kg	IT	0	0	0	0	0	0	1	0	0	0	1
skins		AR	0	0	0	0	0	0	0	3	0	0	3
skins		AT	2	3	2	0	0	0	3	3	2	0	15
skins		BG	0	0	0	0	0	0	0	1	0	0	1
skins		BR	0	2	0	0	0	0	0	0	0	0	2
skins		BW	0	0	0	0	0	0	1	1	0	0	2
skins		CA	0	9	0	9	7	7	4	3	3	1	43
skins		CH	0	0	0	0	0	0	0	1	0	0	1
skins		CN	0	0	0	1	0	0	0	0	0	0	1

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins		CZ	0	0	0	0	0	0	1	1	4	0	6
skins		DE	0	0	0	0	0	0	5	5	4	0	14
skins		DK	0	0	0	1	0	0	2	0	1	0	4
skins		ES	0	0	0	0	2	1	7	5	1	0	16
skins		FI	0	0	0	0	0	0	1	0	0	0	1
skins		FR	0	0	0	0	0	1	2	5	4	0	12
skins		GB	0	0	0	0	2	1	2	2	3	0	10
skins		HK	0	0	0	0	1	0	0	0	0	0	1
skins		HN	0	0	0	0	0	0	0	0	1	0	1
skins		HU	0	0	0	0	0	0	0	2	2	0	4
skins		IT	0	0	0	0	0	0	2	0	2	0	4
skins		LT	0	0	0	0	0	0	0	1	1	0	2
skins		MX	0	0	0	0	1	0	0	3	1	1	6
skins		NG	0	0	0	0	0	0	0	6	0	0	6
skins		NZ	0	0	0	0	1	0	0	0	1	0	2
skins		PL	0	0	0	0	0	0	1	1	0	0	2
skins		PT	0	0	0	0	0	0	0	1	0	0	1
skins		RO	0	0	0	0	0	0	0	1	0	0	1
skins		RU	0	0	0	0	0	0	1	5	0	1	7
skins		SE	0	0	0	0	0	0	0	2	0	0	2
skins		SK	0	0	0	0	0	0	0	0	0	2	2
skins		US	0	0	0	0	3	2	55	128	68	6	262
skins		YU	0	0	0	0	0	0	0	0	1	0	1
skins		ZA	0	20	0	0	1	9	8	12	2	3	55
skulls	kg	IT	0	0	0	0	0	0	1	0	0	0	1
skulls		AR	0	0	0	0	0	0	0	3	0	0	3
skulls		AT	2	0	2	0	0	0	3	3	2	0	12
skulls		BE	0	0	0	0	0	2	0	0	0	0	2
skulls		BG	0	0	0	0	0	1	0	1	0	0	2
skulls		BW	0	0	0	0	0	0	1	1	0	0	2
skulls		CA	0	9	0	19	12	9	4	2	3	1	59
skulls		CH	0	0	0	0	1	0	0	1	0	0	2
skulls		CL	0	0	0	0	0	1	0	0	0	0	1
skulls		CZ	0	0	0	0	0	0	1	1	4	0	6
skulls		DE	0	0	0	0	1	0	6	6	4	0	17
skulls		DK	0	0	0	0	1	0	2	0	1	0	4
skulls		ES	0	0	0	0	3	1	8	5	2	0	19
skulls		FI	0	0	0	0	0	1	1	0	0	0	2
skulls		FR	0	0	0	0	0	0	2	8	5	0	15
skulls		GB	0	0	0	0	3	1	2	2	2	1	11
skulls		HK	0	0	0	0	1	0	0	0	0	0	1
skulls		HN	0	0	0	0	0	0	0	0	1	0	1
skulls		HU	0	0	0	0	0	0	0	2	2	0	4
skulls		IT	0	0	0	0	0	0	2	0	2	0	4
skulls		LT	0	0	0	0	0	0	0	1	1	0	2
skulls		MU	0	0	0	0	0	0	0	1	0	0	1
skulls		MX	0	0	0	0	0	0	0	3	1	1	5
skulls		NO	0	0	0	1	0	0	0	1	0	0	2
skulls		NZ	0	0	0	0	1	0	0	1	1	0	3
skulls		PA	0	0	0	0	0	0	0	1	0	0	1
skulls		PL	0	0	0	0	0	0	1	1	0	0	2
skulls		PT	0	0	0	0	0	0	0	2	0	0	2

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skulls		RO	0	0	0	0	0	0	0	1	0	0	1
skulls		RU	0	0	0	0	0	0	1	5	0	1	7
skulls		SE	0	0	0	0	0	0	1	2	0	0	3
skulls		SK	0	0	0	0	0	0	0	0	0	2	2
skulls		US	0	3	1	7	9	5	58	134	74	9	300
skulls		YU	0	0	0	0	0	0	0	0	1	0	1
skulls		ZA	0	22	0	1	1	9	8	11	6	3	61
specimens		CN	1	0	0	0	0	2	0	0	0	0	3
tails		US	0	0	0	0	0	0	0	0	0	10	10
teeth		CH	0	0	0	0	0	0	0	4	4	0	8
teeth		NZ	0	0	1	0	0	0	0	0	0	0	1
trophies		AR	1	2	2	0	1	0	1	7	0	0	14
trophies		AT	4	6	2	4	3	1	4	2	1	2	29
trophies		AU	0	4	0	1	0	0	0	0	0	0	5
trophies		BE	1	2	2	2	1	3	1	0	1	0	13
trophies		BG	0	1	4	1	0	1	2	1	0	2	12
trophies		BR	0	0	0	0	0	0	0	0	0	2	2
trophies		CA	9	10	2	8	4	4	1	5	3	2	48
trophies		CH	0	0	0	1	1	0	0	1	1	2	6
trophies		CL	2	0	0	0	0	1	0	0	0	0	3
trophies		CN	0	0	0	1	0	2	0	1	1	0	5
trophies		CR	0	1	0	1	0	0	0	0	0	0	2
trophies		CZ	3	3	0	0	2	1	3	1	4	0	17
trophies		DE	9	12	4	4	5	5	8	8	8	4	67
trophies		DK	3	3	2	3	10	6	4	3	0	1	35
trophies		EE	1	0	0	0	0	0	0	0	0	1	2
trophies		ES	25	20	26	18	13	8	10	8	6	4	138
trophies		FI	2	2	1	2	1	2	3	1	0	1	15
trophies		FR	30	9	8	8	5	2	2	10	7	5	86
trophies		GB	1	1	1	2	0	1	1	2	2	2	13
trophies		HR	1	0	0	0	0	0	0	0	0	0	1
trophies		HU	0	0	0	0	1	0	1	1	2	1	6
trophies		IT	4	2	4	7	4	3	6	3	1	0	34
trophies		LT	1	1	0	0	0	0	0	2	1	0	5
trophies		LU	0	0	4	1	0	0	0	0	0	0	5
trophies		LV	0	0	0	0	0	0	0	0	1	1	2
trophies		MU	0	0	0	0	0	0	0	1	0	0	1
trophies		MX	8	15	2	4	6	13	8	5	5	5	71
trophies		NO	1	0	1	2	1	3	0	1	0	0	9
trophies		NZ	1	0	0	0	2	2	1	0	1	0	7
trophies		PA	0	0	0	0	0	0	0	1	0	0	1
trophies		PH	0	0	0	2	3	0	0	0	0	0	5
trophies		PK	1	0	0	0	0	0	0	0	0	0	1
trophies		PL	0	5	4	2	1	3	6	2	1	4	28
trophies		PT	2	3	1	2	0	0	0	2	0	0	10
trophies		QA	0	0	0	0	0	2	0	0	0	0	2
trophies		RO	0	0	1	0	0	1	0	0	1	0	3
trophies		RS	0	0	0	0	0	0	0	0	1	0	1
trophies		RU	5	1	3	6	7	6	4	10	0	1	43
trophies		SA	0	0	1	0	0	0	0	0	0	0	1
trophies		SD	0	0	0	0	0	0	0	0	0	2	2
trophies		SE	1	2	0	1	2	0	1	1	2	2	12

Term	Unit	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies		SG	0	1	0	0	0	0	0	0	0	0	1
trophies		SI	0	1	0	0	0	0	0	0	0	0	1
trophies		SK	2	0	1	3	0	1	0	0	1	1	9
trophies		SL	0	1	0	0	0	0	0	0	0	0	1
trophies		SZ	0	0	0	0	0	0	0	0	0	2	2
trophies		UA	0	0	0	0	0	0	0	0	2	2	4
trophies		US	185	156	178	143	180	143	126	132	129	117	1489
trophies		XX	0	2	0	0	0	0	0	0	0	0	2
trophies		ZA	30	19	23	24	28	6	11	8	10	11	170
trophies		ZM	0	0	0	0	0	0	0	1	0	0	1
Bodies Total			3	0	1	2	5	0	0	1	0	0	12
Bones Total			0	0	0	0	0	0	0	8	1	2	11
Claws Total			0	0	0	0	8	0	1	38	23	0	70
Derivatives Total			0	0	1	0	0	0	0	0	0	0	1
Feet Total			0	0	0	0	0	0	0	4	0	0	4
Leather Products (large) Total			0	8	0	0	0	0	0	0	0	0	8
Live Total			0	0	0	0	0	0	0	0	0	3	3
Skeletons Total			1	0	0	0	0	0	0	0	0	0	1
Skin Pieces Total			0	0	0	0	0	1	0	1	1	2	5
Skins Total			2	34	2	11	18	21	95	192	101	14	490
Skins Total	kg		0	0	0	0	0	0	1	0	0	0	1
Skulls Total			2	34	3	28	33	30	101	199	112	18	560
Skulls Total	kg		0	0	0	0	0	0	1	0	0	0	1
Specimens Total			1	0	0	0	0	2	0	0	0	0	3
Tails Total			0	0	0	0	0	0	0	0	0	10	10
Teeth Total			0	0	1	0	0	0	0	4	4	0	9
Trophies Total			333	285	277	253	281	220	204	220	192	177	2442
Grand Total			342	361	285	294	345	274	401	667	434	226	3629

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* from Zimbabwe, all sources, all purposes, on 03/23/2016.

Table 61: Imports of *Panthera pardus* into Austria, all sources, all purposes 2005-2014.

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	H	W	AT	0	0	0	0	0	1	0	0	0	0	1
skins	H	W	AT	3	0	0	0	3	4	4	3	4	0	21
trophies	H	W	AT	17	26	9	10	17	10	11	18	13	10	141
trophies	H	W	AT	0	0	0	0	0	0	1	0	0	0	1

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins	P	O	AT	0	0	0	0	0	0	0	0	1	0	1
skins	P	W	AT	4	14	15	0	0	0	0	0	0	0	33
trophies	P	W	AT	0	1	6	12	4	1	1	0	2	4	31
skins	Q	O	AT	0	0	0	0	1	0	0	0	0	0	1
bodies total				0	0	0	0	0	1	0	0	0	0	1
skins total				7	14	15	0	4	4	4	3	5	0	56
trophies total				17	27	15	22	21	11	13	18	15	14	173
Grand Total				24	41	30	22	25	16	17	21	20	14	**230**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* into Austria by individual sources and purposes, on 03/16/2016.

Table 62: Imports of *Panthera pardus* into Canada, all sources, all purposes 2005-2014.

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	E	W	CA	0	0	0	0	0	0	0	2	0	0	2
skins	E	W	CA	0	0	0	0	0	0	0	1	0	0	1
trophies	H	C	CA	0	0	0	0	0	0	0	0	2	0	2
bodies	H	W	CA	0	0	0	6	8	0	6	2	1	4	27
skins	H	W	CA	11	22	0	18	32	10	10	11	3	2	119
trophies	H	W	CA	16	17	3	15	16	22	9	10	8	13	129
trophies	H	F	CA	0	0	0	0	0	0	0	0	2	0	2
trophies	P	I	CA	0	0	0	0	0	0	0	0	0	1	1
skins	P	O	CA	0	0	0	2	1	0	1	1	0	1	6
bodies	P	W	CA	0	0	0	1	1	0	0	0	0	1	3
skins	P	W	CA	2	2	0	0	1	0	0	0	0	1	6
trophies	P	W	CA	3	0	0	0	1	0	0	1	0	1	6
bodies	T	O	CA	0	0	0	0	0	0	0	1	0	0	1
skins	T	W	CA	2	0	0	0	0	0	0	0	0	0	2
live	Z	C	CA	0	1	2	1	0	1	0	1	2	2	10
bodies total				0	1	2	7	9	1	6	5	1	5	33
live total				0	1	2	1	0	1	0	1	2	2	10
skins total				15	24	0	20	34	10	11	13	3	4	134
trophies total				34	43	3	51	69	22	32	33	21	34	141
Grand Total				34	42	5	43	60	33	26	30	18	26	**318**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* into Canada by individual sources and purposes, on 03/17/2016.

Table 63: Imports of *Panthera pardus* into France, all sources, all purposes 2005-2014.

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	H	W	FR	0	0	0	0	1	0	0	0	0	0	1
skins	H	W	FR	2	1	1	0	28	25	19	23	11	0	110
trophies	H	W	FR	188	74	33	47	52	44	10	11	10	4	473
skins	P	O	FR	3	0	0	1	0	0	0	1	0	0	5
bodies	P	W	FR	0	0	0	0	2	0	0	0	0	0	2
skins	P	W	FR	2	0	0	0	1	1	1	0	2	2	9
trophies	P	W	FR	4	2	33	138	60	51	32	76	33	30	459
live	Q	C	FR	0	2	0	0	0	0	0	0	0	4	6
live	Z	C	FR	0	1	3	1	0	2	0	0	0	0	7
bodies total				0	0	0	0	3	0	0	0	0	0	3
live total				0	3	3	1	0	2	0	0	0	4	13
skins total				7	1	1	1	29	26	20	24	13	2	124
trophies total				192	76	66	185	112	95	42	87	43	34	932
Grand Total				199	80	70	187	144	123	62	111	56	40	**1,072**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* into France by individual sources and purposes, on 03/17/2016.

Table 64: Imports of *Panthera pardus* into Germany, all sources, all purposes 2005-2014.

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live	B	C	DE	0	0	0	0	0	0	2	0	0	0	2
bodies	H	W	DE	0	0	0	0	0	1	0	0	0	0	1
skins	H	W	DE	0	0	0	0	5	2	12	15	8	0	42
trophies	H	W	DE	62	66	30	41	60	34	30	46	38	36	443
bodies	P	O	DE	0	0	1	0	0	0	0	0	0	0	1
skins	P	O	DE	0	0	0	0	0	1	0	0	1	0	2
trophies	P	O	DE	0	0	0	0	0	0	0	1	0	0	1
bodies	P	W	DE	0	0	0	1	0	0	0	0	0	0	1
skins	P	W	DE	1	0	0	0	0	0	2	0	0	0	3
trophies	P	W	DE	4	1	3	0	4	3	2	1	0	0	18
live	Q	C	DE	0	1	0	0	0	0	0	0	0	0	1
trophies	Q	O	DE	0	0	0	1	0	0	0	0	0	0	1
skins	T	O	DE	0	1	0	0	0	0	0	0	0	0	1
skins	T	U	DE	0	0	7	0	0	0	0	0	0	0	7
skins	T	W	DE	0	0	7	0	0	1	0	0	0	0	8
live	Z	C	DE	0	0	2	0	3	0	0	2	0	0	7
bodies total				0	0	1	1	0	1	0	0	0	0	3
live total				0	1	2	0	3	0	2	2	0	0	10
skins total				1	1	14	0	5	4	14	15	9	0	63
trophies total				66	67	33	42	64	37	32	48	38	36	463
Grand Total				67	69	50	43	72	42	48	65	47	36	**539**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* into Germany by individual sources and purposes, on 03/17/2016.

Table 65: Imports of *Panthera pardus* into Italy, all sources, all purposes 2005-2014.

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies	H	R	IT	0	0	0	1	0	0	0	0	0	0	1
bodies	H	W	IT	0	0	0	0	0	1	0	0	0	0	1
skins	H	W	IT	0	0	0	0	5	5	4	3	2	0	19
trophies	H	W	IT	20	12	15	18	23	18	22	18	12	7	165
skins	P	O	IT	0	0	0	1	0	0	0	0	0	0	1
trophies	P	W	IT	0	0	0	0	0	0	0	0	3	0	3
skins	Q	O	IT	0	0	0	0	0	0	0	1	0	0	1
live	Z	C	IT	0	0	0	0	1	0	0	0	0	0	1
bodies total				0	0	0	0	0	1	0	0	0	0	1
live total				0	0	0	0	1	0	0	0	0	0	1
skins total				0	0	0	1	5	5	4	4	2	0	21
trophies total				20	12	15	19	23	18	22	18	15	7	169
Grand Total				20	12	15	20	29	24	26	22	17	7	**192**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* into Italy by individual sources and purposes, on 03/17/2016.

Table 66: Imports of *Panthera pardus* into Mexico, all sources, all purposes 2005-2014.

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies	H	C	MX	0	0	0	0	0	0	0	0	2	0	2
trophies	H	F	MX	0	0	0	0	0	0	0	0	2	0	2
trophies	H	I	MX	0	0	0	0	0	2	0	0	0	0	2

trophies	H	O	MX	0	0	0	0	0	0	6	0	0	0	6
bodies	H	W	MX	0	0	0	0	1	0	0	0	0	0	1
skins	H	W	MX	0	0	0	0	3	4	3	4	5	0	19
trophies	H	W	MX	39	68	50	57	49	46	38	48	30	29	454
trophies	H	W	MX	0	0	0	0	0	0	1	0	0	0	1
trophies	P	W	MX	1	0	1	2	0	0	0	1	0	0	5
live	Q	C	MX	0	0	0	0	0	2	0	0	1	0	3
trophies	T	W	MX	0	0	1	1	1	0	0	0	0	0	3
live	Z	C	MX	0	0	0	4	0	0	0	0	0	1	5
bodies total				0	0	0	0	1	0	0	0	0	0	1
live total				0	0	0	4	0	2	0	0	1	1	8
skins total				0	0	0	0	3	4	3	4	6	0	20
trophies total				40	68	52	60	56	48	45	49	34	29	481
Grand Total				40	68	52	64	59	54	48	53	41	30	**510**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* into Mexico by individual sources and purposes, on 03/17/2016.

Table 67: Imports of *Panthera pardus* into Russia, all sources, all purposes 2005-2014.

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live	B	C	RU	0	0	0	0	0	0	0	2	0	0	2
bodies	H	W	RU	0	0	3	0	0	2	1	1	0	1	8
live	H	W	RU	0	0	0	0	0	2	0	0	0	0	2
skins	H	W	RU	0	0	0	0	7	6	8	7	2	0	30
trophies	H	W	RU	15	8	20	29	36	35	23	51	15	31	263
live	N	W	RU	0	0	0	0	4	0	0	0	0	0	4
skins	P	C	RU	0	0	0	0	0	0	0	0	2	0	2
bodies	P	W	RU	0	0	0	0	1	0	0	0	0	0	1
trophies	P	W	RU	0	0	0	5	5	2	2	4	14	5	37
live	Q	U	RU	0	0	0	0	0	0	4	0	0	0	4
live	Q	W	RU	0	0	0	0	0	0	4	0	0	0	4
skins	T	O	RU	0	0	0	0	0	0	0	4	0	0	4
live	Z	C	RU	0	5	3	3	0	0	2	2	6	3	24
live	Z	F	RU	0	0	0	0	0	0	0	1	0	0	1
bodies total				0	0	3	0	1	2	1	1	0	1	9
live total				0	5	3	3	4	2	10	5	6	3	41
skins total				0	0	0	0	7	6	8	11	4	0	36
trophies total				15	8	20	34	41	37	25	55	29	36	300
Grand Total				15	13	26	37	53	47	44	72	39	40	**386**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* into Russia by individual sources and purposes, on 03/17/2016.

Table 68: Imports of *Panthera pardus* into South Africa, all sources, all purposes 2005-2014.

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
live	B	C	ZA	0	0	0	0	2	0	2	1	0	0	5
live	B	F	ZA	0	0	0	1	0	0	0	0	0	0	1
live	B	F	ZA	0	0	0	1	0	0	0	0	0	0	1
live	B	W	ZA	1	0	0	0	0	0	0	0	0	0	1
live	E	C	ZA	0	0	0	0	3	0	0	0	0	0	3
trophies	H	C	ZA	0	0	0	0	0	0	1	0	0	0	1
trophies	H	F	ZA	0	0	1	1	0	0	0	0	0	0	2
trophies	H	R	ZA	0	1	0	0	0	0	0	0	0	0	1
skins	H	W	ZA	0	51	0	0	22	28	41	38	27	0	207
trophies	H	W	ZA	87	74	73	76	80	43	40	46	43	25	587

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
skins	L	W	ZA	0	0	0	0	0	0	0	2	0	0	2
skins	P	C	ZA	0	0	0	0	7	0	0	0	0	0	7
skins	P	O	ZA	2	0	0	0	0	0	1	0	0	0	3
skins	P	W	ZA	6	1	0	0	3	0	0	0	0	0	10
trophies	P	W	ZA	2	0	0	0	1	0	4	12	1	0	20
live	Q	C	ZA	0	0	0	0	0	4	0	0	0	0	4
live	T	C	ZA	0	1	0	0	1	0	1	0	2	3	8
live	T	W	ZA	0	0	0	0	0	0	1	1	0	0	2
trophies	T	W	ZA	0	0	0	1	0	0	0	1	0	0	2
live	Z	C	ZA	0	1	0	2	0	0	0	2	2	2	9
live	Z	W	ZA	0	0	2	0	0	0	0	0	0	0	2
live total				1	2	2	4	6	4	4	4	4	5	36
skins total				8	52	0	0	32	28	42	40	27	0	229
trophies total				89	75	74	78	81	43	45	59	44	25	613
Grand Total				98	129	76	82	119	75	91	103	75	30	**878**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* into South Africa by individual sources and purposes, on 03/17/2016.

Table 69: Imports of *Panthera pardus* into Spain, all sources, all purposes 2005-2014.

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
bodies	H	W	ES	0	0	0	0	0	2	0	1	0	0	3
skins	H	W	ES	0	3	0	0	18	27	32	12	7	0	99
trophies	H	W	ES	90	91	100	76	72	53	39	29	18	20	588
trophies	P	W	ES	0	0	0	0	0	0	3	1	11	0	15
live	Q	C	ES	0	0	0	0	0	1	1	0	0	0	2
live	T	C	ES	0	0	0	0	0	1	0	0	0	0	1
skins	T	W	ES	0	0	0	0	1	0	0	0	0	0	1
bodies total				0	0	0	0	0	2	0	1	0	0	3
live total				0	0	0	0	0	2	1	0	0	0	3
skins total				0	3	0	0	19	27	32	12	7	0	101
trophies total				90	91	100	76	72	53	42	30	29	20	602
Grand Total				90	94	100	76	91	84	75	43	36	20	**709**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* into Spain by individual sources and purposes, on 03/17/2016.

Table 70: Imports of *Panthera pardus* into the United States of America, all sources, all purposes 2005-2014.

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies	E	W	US	0	0	2	0	0	0	0	0	0	0	2
trophies	H	C	US	0	0	1	0	0	0	1	0	0	0	2
trophies	H	I	US	21	31	19	30	14	13	14	18	10	5	175
skins	H	R	US	0	1	0	0	0	0	0	0	0	0	1
bodies	H	W	US	1	0	0	0	0	6	1	4	0	0	12
skins	H	W	US	1	26	4	1	46	83	152	262	106	2	683
trophies	H	W	US	497	512	494	566	642	445	296	460	345	316	4,573
trophies	H	W	US	0	0	0	0	0	1	0	0	0	0	1
skins	L	W	US	0	0	3	0	0	0	0	0	0	0	3
trophies	P	I	US	0	0	0	0	0	0	0	0	1	0	1
skins	P	O	US	1	2	0	1	0	2	1	6	1	1	15
trophies	P	O	US	0	0	0	0	0	0	0	1	0	0	1
skins	P	U	US	2	0	0	0	0	0	0	0	0	0	2
bodies	P	W	US	0	0	0	0	0	0	1	1	0	0	2
skins	P	W	US	4	2	0	4	1	0	0	0	0	0	11

Term	Purpose	Source	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
trophies	P	W	US	4	3	4	4	1	0	1	10	6	2	35
live	Q	C	US	0	0	0	1	1	2	2	0	1	0	7
skins	Q	O	US	0	0	0	2	0	0	0	0	1	0	3
skins	Q	W	US	0	0	0	0	0	0	0	0	1	0	1
skins	S	U	US	0	0	0	7	0	0	0	0	0	0	7
skins	T	I	US	2	0	0	0	0	2	0	1	0	0	5
skins	T	O	US	3	2	0	0	1	0	0	0	0	0	6
skins	T	U	US	0	1	0	0	0	0	0	0	0	0	1
trophies	T	U	US	0	0	1	0	0	0	0	0	0	0	1
skins	T	W	US	0	1	0	0	0	0	1	0	1	0	3
trophies	T	W	US	0	1	1	0	0	0	0	0	0	1	3
live	Z	C	US	0	0	0	6	3	0	1	1	3	3	17
live	Z	F	US	0	0	0	0	0	0	0	1	0	0	1
live	Z	F	US	0	0	0	0	0	0	0	1	0	0	1
bodies total				1	0	0	0	0	6	2	5	0	0	14
live total				0	0	0	7	4	2	3	3	4	3	26
skins total				13	35	7	15	48	87	154	269	110	3	741
trophies total				522	547	522	600	657	459	312	489	362	324	4,794
Grand Total				536	582	529	622	709	554	471	766	476	330	**5,575**

Source: UNEP-WCMC CITES Trade Database searched by "gross imports" of *Panthera pardus* into the United States of America by individual sources and purposes, on 03/17/2016.