



**CONVENTION ON
MIGRATORY
SPECIES**

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Agenda Item 25.1

**PROPOSAL FOR THE INCLUSION OF
THE GIRAFFE (*Giraffa camelopardalis*)
ON APPENDIX II OF THE CONVENTION**

Summary:

The Government of Angola has submitted the attached proposal* for the inclusion of the Giraffe (*Giraffa camelopardalis*) on Appendix II of CMS.

*The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CMS 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.

**PROPOSAL FOR THE INCLUSION OF THE GIRAFFE (*Giraffa camelopardalis*)
ON APPENDIX II OF THE CONVENTION ON THE CONSERVATION OF
MIGRATORY SPECIES OF WILD ANIMALS**

A. PROPOSAL:

Inclusion of Giraffe (*Giraffa camelopardalis*) on Appendix II - Migratory species requiring international cooperation

B. PROPONENT: Government of Angola

C. SUPPORTING STATEMENT:

1. Taxon

1.1	Classis:	Mammalia
1.2	Order:	<i>Artiodactyla</i>
1.3	Family:	Giraffidae
1.4	Genus/Species/subspecies:	<i>Giraffa camelopardalis</i> (Linnaeus, 1758)
1.5	Scientific synonyms:	
1.6	Common name(s):	Giraffe

2. Overview

Among the large mammals of Africa, giraffe are among the least studied, yet are increasingly under threat. Recently, the giraffe species was uplisted to Vulnerable on the IUCN Red List, having declined by an estimated 40% in the last 30 years, further highlighting the increasing need to protect them. Giraffe occur in 21 sub-Saharan African countries, where they travel transboundary in a number of countries. While giraffe migrations are largely driven by habitat availability, forage resources, search for mates and/or minimising conflict/predation, the predictability and/or cyclical nature of giraffe migrations and transboundary movements has never truly been quantified across their range and as such greater research is required to better understand this. Importantly, many of the giraffe populations found in Africa cross international boundaries within the definition provided by the Bonn Convention in Article I, paragraph 1 (a) and CMS Resolution 11.33 on Guidelines for Assessing Listing Proposals to Appendices I and II of the Convention. Giraffe face a number of direct and indirect threats throughout their range but different countries have varying levels of protection for giraffe in their policies. It is envisaged that listing giraffe on the CMS appendix II will raise awareness for giraffe conservation, promote collaboration between giraffe range states for better conservation and management practices and increase fundraising opportunities to support giraffe conservation across Africa.

3. Migrations

3.1 Kinds of movement, distance, the cyclical and predicable nature of the migration

In Southern Africa, giraffe (*Giraffa camelopardalis* spp.) have been observed to travel transboundary in a number of countries. Giraffe, especially males, cover great distances in search of forage and mates. However, the nature of these movements are not well understood. Recent findings have shown that Angolan giraffe (*G. c. angolensis*) can cover >11,000 km² in the arid areas of north-eastern Namibia and transboundary into north-western Botswana (Flanagan et al. 2016).

Angolan giraffe in north-eastern Namibia also migrate transboundary north into Angola and south into Botswana, with Namibia's Bwabwata National Park being the central point (Panthera pers. comm.). In south-western Zambia, migrations of South African giraffe (*G. c. giraffa*) from Sioma Ngwezi National Park into south-eastern Angola has also been reported (ZAWA pers. comm.).

In South Africa, undocumented reference occurs on giraffe migrations transboundary between Kruger National Park in the north-east and Mozambique, and Zimbabwe (GCF pers. comm.). In East Africa, increasing attention towards giraffe conservation and management has resulted in increased field efforts to understand their spatial ecology. The Giraffe Conservation Foundation (GCF) in collaboration with African Parks Network and local Ethiopian partners including the Ethiopian Wildlife Conservation Authority fitted GPS Satellite units to Nubian giraffe (*G. c. camelopardalis*) in 2015 and subsequently observed transboundary movements between Ethiopia's Gambella National Park in the west and South Sudan's Boma National Park (GCF pers. comm.). This is the first recorded information about such transboundary movements of giraffe in the area.

Regular migrations transboundary between Kenya and Tanzania of Masai giraffe (*G. c. tippelskirchi*) occur. Giraffe move regularly between Kenya's Masai Mara National Reserve and Tanzania's Serengeti National Park the western side of each country, and similar movements are observed north-south across the border moving east and the Lake Natron, Amboseli and Tsavo landscapes.

In Uganda's northeastern Kidepo Valley National Park, recent efforts by Uganda Wildlife Authority and GCF have resulted in GPS Satellite units fitted to Rothschild's giraffe (*G. c. rothschildi*) in 2016/7 and newly observed movements indicate that they likely migrate north in and out of Kidepo National Park in South Sudan (GCF pers. comm.).

Although no recent reports, it is likely that recent and/or current transboundary migrations of giraffe occur in northern Kenya (Reticulated giraffe *G. c. reticulata*) north into southern Ethiopia and east into Somalia.

Across Central Africa, little is known of giraffe migrations although potentially those in Cameroons north-eastern Bouba Njiida National Park could migrate transboundary in and out of southern Chad (Bristol Zoological Society pers. comm.). More research is required.

In Niger, West Africa, Suraud (2011) and Le Pendu and Ciofalo (1999) documented that West African giraffe (*G. c. peralta*) follow the hydrographic network, food availability, previous distribution, social transmission and poaching events. They also showed

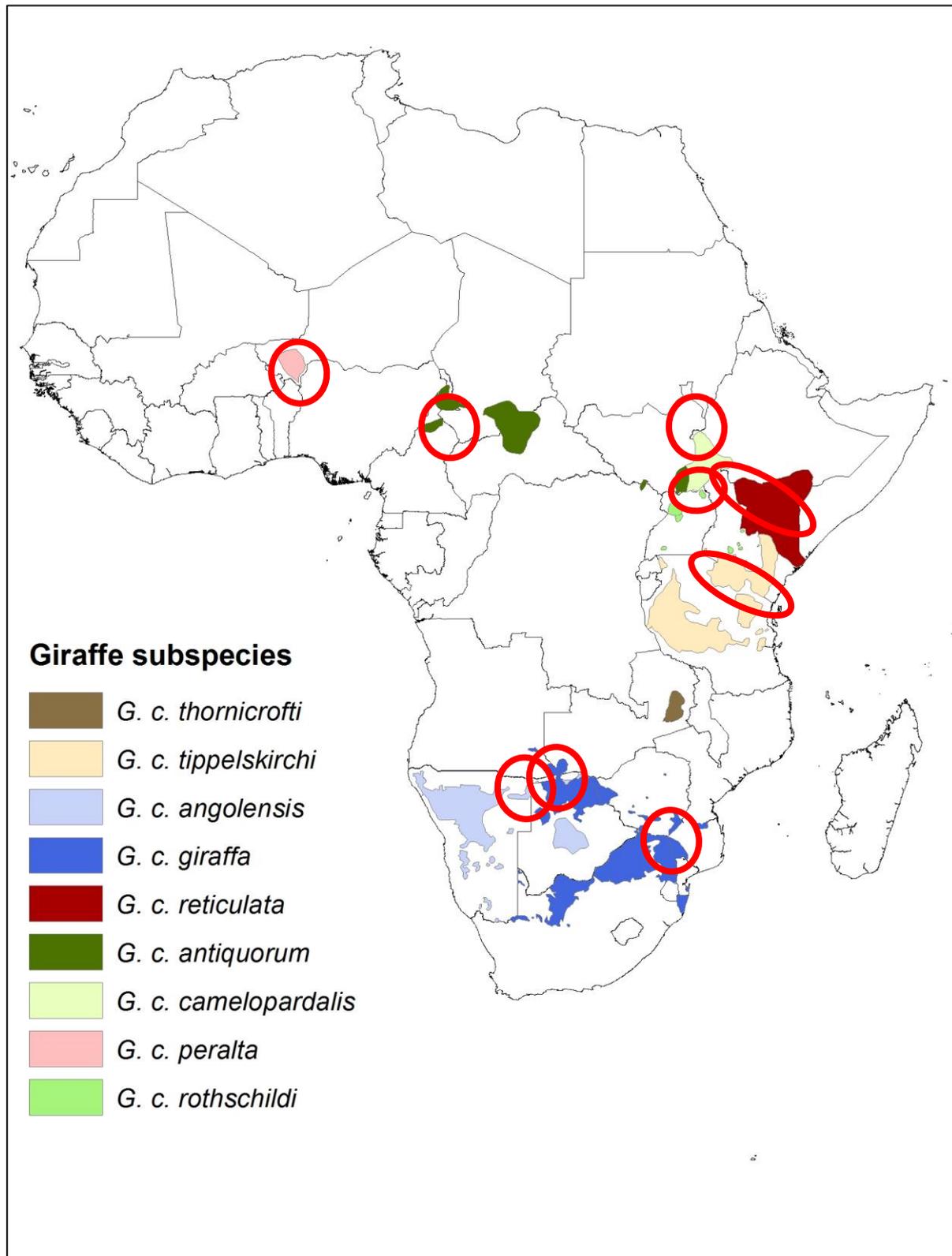


Fig. 1. Transboundary distribution of giraffe subspecies (Giraffe Conservation Foundation 2017).

that West African giraffe home range doubled during the dry season (Suraud, 2011; Le Pendu and Ciofolo, 1999), further highlighting the dependence for giraffe on seasonal forage. The West African giraffe originally migrated into Niger from Mali in the west due to local poaching threats and today transboundary movements into Nigeria in the east are observed.

Whilst giraffe migrations are likely largely driven by habitat availability, forage resources, search for mates and/or minimising conflict/predation, the predictability and/or cyclical nature of giraffe migrations and transboundary movements has never truly been quantified across their range and as such greater research is required to better understand this.

3.2 Proportion of the population migrating, and why that is a significant proportion

In the absence of a definition by the Conference of Parties of the term ‘significant proportion’, it is impossible to make such an assessment. What is crucial though is that as set out in Figure 1 above many of the giraffe populations found in Africa, include members that cross international boundaries within the definition provided by the Convention in Article I, paragraph 1 (a) and CMS Resolution 11.33 on Guidelines for Assessing Listing Proposals to Appendices I and II of the Convention.

4. Biological data (other than migration)

4.1 Distribution (current and historical)

Historically, giraffe ranged throughout the northern and southern savannah regions of sub-Saharan Africa, from open savannah to scrub and open woodland, apparently avoiding dense forest and desert environments (e.g. Muller et al. 2016; Skinner & Chimimba 2005; East 1999). In the last century, giraffe appear to have gone extinct in at least seven countries (Burkina Faso, Eritrea, Guinea, Mali, Mauritania, Nigeria and Senegal). Today, giraffe live in non-continuous, fragmented populations across sub-Saharan Africa.

The IUCN currently recognise one species and nine subspecies of giraffe, although recent genetic based taxonomical assessments have proposed between four and eight species coupled with varying numbers of subspecies (e.g. Fennessy et al. 2016a; Groves & Grubb 2011; Brown et al. 2007).

The Angolan giraffe (*G. c. angolensis*) range includes central Botswana and most parts of Namibia, and potentially parts of Zimbabwe. Populations have been translocated to South Africa, and to private land in Botswana and Zimbabwe.

The Kordofan giraffe (*G. c. antiquorum*) range includes some of Africa’s areas affected by conflicts: southern Chad, Central African Republic, northern Cameroon, northern Democratic Republic of Congo, and western South Sudan.

The Nubian giraffe (*G. c. camelopardalis*) range in small isolated populations in eastern South Sudan and western Ethiopia.

The South African giraffe (*G. c. giraffa*) ranges from west to east across southern eastern Angola; northern Botswana; southern Mozambique; northeastern Namibia; northern South Africa; southwestern Zambia; and eastern and southern Zimbabwe. Previous re-introductions of the South African and Angolan giraffe to overlapping areas have likely resulted in hybrid populations. There have also been extralimital (outside their natural range) introductions of South African giraffe across Angola, Senegal, South Africa, Zambia and Zimbabwe.

The West African giraffe (*G. c. peralta*) lives in a small, isolated population in south eastern Niger, and share their living space with local villagers.

The reticulated giraffe (*G. c. reticulata*) has a relatively limited distribution across northern and north-eastern Kenya, and small restricted populations most likely persist in southern Somalia and southern Ethiopia.

The Rothschild’s giraffe (*G. c. rothschildi*) occur naturally and in extralimital populations in Kenya and Uganda, and potentially in eastern South Sudan and western Ethiopia.

The Thornicroft’s giraffe (*G. c. thornicrofti*) is a small isolated population in the South Luangwa Valley, northeastern Zambia.

The Masai giraffe (*G. c. tippelskirchi*) range across central and southern Kenya; throughout Tanzania; and a translocated extra-limital population occurs in the Akagera National Park, Rwanda.

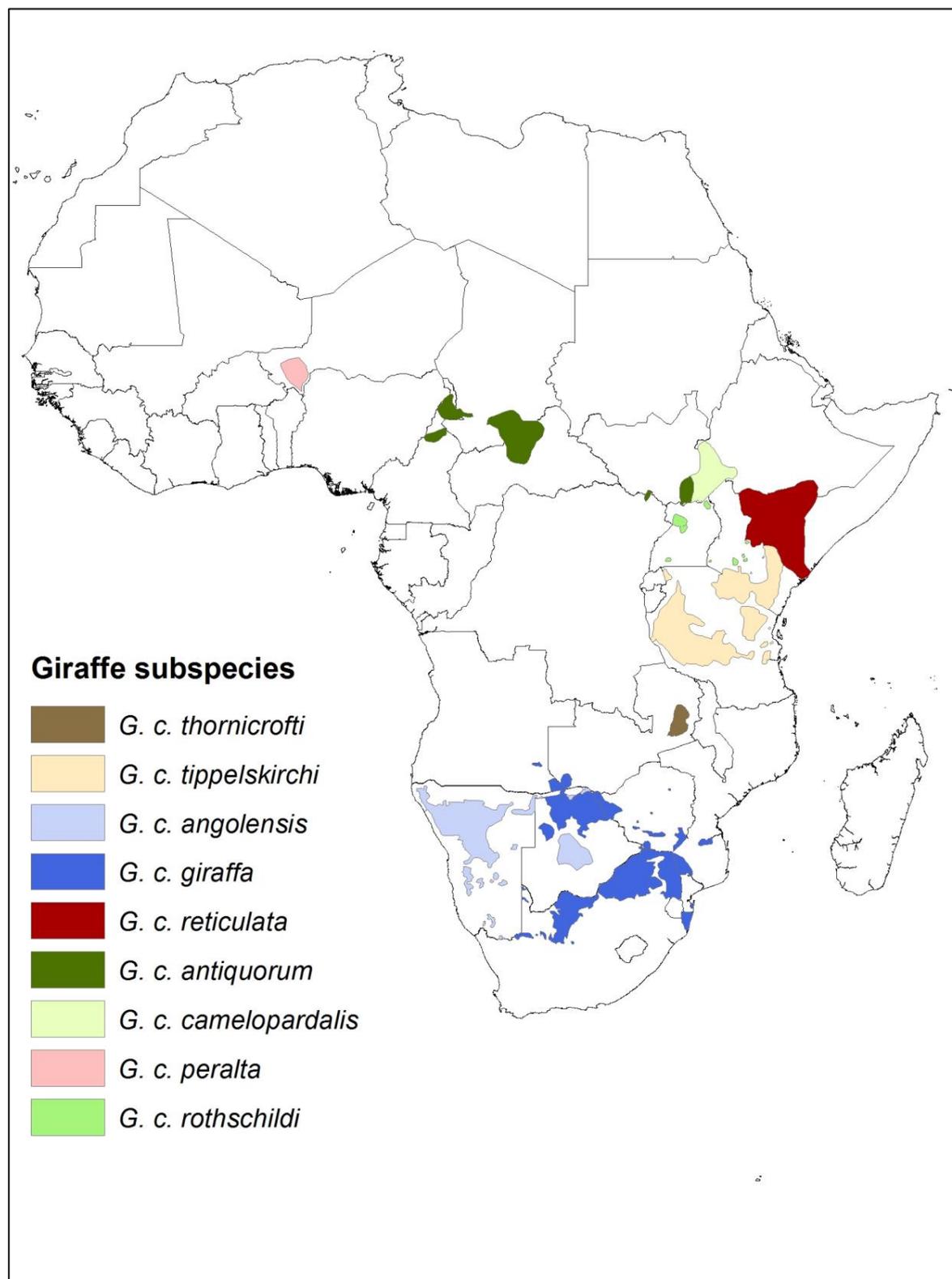


Fig. 2. Distribution of giraffe subspecies throughout Africa (Giraffe Conservation Foundation 2017).

4.2 Population (estimates and trends)

As a species, giraffe numbers have declined by almost 40% from an estimated 151,702 – 163,452 in 1985 to a current estimate of 97,562 (Muller et al. 2016).

In Eastern Africa, *G. c. camelopardalis* has declined from an historic estimate of 20,577 individuals in 1979/1981 to the current estimate of 650 individuals (-97%, Wube et al. 2016). *G. c. tippelskirchi* has declined from an historic estimate of 63,292 individuals thirty years ago to the current estimate of 32-33,000 individuals (-50%, Bolger et al. 2016). *G. c. reticulata* has declined from an historic estimate of 36,000-47,750 individuals to the current estimate of 8,661 individuals (Kenya Wildlife Service in preparation, Doherty et al. 2016). *Giraffa c.*

rothschildi has increased from an historic estimate of 1,331 individuals in the 1960s to the current estimate of 1,671 individuals within their natural range (26%, Fennessy et al. 2016b). *Giraffa c. thornicrofti* has stabilized at close to 600 individuals since 1973, following an increase from approximately 300 giraffe in the early 1970s (Berry & Bercovitch, 2016).

In Southern Africa, *G. c. angolensis* has increased from an historic estimate of 5,000 individuals to the current estimate of 13,031 individuals (+161%, Marais et al. 2016). *Giraffa c. giraffa* has increased from an historic estimate of 8,000 individuals to the current estimate of over 21,387 individuals (+167%, Deacon et al. 2016). The population resident in the north eastern Namibia, northern Botswana, northwestern Zambia and northwestern and central Zimbabwe are of uncertain taxonomic status and are considered as *G. c. angolensis* for this report, and are estimated to have increased from approximately 10,000 historically to the current estimate of 17,551 (J. Fennessy, unpubl. data).

In Central Africa, *G. c. antiquorum* has decreased from an historic estimate of 3,696 individuals thirty years ago to the current estimate of 2,000 individuals (-46%, Fennessy & Marais 2016).

In West Africa *G. c. peralta* has increased from an historic estimate of 49 individuals to the current estimate of 550 individuals (+700%, Fennessy et al. 2016c).

4.3 Habitat (short description and trends)

Giraffe range widely throughout Africa, but are most often found in savanna, savanna/ woodland and shrubland habitats (Muller et al. 2016). The savanna is characterised by trees that stand too far apart to have a closed canopy and as such do not prevent the growth of an herbaceous layer consisting mostly of grass and shrubs. The density and distribution of trees in savannah can vary from open plains to woodland. The African savannah consists of multiple species of *Acacia*, two species of baobab (*Adansonia*) and sausage tree (*Kigelia africana*) among many others (Muller et al. 2016). Common grasses of the African savanna include Bermuda grass (*Cynodon*), typical of East Africa, red oat grass (*Themeda triandra*) and Rhodes grass (*Chloris gayana*) (commonly found in the Serengeti) and lemon grass (*Cymbopogon*). Shrubland refers to an ecosystem dominated by small to medium-sized woody plants, such as heather (*Erica*), bean (*Aspalathus*), and daisy (*Senecio*). The growth of shrubland can often be at equilibrium with consumption by browsers. Rainfall is seasonal in the African savanna, but because giraffe are capable of enduring lengthy periods without drinking, they are not confined to water sources during drought.

4.4. Biological characteristics

The giraffe is an even-toed ungulate, the tallest living terrestrial animal and the largest ruminant. Males (bulls) may exceed 5.5m (18 feet) in height, and the tallest females (cows) are about 4.5m. Using prehensile tongues almost half a metre long, they can browse foliage almost 6m from the ground. Giraffes grow to nearly their full height by four years of age but gain weight until they are seven or eight. Males weigh up to 1,930kg (4,250 pounds), females up to 1,180kg (2,600 pounds). The tail may be a metre in length and has a long black tuft on the end; there is also a short black mane. Both sexes have a pair of ossicones, though males possess other bony protuberances on the skull. The back slopes downward to the hindquarters, a silhouette explained mainly by large muscles that support the neck; these muscles are attached to long spines on the vertebrae of the upper back.

Giraffe have different coat patterns, which are unique to individual animals. Masai giraffe are recognisably darker than other subspecies, with large, dark-brown patches that are shaped distinctively like vine leaves with jagged edges. The patches are surrounded by a creamy-brown colour, which extends to the lower legs. Reticulated giraffe have rich orange-brown patches, which are surrounded by a network of striking white lines. Often, the broad, striking white lines that surround the patches continue the entire length of their legs. The West African giraffe on the other hand is noticeably light in appearance, and has rectangular, tan coloured patches. The patches are broadly surrounded by a creamy colour. The legs are noticeably white with no patterns. Nubian giraffe has large and rectangular chestnut-brown patches, which are surrounded by an off-white, creamy colour. The patches do not extend to the legs, which are noticeably white. Kordofan giraffe have pale and irregular tan-coloured patches that are

surrounded by a creamy colour, and do not extend to the legs, which are noticeably white. South African giraffe have star-shaped patches, which have various shades of brown, and are surrounded by a light tan brown colour. The legs of South African giraffe and Angolan giraffe are randomly speckled with uneven spots. However, Angolan giraffe have large, uneven and irregularly notched patches, which are light brown in colour and surrounded by a pale cream colour.

There are only seven cervical vertebrae, but they are elongated. Thick-walled arteries in the neck have extra valves to counteract gravity when the head is up; when the giraffe lowers its head to the ground, special vessels at the base of the brain control blood pressure. Giraffe are reported to live up to 26 years in the wild and slightly longer in captivity. Giraffe feed on *Acacia* in high proportions, but preferred plant species vary by region during the dry season. Additionally, *Faidherbia albida*, *Kigelia africana*, *Boscia* and *Grewia* species have all been identified as other common plant species in the diet of giraffe across the continent (Muller et al. 2016).

4.5 Role of the taxon in its ecosystem

As obligate herbivores, giraffe spend the majority of their time browsing among tall branches for flowers, pods and fruits, but will lower their heads and browse lower down, from small bushes and even off the ground. A staple of the giraffe's diet is browse from *Acacia* species, and the growth and regeneration is greatly impacted by giraffe consumption (Pellew 1983; Ruess & Halter 1990). Giraffe are important seed dispersers, particularly for the favoured *Acacia* tree species, depositing seeds in their dung far from the parent plant (Miller, 1996). Furthermore, giraffe assist pollination, carrying pollen around on their heads and necks (Hofmeyr 2003). Due to their ability to browse where others cannot, they contribute to local resource partitioning. However, in areas/times where/when resources are limited, giraffe will compete for browse with, for instance, gerenuk, kudu and impala (Makhabu 2005). Giraffe are used as vectors or hosts in the lifecycle of multiple parasites, including ticks, fleas, lice and hippoboscids externally, and nematodes and flatworms internally (Dagg 2014). Fortunately, these ectoparasites allow for a mutualistic symbiosis with oxpeckers, which also consume ear wax, blood and other edible materials found on the giraffe (Bezuidenhout and Stutterheim 1980).

Giraffe are naturally preyed upon by lion, and to a lesser extent leopard and cheetah. Additionally, humans also predate upon giraffe for various body parts, mostly meat, hide and tails, predominantly hunted illegally.

5. Conservation status and threats

5.1 IUCN Red List Assessment (if available)

- Giraffe *Giraffa camelopardalis* is listed as Vulnerable under category A2 of the IUCN Red List (Muller et al. 2016).
- West African giraffe *Giraffa camelopardalis peralta* was listed as Endangered on the IUCN Red List in 2008.
- Rothschild's giraffe *Giraffa camelopardalis rothschildi* was listed as Endangered on the IUCN Red List in 2010.

5.2 Equivalent information relevant to conservation status assessment

Giraffe are currently not listed on CITES.

5.3 Threats to the population (factors, intensity)

Direct threat to the population:

-Habitat loss

Habitat loss is one of the key threats to giraffe. Throughout their range, habitats are being encroached upon, specifically through the expansion of human settlements, pastoralism, the conversion of land for agriculture and the associated uncontrolled harvesting of timber and fuel wood. Conflict arises with farmers through loss of crops, and diseases can be spread through

contact with livestock. Furthermore, available habitat and range is impacted by fences and other infrastructure (roads, railways) that disrupt migration or dispersal of giraffe. Fragmentation of habitat can lead to small isolated populations that risk a decline in fitness through inbreeding depression, and are more likely to go extinct by stochastic events.

-Poaching (Illegal hunting)

Giraffe poaching (illegal hunting) appears to be prevalent in several countries, notably Tanzania, Kenya and the Democratic Republic of the Congo. However, it might be more prevalent in other countries but little research has been undertaken. Giraffe are illegally hunted for their meat, as well as other products such as their skins, tails, hair and bone, and products such as brains and bone marrow for a small but potentially growing market of alternative medicine. Giraffe are illegally hunted with rifles or snares, the latter set in trees specifically to catch giraffe, or on the ground to indiscriminately catch wildlife including giraffe (Straus 2015; J. Fennessy, pers. comm.).

-Drought

Drought contributes to malnutrition through the loss of abundance of palatable species of browse (Parker & Bernard, 2005). When forage and browse are reduced, giraffe tend to increase home ranges (McQualter et al. 2015), but this may be hindered by fencing and habitat loss, and can lead to reduced fitness and potential death.

Indirect threat

-Armed conflict

Giraffe occur in some areas of Africa where armed conflict limits the effort to monitor and protect, as well as can increase illegal hunting threats. Obtaining a greater understanding of giraffe ecology, movement, genetics, population dynamics and other aspects of their life history is challenging in these environments.

5.4 Threats connected especially with migrations

The migration of giraffe is threatened by the continuation of human population growth, civil unrest, migration and encroachment. Habitats are lost or fragmented, and the erection of fences and other infrastructure can restrict movements between critical habitat, loss of corridors, and a reduction in native food pasture and vegetation quality. The majority of transboundary corridors and landscapes are not well protected and collaboration of range States for the management of giraffe is limited, if at all.

5.5 National and international utilization

Giraffe can only be legally hunted for meat or trophies in three southern African countries (Namibia, South Africa and Zimbabwe), and only then with an approved certain permit and quota. According to the new giraffe IUCN Red List Assessment, legal hunting of giraffe has no impact on the conservation of giraffe (Muller et al. 2016).

In contrast, giraffe are illegally hunted in far greater numbers in parts of East and Central Africa, giraffe parts (bones, brain, bone marrow) are incorrectly believed to cure HIV/AIDS and giraffe meat has been found to be part of a thriving bushmeat trade in southern Kenya (KWS pers. comm.).

6. Protection status and species management

6.1 National protection status

Angola: Giraffe are awarded full protection by the Combined Executive Decree No. 37/99 of 27 January 1999 (Governo de Angola 1999) issued by the Ministry of Agriculture and Rural Development and the Ministry of Finances. This decree was approved to provide an updated list of species (including giraffe) whose hunting is prohibited.

Botswana: Giraffe have been classified as a protected animal under section 17 of The Wildlife Conservation and National Parks Act 1992. This legislation allowed the hunting and capturing

of giraffe under special circumstances and via a permit granted by the director of the Department of Wildlife and National Parks (DWNP), within wildlife management areas. As of January 2014, new legislation made hunting laws more stringent and banned the hunting of protected animals including giraffe.

Cameroon: Giraffe are classified as a Class A species under Wildlife Law No. 94/01 of 1994 to lay down Forestry, Wildlife and Fisheries Regulations. Class A species includes rare or endangered species that benefit from full protection and may consequently not be hunted.

Central African Republic: Under Section 27 of Ordinance No. 84/045 on the protection of wildlife and the regulating of hunting in the Central African Republic (l'Ordonnance no. 84 /045 portant protection de la Faune Sauvage et règlementant l'exercice de la chasse en République Centrafricaine), hunting, capturing and/or collecting of any individual listed in List A of the Ordinance, which includes giraffe, is strictly prohibited.

Chad: Under Article 25 of Ordinance No. 002/PR/88 on the Conservation of Wildlife, giraffe are classified as a Category A species. Category A species benefit from full protection and may consequently not be hunted.

Democratic Republic of the Congo: Giraffe are classified by the Congolese Wildlife Authority, the Institut Congolais pour la Conservation de la Nature (ICCN), as a rare or endangered species that is fully protected and may not be killed.

Ethiopia: Under Article 24 of the Council Ministers Regulations No. 163/2008, a regulation provisioned for wildlife development, conservation and utilization, no person is allowed to hunt species listed in Table 10 of the regulations, which includes giraffe, except with a special hunting license acquired in accordance with Article 22 of the regulations.

Kenya: Reticulated and Rothschild's giraffe are accorded full protection under the Wildlife (Conservation and Management) Act (Chapter 376). Although Masai giraffe are not awarded any special protection in Kenya, big-game hunting has been banned in the country.

Malawi: The Game Act (No. 26 of 1953) is the main act for the preservation, control and trade of game animals. Giraffe are not specially protected under this act but no legal hunting is allowed.

Mozambique: Giraffe are protected under the Forestry and Wildlife Law (Law No. 10/99) and Regulations of the Forestry and Wildlife Law (Decree No. 12/2002). Giraffe are listed in Annexure 2 of the Regulations as a protected species that may not be hunted. They are listed as one of the eight mammals on Mozambique's National Red List that are either extinct or in danger of extinction (MICOA 2009).

Namibia: Giraffe is one of ten species that are classified by the Ministry of Environment & Tourism (MET) as specially protected under Schedule 3 of No.4 of 1975 Nature Conservation Ordinance (Government of Namibia 1975). This classification does not limit hunting of giraffe, but rather requires one to obtain specific hunting permits from the Namibian Government before a licence is granted.

Niger: West African giraffe are fully protected under Niger's 'Loi N° 82-002 du 28 Mai 1982 portant réglementation de la chasse' (Law No. 82-002 of 28 May 1982 regulating hunting) and may not be hunted.

Rwanda: Giraffe is listed by the Rwanda Environment Management Authority as a protected species that may consequently not be hunted under the Rwanda Wildlife Policy (2013).

Somalia: Giraffe are not specially protected in the Federal Republic of Somalia but legal hunting is approved.

South Sudan: Under Chapter 5, Section 25 of the Wild Life Conservation and National Parks Act of 2003, no person shall hunt or capture any animal listed in Schedule 1 of the Act, which includes giraffe.

Swaziland: Giraffe are classified as royal game under the Second Schedule of the Game (Amendment) Act of 1991, an Act to amend the Game Act of 1953 and to provide for matters incidental thereto. A valid permit issued under the provisions of section 16 of the Game Act is required to hunt or attempt to hunt, or be in possession of a trophy of any royal game.

Tanzania: Giraffe are protected under the Wildlife Conservation Act No.5 of 2009. The act prohibits hunting, killing, capturing and wounding giraffe with punishment including fines and imprisonment.

Uganda: Giraffe are protected under the Game (Preservation and Control) Act of 1959 (Chapter 198). Giraffe are listed under Part A of the First Schedule of the Act as animals that may not be hunted or captured in Uganda.

Zambia: The Zambia Wildlife Authority (ZAWA) is mandated under the Zambia Wildlife Act No. 12 of 1998 to manage and conserve Zambia's wildlife and under this same act, the hunting of giraffe in Zambia is illegal.

6.2 International protection status

There is currently no international protection status for giraffe, including CITES listing. Although giraffe is currently listed as one of the species for which hunting is permitted under national law in Namibia, South Africa and Zimbabwe, trophy hunting is limited to predominantly private owned land in these countries and not the areas in which they migrate across borders.

6.3 Management measures

Given that some giraffe populations are overall in decline across Africa, yet are increasing or stable in some areas/countries, the conservation actions most useful and appropriate for their long-term sustainability will differ as a function of their population dynamics, ecological stability, national policies and legislation. Giraffe are subject to various degrees of legal protection in the different range States. More than 50% of their numbers inhabit Southern Africa, as together with the majority across much of Africa they live in national protected areas and private farms, although populations also exist in unprotected and communal areas. The main threats to the conservation of giraffe populations are habitat loss, encroachment and conversion and poaching.

As an example, in Niger, government-led initiatives supported by NGOs in support of targeted community education, awareness and conservation programs have facilitated the re-bounding of the giraffe population from a low of 49 individuals (mid-1990s) to >500 individuals today despite the absence of official protected areas. However, habitat loss and drought remain significant threats in this area. Importantly, the government was the first and remains the only giraffe range State to have developed a National Giraffe Conservation Strategy, and through this and their status as Endangered on the IUCN Red List the conservation of the subspecies has increased nearly eightfold in twenty years.

Kenya is finalising a National Giraffe Conservation Strategy which seeks to identify and implement a number of conservation interventions to conserve the three giraffe subspecies (*G. c. reticulata*, *G. c. rothschildi* and *G. c. tippelskirchi*) in the country. Rothschild's giraffe are currently listed as Endangered on the IUCN Red List and accorded full protection under the Kenyan Wildlife (Conservation and Management) Act (Chapter 376) and in the Republic of Uganda, giraffe are protected under the Game (Preservation and Control) Act of 1959 (Chapter 198) and listed under Part A of the First Schedule of the Act as animals that may not be hunted or captured.

Throughout Eastern and Southern Africa, an increasing number of giraffe translocations have augmented current and repopulated former (and extralimital) habitats with giraffe, fostering

wildlife enterprises including tourism and/or sustainable use, and maintaining genetic diversity given small, enclosed and/or fragmented populations.

Although one of the smallest giraffe populations in Africa lives in the Luangwa Valley, Zambia, the Thornicroft's giraffe has been stable for a number of years, so intervention as a conservation action should remain status quo. Instead, continued monitoring of the population, combined with efforts to limit and control mineral extraction and land conversion, would be useful.

6.4 Habitat conservation

Conservation measures typically include habitat management and protection through law enforcement in state-owned, private and community based conservation areas. Successful protection of habitat and cessation of habitat encroachment with the use of fences and border protection can result in large populations building up within an area. The continued growth of these populations however is limited by the ability of that ecosystem to support a particular number of giraffe due to space, water and forage availability (i.e. limited carrying capacity).

6.5 Population monitoring

There are very few long-term giraffe monitoring efforts across Africa. In Southern Africa, giraffe monitoring initiatives of varying scientific quality and consistency have been running for the past 20 or more years, in particular Namibia and Zambia. In East Africa, various giraffe monitoring projects were established in the past 5-10 years in both Kenya (Soysambu Conservancy, Samburu National Reserve) and Uganda (Murchison Falls National Park). However, giraffe are surveyed by NGOs or government institutions as part of larger monitoring efforts of wildlife, which vary in methodology and resources allocated. In recent times, there has been progress in better understanding the conservation of giraffe populations across Africa. The next steps associated with this progress are to strengthen collaboration between range states, and developing a standard monitoring methodology that is suitable/applicable to giraffe range states.

7. Effects of the proposed amendment

7.1 Anticipated benefits of the amendment

- Increased giraffe conservation and management collaboration between giraffe range States.
- More opportunities for exchange of best practices between Range State Parties.
- Increased awareness, education and monitoring on giraffe conservation, with particular attention to giraffe spatial ecology, threats and management in transboundary landscapes.
- International monitoring and review of conservation status developments and conservation measures through the analysis and review of Parties' National Reports by the Conference of Parties at each meeting.
- Increased fundraising opportunities to support giraffe conservation across Africa.

7.2 Potential risks of the amendment

- Lack of commitment from one of any range State Parties that conserve and/or manage giraffe, in particular those that share a transboundary habitat of giraffe.
- Increased conservation attention on giraffe as a migratory species potentially impacting lawful income-generating activities in parts of southern Africa.
- Insufficient financial and technical resources to implement giraffe conservation activities.

7.3 Intention of the proponent concerning development of an Agreement or Concerted Action

Implementation of targeted and implementable conservation measures for giraffe is key to the Proponents. Therefore, although desirable over time, the Proponents therefore do not wish to immediately develop an Agreement or Memorandum of Understanding, as this would require further negotiations among the Range States and would potentially take a long time to be developed and incur considerable overhead costs. As such, the Proponents suggest to establish an informal but dynamic initiative to develop and support collective and collaborative priority actions, for threatened populations or subspecies, and those of regional transboundary populations, to assist each range State to address the individual challenges faced by them. Implementation of the collectively developed measures will be reviewed on a regular basis through the Conference of Parties of CMS.

As priority, the Proponents suggest the following priority actions at the national / regional / transboundary level and which the COP would adopt within a decision as part of the acceptance of the proposal so that implementation could start right away.

- National Giraffe Conservation Strategy finalisation / development in Ethiopia, Kenya, Tanzania, Uganda and Zambia. Other countries to be assessed.
- Transboundary Giraffe Conservation Strategies / Action Plans to be developed in the Southern Africa Kazango-Zambezi Conservation Transfrontier Area region (Angola, Botswana and Namibia), Kenya / Tanzania and Ethiopia / South Sudan.
- Implementation of National Giraffe Conservation Strategy in Niger.
- Africa-wide survey / monitoring of giraffe populations.

8. Range States

Currently, giraffe occur in 21 African countries, having gone locally extinct in at least seven countries (Burkina Faso, Eritrea, Guinea, Mali, Mauritania, Nigeria and Senegal). The 21 countries include: Angola, Botswana, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Niger, Rwanda, Somalia, South Africa, South Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

9. Consultations

The Government of Angola shared this listing proposal on 15 May 2017 with all CMS Range State Parties of giraffe and invited comments until 21 May 2017. No comments were received on the proposal before the deadline.

10. Additional remarks

None

11. References

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