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

CE

Seventeenth meeting of the Conference of the Parties Johannesburg (South Africa), 24 September – 5 October 2016

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

All African populations of *Panthera leo* to be transferred from Appendix II to Appendix I in accordance with Resolution Conf. 9.24 (Rev CoP16).

The species meets the biological criteria for an Appendix I listing by virtue of a marked observed ongoing and projected decline in the population size in the wild (Resolution Conf. 9.24 (Rev. CoP16) Annex I Par C(i)(ii)).

Moreover, across much of its range, the species meets the criteria for an Appendix I listing on the basis of small and declining size of national populations and/or very small subpopulations (Resolution Conf. 9.24 (Rev. CoP16), Annex I, Paragraph A (i)(ii)).

The species is known to be in trade, and trade has or may have a detrimental impact on the status of the species (Resolution Conf. 9.24 (Rev. CoP16) Annex 5).

Note that the regional population in India, subspecies *Panthera leo persica* is already included in Appendix I.

B. Proponent

Chad, Côte d'Ivoire, Gabon, Guinea, Mali, Mauritania, the Niger, Nigeria and Togo²:

C. Supporting statement

1. <u>Taxonomy</u>

1.1 Class: Mammalia

1.2 Order: Carnivora

1.3 Family: Felidae

1.4 Genus, species or subspecies, including author and year: Panthera leo (Linnaeus, 1758)

1.5 Scientific synonyms: None

1.6 Common names: English: African lion

This document has been provided in these languages by the author(s).

The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

French: Lion d'Afrique

Spanish: León

1.7 Code numbers: A-112.007.002.001

Overview

The IUCN's 2015 Red List assessment of *Panthera leo* (Bauer et al. 2015a) details serious declines in lion populations across much of their African range. According to the assessment, which is based on 47 well monitored lion populations, lion numbers are inferred to have declined by 43% from 1993-2014 (approximately 3 lion generations) with a decreasing population trend, and the species is thought to occupy only around 8% of its historic range. Bauer et al. 2015b indicated that lion populations in West, Central, and East Africa are predicted to suffer a further projected 50% decline over the next two decades. Although the IUCN has maintained the lion's 'Vulnerable' Red List status, nevertheless Bauer et al. 2015a state that sample lion populations outside of Botswana, Namibia, South Africa, Zimbabwe and India have been observed to have declined by more than 60% from 1993-2014 and thus it is inferred by the IUCN that in the majority of its range the lion meets the criteria for an 'Endangered' listing. The West African subpopulation, which is thought to number just over 400 individuals, has been separately classified by the IUCN as 'Critically Endangered' (Henschel et al. 2015).

The IUCN's 2015 Red List assessment indicates that the lion has likely been recently extirpated from 12 African countries and is suspected to have undergone a possible recent extirpation in another four. Many populations are small and fragmented. The main identified threats include indiscriminate killing in defence of life and livestock, habitat loss, prey base depletion, the impacts of local and international trade in bush meat on prey availability, poorly regulated sport hunting, and the increasing international trade in lion parts and products. (Bauer et al. 2015a)

While lion populations have declined, international trade in lion specimens has increased markedly in recent years. Data from the CITES Trade Database on trade in lions and parts and products derived from them for the ten-year period 2005-2014 reveal a total of 29,214 lion items declared to have been exported by 102 Parties, 19 of which are range States. 11,164 of these items were declared to have been derived from wild lions. (CITES Trade Database 2015).

An Appendix I listing would reduce the impacts of international trade on the species, strengthen domestic protection by permitting stronger penalties for illegal trade, encourage further international efforts (including access to resources) to protect the species, offer opportunities to increase public awareness of the threats facing the species, and provide greater impetus for the implementation of national and regional conservation strategies.

3. Species characteristics

3.1 Distribution

According to the 2015 IUCN assessment, African lions are native to Angola, Benin, Botswana, Burkina Faso, Cameroon, Central African Republic, Chad, The Democratic Republic of the Congo, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Niger, Nigeria, Senegal, Somalia, South Africa, Sudan, Swaziland, The United Republic of Tanzania, Uganda, Zambia, and Zimbabwe. They are possibly extinct in Côte d'Ivoire, Ghana, Guinea, Guinea-Bissau, Mali, Rwanda, and Togo. They are functionally extinct in Algeria, Burundi, Congo, Djibouti, Egypt, Eritrea, Gabon, Gambia, Lesotho, Libya, Mauritania, Morocco, Sierra Leone, Tunisia, and Western Sahara (Bauer et al. 2015a).

Bauer et al. (2015a) estimated extant lion range (based on areas where recent records provided reasonable confidence that lions persist) at 1,654,375 km², or 8% of historical range.

3.2 Habitat

The African lion has a broad habitat tolerance, absent only from tropical rainforest and the interior of the Sahara desert (Nowell and Jackson 1996).

3.3 Biological characteristics

Biological characteristics of the African lion are quite well documented (e.g. Schaller 1972; Scheel 1993; Nowell and Jackson 1996). Lions are generalist, cooperative hunters. Foraging preferences change with season and with lion group size. Lions have no fixed breeding season. Females give birth every 20 months if they raise their cubs to maturity, but the interval can be as short as 4-6 weeks if their litter is lost. Gestation lasts 110 days, litter size range is 1-4 cubs, and sex ratio at birth is 1:1. At about four years of age, females will have their first litter and males will become resident in a pride. Pride takeovers by male lions and subsequent infanticide of cubs sired by the ousted male lions greatly influences reproductive success. Lionesses defending their cubs from the victorious males are sometimes killed during the takeover. Infanticide typically accounts for 27 percent of cub mortality. Adult mortality is typically caused by humans, starvation, disease or attacks by other lions. Injury and death can also occur during hunting attempts on some of their larger prey.

Lions are the most social of the big cats, with related females remaining together in prides, and related and unrelated males forming coalitions competing for tenure over prides.

3.4 Morphological characteristics

The lion is the second largest species of Felidae. Characteristics include sharp, retractile claws, a short neck, a broad face with prominent whiskers, rounded ears and a muscular body. Lions are typically a tawny colour with black on the backs of the ears and white on the abdomen and inner legs. Males usually have a mane around the head, neck and chest. Lions are sexually dimorphic. Adult males, on average, weigh about 188 kg with the heaviest male on record weighing 272 kg. Females are smaller, weighing, on average, 126 kg. Male body length, not including the tail, ranges from 1.7 m to 2.5 m with a tail from 0.9 m to 1 m (Nowell and Jackson 1996).

3.5 Role of the species in its ecosystem

As a top order predator, the lion affects (and is affected by) populations of its prey species, which typically include buffalo, zebra, wildebeest, roan, sable, springbok, gemsbok, kob, impala, warthog, and hartebeest (Nowell and Jackson 1996). Lions are the only predator that can kill large herbivores, such as elephant, giraffe and buffalo, using cooperative hunting techniques (Hopcraft et al. 2010). A change in abundance and distribution of lions can significantly impact prey species abundance and ecosystem balance. Lion presence and abundance impacts the carnivore guild, with inter-specific competition affecting the distribution and abundance of other large carnivores, notably cheetahs and African wild dogs (Ripple et al. 2014).

The importance of large apex consumers such as lions to ecosystem stability, and the impacts of their removal, is increasingly being recognised. Estes et al. 2011 described the loss of these animals as possibly 'humankind's most pervasive influence on nature'.

4. Status and trends

4.1 Habitat trends

Habitat loss and corresponding loss of prey are serious threats to African lions (Van Orsdol et al. 1985; Ray et al. 2005; Hayward et al. 2007). In sub-Saharan Africa, there was a 25% increase in the amount of land allocated to agriculture between 1970 and 2000 (Chardonnet et al. 2010). Numbers of wild herbivores declined by 52% in East Africa and 85% in West Central Africa between 1970 and 2005 (Craigie et al. 2010). The exploitation of trees and mineral resources, and the construction of dams and irrigation schemes, contribute to destruction and degradation of lion habitats (IUCN 2006a). The growing human population has also resulted in an increase in the consumption of bush meat and subsequent decline in prey availability, and a concomitant increase in competition between humans and lions. The 2015 IUCN assessment indicates that habitat loss and conversion has led to many lion populations becoming small and isolated; current lion habitat is estimated at 1,654,375 km², or 8% of historical range (Bauer et al. 2015a).

4.2 Population size

Bauer et al. (2015a) applied recent regional population trends to previous population estimates (Bauer and Van Der Merwe 2004, Chardonnet 2002), and provided updated regional population estimates in the form of ranges, as follows:

Region	Population range estimates								
	Based on Bauer and Van Der Merwe 2004	Based on Chardonnet 2002							
Southern Africa	10,385	15,925							
East Africa	7,345	13,316							
West Africa	406	406							
Central Africa	590	1,747							
Total	18,726	31,394							

The authors expressed "greater confidence in the estimate of fewer than 20,000 Lions in Africa than in a number over 30,000".

4.3 Population structure

Lion population structures differ depending on a number of variables, including climate, habitat and prey availability (Tuqa et al. 2014). Prides typically consist of 5-9 adult females with up to 18 being observed, their dependent offspring, and separate coalitions of 2-6 males (Haas et al.2005). Prides generally break into smaller groups when hunting.

Lions tend to live at higher densities than most other felids, but with a wide variation from 1.5 adults per 100 km² in southern African semi-desert to 55 adults per 100 km² in parts of the Serengeti (Sunquist and Sunquist 2002). Pride ranges can vary widely even in the same region: e.g., from 266-4,532 km² in the Kgalagadi Transfrontier Park of South Africa (Funston 2001). There is evidence to suggest that social groups may be more important than individuals in determining the ecological stability of predator-prey relationships, suggesting that the viability of lion social groupings is highly important (Fryxell et al. 2007).

Increasing fragmentation of lion populations in insular reserves which are closed to natural immigration has long been identified as an issue (Kissui et al. 2004, Packer et al. 1991). Human disturbance affects pride structure, and lions tend to be less gregarious in human dominated landscapes; such populations typically exist at low density consisting of small prides, a lack of adult males, and little immigration (Snyman 2010). Fragmentation and isolation of populations may affect genetic variability, with consequences for reproductive performance and sex rations (Packer et al. 1991).

4.4 Population trends

The 2015 IUCN assessment infers that lion populations across Africa have undergone a reduction of approximately 43% over the past 21 years (approximately three lion generations, 1993-2014) based on time trend analysis of census data for 47 relatively well monitored lion subpopulations (Bauer et al. 2015a).

This overall assessment masks a dichotomy. While sample lion subpopulations increased by 12% in four southern African countries (Botswana, Namibia, South Africa and Zimbabwe) and in India, an observed decline of 60% or more in sample subpopulations outside these countries was observed for the remainder of its African range. In other words, in the majority of its range the lion meets the IUCN Red List criterion for Endangered (Bauer et al. 2015a).

Bauer et al. (2015b) predicted that at a regional scale, lion populations in West, Central and East Africa are likely to suffer further projected 50% declines over the next two decades.

In the region of West Africa, the lion is separately classified by the IUCN as Critically Endangered (Henschel et al. 2015), based on surveys suggesting that only 406 (range 269-583) lions remain in West Africa, most of which (about 90%) persist in a single population in W-Arly-Pendjari (Henschel et al. 2014).

Regional African lion conservation strategies developed by the IUCN in 2006 for West-Central and East-Southern regions, defined and identified Lion Conservation Units (LCUs) as 'areas of known or probable lion range that can be considered an ecological unit of importance for lion conservation', and classified such units as Large (>500 individuals), Medium (<500, >50 individuals), and Small (<50 individuals) (IUCN 2006a,b). A total of 67 LCU's were identified. Using a similar classification, Riggio et al. (2013) defined 'Lion Strongholds' as being increasing populations within protected areas containing at least 500 individuals, and 'Potential Strongholds' as populations with greater than 250 individuals.

Almost all lion populations that historically exceeded 500 individuals are declining (Bauer et al. 2015b). Among the 67 LCUs identified by the IUCN (IUCN 2006a,b), Riggio et al. (2013) identified only 10 which met the criteria to be classified as Lion Strongholds (increasing populations containing >500 individuals within protected areas). These authors also noted that 18 of the LCUs identified in the 2006 regional conservation strategies had lost their lions.

West and Central Africa:

Bauer et al. (2015a) estimate that as few as 406 lions exist in West Africa and 590-1,747 across Central Africa. These authors suggest that the combined population across West and Central Africa underwent an estimated decrease of 66% between 1993 and 2014 (21 years, three lion generations). At the country level, all countries in West and Central Africa have very small wild national populations (<500, as defined in CITES Resolution Conf. 9.24 (Rev. CoP16) Annex 5) and, with the exception of Benin, each of the national populations in these regions is inferred to have declined (Bauer et al. 2015a, supplementary material, Table 3), with population declines in Ghana, Côte d'Ivoire, Nigeria and Senegal exceeding the general guideline of 50% for a marked recent rate of decline as defined in CITES Resolution Conf. 9.24 (Rev. CoP16) Annex 5.

East Africa:

Bauer et al. (2015a) estimate the East African lion population to be 7,345 – 13,316 (Bauer et al. 2015a, supplementary material, Table 2) and it is inferred to have experienced a marked recent decline estimated at 59% between 1993 and 2014 (Bauer et al. 2015a, supplementary material, Table 3)

Southern Africa:

Southern Africa is the only region where trends in lion numbers are positive; according to Bauer et al. (2015a, supplementary material, Table 2), the inferred lion population across southern Africa is 10,385-15,925. However, populations in Botswana and Zambia are inferred to have declined between 1993-2014 (Bauer et al. 2015a, supplementary material, Table 3). In addition, all subpopulations in Namibia, Zambia and Zimbabwe number below 500 individuals (Bauer et al. 2015a, supplementary material, Table 3). With regard to Mozambique, the authors note that the lion population has experienced a temporary boom that is unlikely to continue, possibly related to the increased opportunity to feed on the bodies of poached elephants as poaching has dramatically increased in the country in recent years. With regard to South Africa, the wild population is small but inferred to have increased between 1993-2014 (Bauer et al. 2015a, supplementary material, Table 3).

4.5 Geographic trends

Bauer et al. (2015a) indicated that lions have been recently extirpated from 12 African countries (Cote d'Ivoire, Gambia, Guinea Bissau, Mali, Mauritania, Sierra Leone, Congo, Gabon, Burundi, Djibouti, Eritrea and Lesotho), and possibly extirpated in a further four (Ghana, Guinea, Togo and Rwanda).

Bauer et al. (2015b) predicted that at a regional scale, lion populations in West, Central, and East Africa are likely to suffer further projected 50% declines over the next two decades, and that lion populations are only increasing in southern Africa where they are intensively managed in fenced reserves. These authors state that many lion populations are either now gone or expected to disappear within the next few decades to the extent that the intensively managed populations in southern Africa may soon supersede the iconic savannah landscapes in East Africa as the most successful sites for lion conservation. The rapid disappearance of lions suggests a major trophic downgrading of African ecosystems with the lion no longer playing a pivotal role as apex predator.

5. Threats

Major threats identified by Bauer et al. (2015b) include indiscriminate killing (primarily as a result of retaliatory or pre-emptive killing to protect life and livestock) and prey base depletion. Habitat loss and conversion has led to a number of populations becoming small and isolated (Bauer et al. 2008). Unsustainable trophy hunting may have contributed to population declines in Botswana, Namibia, Tanzania and Zimbabwe (Packer et al. 2009, 2011, 2013). Furthermore, international trade in lion products is emerging as an additional threat.

The relative extent to which these threats have contributed to lion population declines is difficult to evaluate accurately. In terms of persecution, while actual losses of livestock to predators may be relatively low, the perceived financial cost to farmers can be high, and lions are persecuted intensely in livestock areas across Africa as a consequence. Their scavenging behaviour makes them particularly vulnerable to the practice of lacing prey carcasses with poison to eliminate predators.

Lion population density is known to mirror prey species availability (Van Orsdol et al. 1985, Hayward et al. 2007). Large herbivores are increasingly threatened by an unsustainable and increasingly commercial bushmeat trade, leading to collapses in prey populations across large parts of savanna Africa (Lindsey et al. 2013). Regional lion population trends reported in the 2015 IUCN assessment closely reflect regional changes in herbivore populations reported in the scientific literature. (Craigie et al. 2010).

Current trophy hunting management regimes can lead to unsustainable offtakes, with offtake frequently exceeding the recommended sustainable level of one male lion per 2,000 km² (Packer et al. 2006, 2011).

Infectious disease may also threaten some lion populations (Munson et al. 2008, Trinkel et al. 2011).

6. Utilization and trade

6.1 National utilization

African lions are traditionally used for medicinal, ceremonial and ritual purposes by a number of African communities. Lions are also considered a risk to livestock and human life in many communities, and are targeted as a result. Traditional use and persecution may play a significant role in the decline of some populations (Hazzah 2006; Bauer et al. 2010). Significant commercial captive breeding operations exist, principally in South Africa – see section 8.4.

6.2 Legal trade

A summary of data on declared trade in lion items is provided in Annex A. Analysis of the CITES Trade Database for the period 2005-2014 inclusive reveals a substantial and increasing level of trade in lions and derivatives. The following figures refer to quantities of items listed on the database derived from Appendix II-listed populations of *Panthera leo* between 2005-2014, excluding data declared by weight or volume:

- A total of 29,214 items were declared to have been exported between 2005-2014, rising from 2403 in 2005 to 3587 in 2014, with a high of 4941 in 2011 (Annex A table A1);
- A total of 11,164 items derived from wild lions (source code W) were declared to have been exported between 2005-2014 (Annex A table A1);
- Lion items were declared to have been exported by 102 Parties, including 19 African range States which were responsible for 88% of the items exported. The items were imported by 154 Parties. The largest quantities exported were as follows:

Party	Total number of lion items declared to have been exported 2005-2014 (excluding those declared by weight or volume)
South Africa	19666
Tanzania	1390
Zambia	1215
Zimbabwe	1104
Botswana	1074
Namibia	653
Mozambique	389
Ethiopia	379

According to CITES Trade Database, lions and lion derivatives are traded for a number of purposes. For the period 2005-2014 inclusive, purpose codes associated with lion item exports listed on the database were as follows (in order of quantity of Appendix II lion items declared to have been exported, highest first):

CITES-WCMC purpose code (UNEP WCMC (2013))	Total declared exported items by purpose code	Declared exported items by purpose code from wild lions (Source Code W)
H (Hunting trophy)	12315	4387
T (Commercial)	7787	1701
S (Scientific)	4811	4041
P (Personal)	1273	807
Z (Zoo)	1134	52
Q (Circus or travelling exhibition)	1108	15
B (Breeding in captivity)	355	1
E (Educational)	180	85
N (Reintroduction or introduction to the wild)	23	14
M (Medicinal, including biomedical research))	14	3
L (Law enforcement / judicial / forensic)	14	9

(excludes items declared by volume/weight)

6.3 Parts and derivatives in trade

Trophies form a significant proportion (approx. 42%) of the total declared items exported for the period 2005-2014. Of the 12,315 items exported under purpose code H (Hunting Trophy), approximately 36% were reported to have been derived from wild lions (source code W) (Annex A table A3).

In addition to concerns relating to the sustainability of some trophy hunting operations, concerns have been raised regarding the increasing international commercial trade in skeletal products from lions, the possibility that lion bones are increasingly being used as a substitute for tiger bone in traditional Chinese medicines, and the potential impact of such trade on lion conservation (see for example Williams 2015).

According to the CITES Trade Database, a total of 7979 lion products associated with the terms 'bones', 'bone pieces', 'carvings', 'skeletons' or 'skulls', were declared to have been exported between 2005-2014, of which 1468 were derived from wild lions (source code W) (Annex A table A4):

The trade in skeletal products is increasing. Exported items derived from wild lions increased from 16 in 2005 to 1339 in 2014 (Annex A table A4).

6.4 Illegal trade

Live lions, lion skins and other products are traded illegally both within countries and across international borders. A number of reports of illegal trade in lion products, and opinions from range States on the size and potential impacts of illegal trade, are provided in Annex B.

6.5 Actual or potential trade impacts

The 2015 IUCN assessment (Bauer et al 2015a) states that poorly regulated trophy hunting, which often involves international trade, contributes to population declines. The assessment also recognises the trade in lion bones and other body parts, both within Africa and in Asia, as an emerging threat. Williams et al (2015b) state that 'The legal sale of lion bones may mask an illegal trade, the size of which is only partially known' and highlight false and fraudulent claims made on CITES permits in association with the trade.

In their report to the 27th meeting of the Animals Committee (CITES AC27 Doc 24.3.3), Kenya and Namibia detailed the responses they had received from Parties to their requests for information. The following 12 Parties identified trade as a threat to lion populations:

Benin, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Guinea, Kenya, Mali, Mozambique, Nigeria, Senegal, South Sudan.

Details of the responses of these Parties can be found in Annex B.

7. Legal instruments

7.1 National

According Nowell and Jackson (1996), lions have no legal protection in Burundi, Guinea Bissau, Lesotho or Swaziland. Sport hunting is prohibited or subject to a moratorium in Angola, Botswana, Congo, Gabon, Ghana, Kenya, Ivory Coast, Malawi, Mauritania, Niger, Nigeria and Rwanda. Trophy hunting is permitted in Benin, Burkina Faso, Cameroon, Central African Republic, Democratic Republic of Congo, Ethiopia, Mali, Mozambique, Namibia, Senegal, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia and Zimbabwe.

The African countries listed in the 2015 IUCN assessment in which lions are native fall into the following categories with respect to the CITES National Legislation Project:

Parties with legislation in Category I*, that is believed generally to meet the requirements for implementation of CITES	Cameroon, Democratic Republic of Congo, Namibia, Nigeria, Senegal, South Africa, Zimbabwe						
Parties with legislation in Category 2**, that is believed generally not to meet all of the requirements for the implementation of CITES	Benin, Botswana, Burkina Faso, Chad, Kenya, Malawi, Mozambique, Sudan, Tanzania, Zambia						
Parties with legislation in Category 3**, that is believed generally not to meet all of the requirements for the implementation of CITES	Central African Republic, Niger, Somalia, Swaziland, Uganda						
Parties that have been party to the Convention for 5 years or less**	Angola						

^{*}updated 5th May 2015

Most countries in Eastern and Southern Africa have both CITES and national legislation to protect the African lion. However, lack of resources for effective enforcement and lack of policy implementation are problems in some range States (IUCN 2006ba,b).

7.2 International

African lions were listed on CITES Appendix II in 1977.

Following the 13th Conference of the Parties to CITES in 2004, regional lion conservation strategies were developed for West and Central Africa (IUCN 2006a) and Eastern and Southern Africa (IUCN 2006b), and some range States have subsequently developed complimentary national action plans. However, the continued decline in lion populations across much of their range points to the need for further action (Packer et al. 2013).

At its 11th Conference of the Parties in November 2014, the Convention on the Conservation of Migratory Species of Wild Animals (CMS) adopted Resolution 11.32 on the Conservation and Management of the African Lion, which called for *inter alia* an examination of the regional conservation strategies in the light of the latest IUCN assessment, and the development of further plans to improve the conservation of lions. The Resolution also called upon Parties to prepare a proposal to list the species on Appendix II of the Convention at the 12th Conference of the Parties. These processes are ongoing.

The plight of lions across Africa has also prompted recent action among the international community aimed at conserving lions by restricting trade:

- The Australian Government has introduced a measure to treat African lions as though they are listed on Appendix I of CITES. This measure came into effect on 13 March 2015, and limits Australian trade in African lion items, including preventing imports and exports of African lion hunting trophies (Department of Environment, Government of Australia, 2015);
- In January 2016 the U.S. Fish and Wildlife Service listed West and Central African lions as "Endangered", and East and Southern African lions as "Threatened", under the Endangered Species Act (ESA) with a special rule pending that would require certain conditions to be met for importation of any lion trophies from countries with a threatened population. (USFWS 2016)
- The European Union imposes stricter requirements on lion imports under its Wildlife Trade Regulations, which require an import permit to be issued by the importing Member State. The Scientific Review Group (SRG, made up of representatives of CITES Scientific Authorities from EU Member States) makes recommendations on whether import permits should be issued on a country-by-country basis. As of January 2016, the European Union was operating moratoria on the import of wild lions or lion products from Benin, Burkina Faso, Cameroon, Ethiopia and Mozambique, with requests for imports from wild sources from Central African

^{**}as of March 2013

Republic, South Sudan, Sudan and Zambia being referred to the SRG. (www.speciesplus.net accessed January 2016)

- The French government announced a ban on the import of lion hunting trophies in November 2015 (http://www.theguardian.com/environment/2015/nov/19/france-bans-imports-of-lion-hunt-trophies).

8. Species management

8.1 Management measures

In addition to the regional conservation strategies described in section 7.2, the following countries have developed a National Lion Conservation Action Plan or equivalent: Benin, Cameroon, Ethiopia, Guinea, Malawi (draft, not endorsed by Government), Mozambique, Namibia (draft, not endorsed by Government), Senegal (draft, not endorsed by Government), South Africa (draft, not endorsed by Government), Zambia and Zimbabwe

In addition, the following national conservation plans are relevant to lion conservation:

- 1. Kenya Lion and Hyena Conservation Plan
- 2. Rwanda National Strategy and Action Plan for the Conservation of Biodiversity
- 3. Tanzania Carnivore Conservation Plan
- 4. Tanzania Lion and Leopard Conservation Action Plan
- 5. Uganda Large Carnivore Action Plan
- 6. WAP Transfrontier Conservation Area Large Carnivore Action Plan (Benin, Burkina Faso, Niger)

8.2 Population monitoring

The 2015 recent assessment by the IUCN SSC Cat Specialist Group provides the most accurate estimates of lion numbers at continental, regional, national and population levels (Bauer et al. 2015a). Numbers are inferred from studies of 47 well monitored lion populations.

Bauer et al. (2015b) concluded that that greatly increased intervention efforts are required to maintain viable and ecologically effective populations in most large 'Lion Conservation Units', and emphasized the importance of consistent, rigorous large-scale surveys conducted by independent agencies, particularly in countries like Tanzania which have previously been assumed to hold a significant proportion of Africa's remaining lion populations.

8.3 Control measures

8.3.1 International

In addition to the CITES Appendix II listing, a number of countries and regions impose measures designed to control the import of and trade in lions and parts/products derived from them. See section 7.2.

8.3.2 Domestic

In CITES AC27 Doc. 24.3.3, Kenya and Namibia reported on domestic control measures additional to CITES requirements and specific to African lions in Ghana, Guinea, Mali, Mozambique, Namibia, Nigeria, Rwanda, South Sudan, South Africa, Tanzania, Zambia and Zimbabwe. Further details can be found in Annex C-

8.4 Captive breeding and artificial propagation

Captive breeding of lions for commercial purposes, both for trophy hunting and for the trade in lion parts, exists mainly in South Africa. In its draft Biodiversity Management Plan for African Lion (Funston and Levendal 2014), the South African authorities estimate that there are currently 'as many as 6000 lions currently in over 200 breeding facilities' in the country, approximately three times the number in South Africa's national parks, and almost twice the estimated total number of wild lions in the country (3155). The draft plan states that captive lions are used exclusively to generate money and currently have limited conservation value. Packer et al. (2006) stated that 'Captive-bred hunting undermines the conservation credibility of the hunting industry and does nothing to preserve lion habitat'.

According to the World Association of Zoos and Aquariums, the zoo population of *Panthera leo* in 2005, as reported to the International Species Information System, was 1138. (http://www.waza.org/, accessed 2nd November 2015).

8.5 Habitat conservation

Bauer et al. (2015b) recognised that increases in lion numbers in four southern African countries are due to the management of lions within fenced reserves. However, these include many small populations that require meta-population management, euthanasia and contraception, and which only make limited contributions to ecosystem functionality and conservation outcomes. Widespread declines are reported in many reserves and across most unprotected areas across Africa.

8.6 Safeguards

Not applicable.

9. Information on similar species

The Asiatic lion, Panthera leo persica, has been listed on CITES Appendix I since 1977.

10. Consultations

Panthera leo has been subject to consideration under the Periodic Review of species included in Appendices I and II [Resolution Conf. 14.8 (Rev. CoP16)], since the species was reinstated into the Review at the 25th meeting of the Animals Committee in 2011. The Review was conducted by Kenya and Namibia. Significant range State consultation has been undertaken on the status of and trade in Panthera leo as part of the Review, and much of the information provided by range States during that process has been included in this submission.

Niger sent a first draft of the proposal to list *Panthera leo* in Appendix I to Kenya, to Rwanda and to West and Central African Parties prior to the regional CITES CoP17 Coordination Workshop held in Dakar, Senegal, on 15-17 March 2016, which was attended by officials representing Burkina Faso, Ivory Coast, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo, Chad, Congo, Democratic Republic of the Congo, Central African Republic and Gabon. Niger also presented the proposal at that meeting. Parties attending the meeting jointly agreed to support its submission to CoP17 and were supportive of its adoption at CoP17.

On 4th April 2016, Niger sent the draft proposal to the following additional range States for comments: Angola, Botswana, Ethiopia, Malawi, Mozambique, Namibia, Somalia, South Africa, South Sudan Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe. At the time of submission no substantive comments had been received.

11. Additional remarks

12. References

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Trade data

CITES trade statistics derived from the CITES Trade Database, UNEP World Conservation Monitoring Centre, Cambridge, UK. Figures reflect *Panthera leo* Appendix II items, and exclude data declared by weight or volume.

Table A1: Gross lion item exports 2005-2014

	Sourc e code(s	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Total	All	2403	1649	1654	1656	2050	2934	4941	4559	3781	3587	29214
Wild source d	W	1991	701	696	544	792	1210	951	2909	885	485	11164

Table A2: Declared exports of lion items by purpose code

Purpose code	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
B (Breeding in captivity)	11	6	18	28	53	54	63	53	31	38	355
E (Educational)	14	11	12	15	8	23	27	21	17	32	180
H (Hunting trophy)	694	1108	720	1040	1395	1063	2019	1550	1269	1457	12315
L (law enforcement/ judicial/forensic)	0	2	0	0	0	0	0	12	0	0	14
M (Medical)	0	0	0	0	0	0	3	0	0	11	14
N (Reintroduction/ introduction into the wild)	1	0	8	0	11	0	1	2	0	0	23
P (Personal)	44	107	85	196	260	100	148	120	107	106	1273
Q (Circus or travelling exhibition)	86	138	93	110	90	102	171	142	104	72	1108
S (Scientific)	689	125	568	59	112	418	302	2022	158	358	4811
T (Commercial)	727	72	87	57	40	1005	2077	426	1929	1367	7787
Z (Zoo)	57	83	57	151	74	111	101	210	164	126	1134
No code	19	0	6	0	7	58	29	1	2	20	142

Table A3: Exports of lion hunting trophies (purpose code 'H') 2005-2014

	Source code(s)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Total	All	694	1108	720	1040	1395	1063	2019	1550	1269	1457	12315
Wild	W	512	487	354	364	529	447	532	746	244	172	4387

Table A4: Exports of skeletal lion products 2005-2014 (lion products associated with the terms 'bones', 'bone pieces', skeletons' or 'skulls')

	Source code(s)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Total	All	16	153	21	73	279	918	2856	476	1848	1339	7979
Wild	W	16	30	17	10	135	354	202	315	332	57	1468

Illegal trade in lion parts

In their report to the 27th Animals Committee meeting in respect of the Periodic Review of *Panthera leo* (CITES AC27 Doc. 24.3.3), Kenya and Namibia provided responses from a number of Parties from which information had been requested. The following Parties referenced illegal trade in their responses:

Party	Summary report
Benin	There is a recognized illegal trade, and lion products from Benin may be sold in other countries in West Africa. (Questionnaire response from Dr. Ir. Sogbohossou Etotepe A, Laboratory of Applied Ecology, University of Abomey-Calavi, Benin).
Cote d'Ivoire	Skins or partial skins originating from Burkina Faso can "readily" be found in public markets in Abidjan and that "given the rarity of lions in West Africa, this trade and the high price a lion skin can fetch is most likely one of the biggest threats to lion survival in this region." (Questionnaire response from Dr. Philipp Henschel, lion survey coordinator for the NGO Panthera).
Ghana	Occasionally lion claws and pieces of lion skins are found in Techiman, a major market in Ghana (Questionnaire response from Mr. Nana Kofi Adu-Nsiah, Executive Director, Wildlife Division of the Forestry Commission in Ghana).
Gabon	Lion skins (sold for medicinal purposes) and canines (sold as talismans) are occasionally seized in the capital, including a recent case of one skin originating from Benin. While the scale of this type of illegal trade is unknown, it is "likely one of the biggest threats to lion survival in this region." (Questionnaire response from Dr. Philipp Henschel, lion survey coordinator for the NGO Panthera).
Guinea	Trade in large carnivores' sub-products (skins, claws, teeth, skulls, fat) is important and common in the periphery of the National Park (Faranah area) and in Conakry. This trade targets essentially lions, leopards and hyenas and has a sub-regional scale. 67 lion skins were discovered in Conakry and it is reported that the skins sold in Conakry come from the entire sub-region (Mali, Niger, Nigeria, Ivory Coast, Senegal, Liberia, Guinea-Bissau and Sierra Leone). Illegal bushmeat trade is also reported to negatively impact lions. (Questionnaire response from Mr. Ansoumane Doumbouya, CITES Management Authority, Chief of the Legislative and Economy Department of the National Guinean Office for Biodiversity and Protected Areas, Guinea).
Kenya	There is reported cases of illegal market for lion claws and canines, especially in the Coast area, that may soon become a major concern as the country's large Chinese population may increase demand for the export of lion parts to Asia. (Questionnaire response from Dr. Laurence Frank, Director of the NGO Living with Lions).
Mali	Poaching is motivated by illegal trade in lion meat and other products (trophies, fat, skins, non- perishable parts), and is having a detrimental impact. Meat is sold in local villages and sent from Protected Areas to various Malian towns. Illegal trade in lion trophies poached in Mali and neighboring countries such as Guinea, Ivory Coast and Burkina Faso is well known in the region.(Questionnaire response from Mr. Bourama Niagate, Director of the National Park and Biosphere Reserve of the Boucle du Baoulé, National Coordinator for MIKE and CMS-AEWA focal point, Mali).
Mozambique	Illegal forms of utilization are in response to human and/or livestock casualties and in poaching for commercial or traditional purposes. (Questionnaire response from Felismina Atanásio Longamane Langa, Deputy National Director, Ministry of Tourism, Mozambique).
Nigeria	Domestic trade in illegal lion products is "massive" and illegal trade is poorly documented. Skins are illegally exported abroad for sale to wealthy Africans. For example, in 2008, aU.S. court case was brought against a Nigerian national who

	attempted to smuggle several lion skins from Nigeria into the U.S. The case attorney revealed this type of case was not an isolated one. Fulani herdmen admit to carrying poison to kill conflict lions and lion surveys conducted by Panthera in 2009 revealed several cases of lion poisoning. (Questionnaire response from Dr. Philipp Henschel, lion survey coordinator for the NGO Panthera).
Senegal	Lion skins (sold for medicinal purposes) and canines (sold as talismans) likely originating from Burkina Faso, Benin and Nigeria can easily be found in Dakar markets.(Questionnaire response from Dr. Philipp Henschel, lion survey coordinator for the NGO Panthera).
South Africa	Illegal trade in captive bred lions within North West province is suspected to take place, as the industry is large. Lions are targeted by the traditional medicine trade in Mpumalanga province, and poaching of lion for the medicinal trade seems to be on the increase due to the expansion of human settlements on the western boundary of the Kruger National Park. The IUCN/SSC African Lion Working Group believes that there is an illegal trade in lion between South Africa and Botswana, Zambia, Zimbabwe and Mozambique and alleges that lionesses with small cubs are shot in Botswana's southern region in order to supply cubs to predator keepers/breeders in South Africa. As there is an excess of captive bred lions available in South Africa, this claim would certainly require further investigation and supporting evidence.
South Sudan	There is an active trade in lion cubs within the Republic of South Sudan. (Questionnaire response from Dr. Aldo Gwake Lazarus, Director, Directorate Wildlife Conservation Central Equatorial State).
Zambia	Illegal trade of lion derivatives and parts occur but most likely are insignificant. These are used for charms, magic and medicinal purposes.

CITES Trade Database searched for *Panthera leo*, source = confiscations/seizures (I).

Gross Exports Report

Арр.	Taxon	Term	Unit	Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Ī	Panthera leo persica	derivatives		CN							14			
I	Panthera leo persica	derivatives		XX	5									
II	Panthera leo	bodies		US							1			
II	Panthera leo	bodies		ZW	1									
II	Panthera leo	bone carvings		TZ										1
II	Panthera leo	bone pieces		ZA					4					
II	Panthera leo	bones		TZ										6
II	Panthera leo	bones		ZA					2					2
II	Panthera leo	carvings		ZA				14			6			
II	Panthera leo	claws	g	ZA							165			
II	Panthera leo	claws		ET	4									
II	Panthera leo	claws		FR										5
II	Panthera leo	claws		GB							2			
II	Panthera leo	claws		KE	1								1	
II	Panthera leo	claws		SO			72							
II	Panthera leo	claws		TH							2			
II	Panthera leo	claws		ZA					18		2			9
II	Panthera leo	claws		ZW	49			2						1
II	Panthera leo	derivatives		CN						200	1			
II	Panthera leo	garments		ZA							2			
II	Panthera leo	hair	g	CU									50	

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Арр.	Taxon	Term	Unit	Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
II	Panthera leo	trophies		XX						1				
II	Panthera leo	trophies		ZA		1			3	5		4	4	8
II	Panthera leo	trophies		ZM				1	1					
II	Panthera leo	trophies		ZW								1		

Gross Imports Report

Арр.	Taxon	Term	Unit	Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
l	Panthera leo persica	derivatives		US	5						14			
II	Panthera leo	bodies		CA							1			
II	Panthera leo	bodies		GB	1									
II	Panthera leo	bone carvings		US										1
II	Panthera leo	bone pieces		US					4					
II	Panthera leo	bones		US					2					8
II	Panthera leo	carvings		US				14			6			
II	Panthera leo	claws	g	NZ							165			
II	Panthera leo	claws		Al							2			
II	Panthera leo	claws		AT			72							
	Panthera leo	claws		GB	5									
II	Panthera leo	claws		NZ				2						
II	Panthera leo	claws		US	49				18		4		1	15
II	Panthera leo	derivatives		US						200	1			
II	Panthera leo	garments		US							2			
II	Panthera leo	hair	g	US									50	
II	Panthera leo	hair		AU					7					
II	Panthera leo	hair		US			1							
II	Panthera leo	live		AE	3						1			
II	Panthera leo	live		FR										1
II	Panthera leo	live		NL		2								1
II	Panthera leo	live		PT		2			3					
II	Panthera leo	live		US									1	
II	Panthera leo	live		XX							5			
II	Panthera leo	live		ZA	1		2	3	4	1	10	1		
II	Panthera leo	medicine		US										1
II	Panthera leo	skin pieces		PT	1									
II	Panthera leo	skin pieces		US	5				1					
II	Panthera leo	skins		BW										1
II	Panthera leo	skins		ES	1									
=	Panthera leo	skins		GB	1				1					
II	Panthera leo	skins		US	2		1			3	1			
II	Panthera leo	skulls		AT				2						
II	Panthera leo	skulls		ES		2				1				
II	Panthera leo	skulls		GB	1									
II	Panthera leo	skulls		US	4		1					1		
II	Panthera leo	specimens	g	US								648		
II	Panthera leo	specimens		US		1	19		35			113		74
II	Panthera leo	teeth		NO				2						
II	Panthera leo	teeth		NZ				1	6					
II	Panthera leo	teeth		US		5		2	1		2	10	50	
II	Panthera leo	trophies		AE						1				

Арр.	Taxon	Term	Unit	Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
II	Panthera leo	trophies		AT							2			
II	Panthera leo	trophies		BH			5							
II	Panthera leo	trophies		PL	1									
II	Panthera leo	trophies		US	1	1		1	5	5	1	10	4	9

In section 6.4 of CITES AC27 Doc. 24.3.3, Kenya and Namibia documented the following examples of illegal trade of lion products:

- In January 2006, the Kenya Wildlife Service (KWS) investigated allegations that a lion cub smuggling
 ring was operating along the Kenya-Somalia border. Investigators discovered a cartel operating in
 Somalia and trading illegally in wildlife species. Lion cubs were being smuggled into Somalia, sold for
 USD150-USD300 and sent on to Europe (KWS).
- At a lion conservation conference held in Douala, the Government of Cameroun identified trade in lion skins as a major cause of the decline in lion populations in Central and West Africa (LAGA pers. comm.).
- In June 2006, a hunting safari worker was arrested for illegally trading in lion products in Garoua, Cameroun. He was accused of using the legal trade in lion trophies as a cover for selling lion products on the black market (LAGA pers. comm.).
- In December 2006, two lion skins were seized in Marua city in northern Cameroun. One skin had originated in Tchad, and the two together were being sold for USD 655 (LAGA pers. comm.).
- In January 2009, three Chinese nationals were arrested at Jomo Kenyatta airport, Nairobi, carrying lion teeth in their luggage, along with ivory carvings and jewellery (KWS).
- In January 2009, Dubai officials announced that they had foiled attempts to smuggle wildlife into Dubai and to "re-export rare animal products including endangered lions" (PRNewswire). However, there have been persistent reports of live lions being smuggled into the UAE for the pet trade. A newspaper in Dubai quoted an employee of a cargo company as saying that cargo workers had found a small lion that had escaped from its cage inside an aircraft (The National). A local veterinarian was quoted as saying that he treated 2 or 3 lion cubs a year at his clinic (Khaleej Times).
- In March 2009, a Vietnamese man in Pretoria, South Africa, was found with the remains of 13 lions in his house, along with a number of rhinoceros carcasses. South African police believe that he had received an order from a global syndicate in east Asia (Daily Mail).
- In April 2009, the Botswana press reported that the government had discovered cross-border smuggling of live lions into South Africa. The principal market for these animals is believed to be the "canned hunting" industry in South Africa. A South African wildlife magazine was reported to advertise lion cubs of "Botswana bloodline" for Rand 20,000 (USD 2,700) each (Botswana Gazette).
- In April 2009, a lion skull was seized at Felixstowe, UK. The skull originated in South Africa and lacked proper permits. In 2009 a US-based website advertised lion meat from animals "raised in South Africa"; Lion meat was subsequently advertised on the same website as "ranch-raised in the USA". Please note that these are allegations in the media which have not been substantiated.

Additional domestic protection and monitoring measures

Ghana	Appendix One of the national wildlife regulation affords the African lion full protection from killing, capture and the parts trade.
Guinea	National legislation classifies lions as a fully protected species and the country has prepared a national action plan for the Conservation of Large Carnivores which includes measures to protect lions. Efforts to protect lions in Guinea are recent (1997) and can be justified by the finding that their population and their habitat have been significantly reduced.
Mali	Measures such as the creation of water stations or water wells are put in place to avoid contacts between cattle and wild fauna in lion habitat areas to avoid humanlion conflicts. A significant effort has been devoted to the education of local communities about the protection of lions, and to controlling poaching through an increase in surveillance among other things. Malian law classifies lions as a partially protected species and regulates lion trophy hunting and lion trade.
Mozambique	Lion hunting is governed, per quota, by the Forestry and Wildlife Law (Law 10/99) and its regulations (Decree 12/2002). The National Human and Wildlife Strategy was passed in 2009 and included a goal of mitigating human-lion conflict. Other instruments affecting lion conservation include passage of the Land Use Planning Law and Regulation; the Environmental Law; the Biodiversity Strategy; and an expected 2012 Conservation Law.
Nigeria	Since 2009, WCS and North Carolina Zoo provide financial and technical law enforcement support within Yankari GR, which is managed by Bauchi State.
Rwanda	Lions are included in the list of protected animals under Rwandan legislation which prohibits their trade and use. The Rwandan government initiated collaboration with partners from the private sector for the repopulation of various species including lions.
Republic of South Sudan	Since 2003, amendments to the Wildlife Conservation and Management Act have included protections for lions; the Act may need to be revised to conform with current lion populations, for which there is no assessment.
South Africa	Lion is protected under both national legislation (National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004 (, the Threatened or Protected Species Regulations of 2007) and provincial ordinances / acts. Permits are required to among others keep, move, catch and hunt lion and it is an offence if any of these activities are carried out without a permit. In terms of national legislation, lion's that cause damage are not allowed to be hunted by an international hunting client. Provincial conservation authorities often require ecological management plans when lion is introduced to a property. The Department of Environmental Affairs initiated a process to develop a Biodiversity Management Plan (BMP) for lions in terms of the National Environmental Management: Biodiversity Act, 2004. The BMP will be aimed at ensuring the long-term survival in nature of the species and will contribute towards the achievement of the recommendations of the Eastern and Southern African Lion Conservation Strategy (the regional conservation strategy compiled by the IUCN/SSC/Cat Specialist Group and others).
Tanzania	To off-set human-lion conflict, the government encourages the establishment of Wildlife Management Areas, a recently created community-based category of gazetted Protected Area, introduced recently (April, 2011) Dangerous Animals Damage Consolation Regulations, and promotes a number of human-lion-conflict mitigation programs throughout the country. To improve the management and efficiency of trophy hunting, the government has passed a new regulation with a

	compulsory age-based restriction of hunted lions controlled by an annual lion trophy inspection. They also set up a monitoring and control programme run by the Wildlife Division. This recent mechanism has successfully resulted in a significantly reduced lion offtake and an improved selection of aged male lions.
Zambia	Lion is a protected species under the Zambia Wildlife Act No. 12 of 1998. It is a criminal offence to hunt, kill, capture or be in possession of a lion specimen without a license. Hunting of lions is regulated through a quota system. To ensure that hunting of lions is sustainable ZAWA undertakes monitoring of all sport hunting activities, recording trophy quality, hunting success and effort aimed at enhancing decision making in setting harvest quotas. Through research by Dr. Paula White, of the Zambia Lion Project, Zambia is developing a Regional Guide to Ageing lions a tool which will assist Professional hunters to hunt mature male lions aged 6 years or older.
Zimbabwe	Zimbabwe's national legislation is very comprehensive to ensure long term survival of the African lion. Zimbabwe has a full range of national legislative and administrative measures needed to effectively implement all aspects of the Convention on Trade In Endangered Species of wild flora and fauna(CITES) and related Resolutions and Decisions of the Conference of Parties. Zimbabwe's legislation is in Category 1 of CITES and therefore meets all the requirements of CITES implementation. The principal Acts governing lion conservation in Zimbabwe are the Parks and Wildlife Act; Chapter 20:14 (1996) as amended in 2001, the Environmental Management Act, Forest Act, several Statutory Instruments, Policies and Management Plans for the African Lion.