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



Twenty-seventh meeting of the Animals Committee Veracruz (Mexico), 28 April – 3 May 2014

Interpretation and implementation of the Convention

Species trade and conservation

ILLEGAL TRADE IN CHEETAHS (ACINONYX JUBATUS) (DECISION 16.72)

- 1. This document has been prepared by the Secretariat.
- 2. At its 16th meeting (CoP16, Bangkok, 2013), the Conference of the Parties adopted a number of Decisions on *Illegal trade in cheetahs (Acinonyx jubatus)*, as follows:

Directed to the Secretariat

16.71 The Secretariat shall, subject to external funding, contract independent consultants to undertake a study of the legal and illegal trade in wild cheetahs, and to assess the impact of this trade on the species conservation in the wild. The study should aim to determine the source of cheetahs in illegal trade, and the transit routes of illegally trafficked cheetahs, and should document the measures taken by Parties to deal with or dispose of confiscated live specimens. All range States must be fully consulted as stakeholders. The Secretariat shall make the results of the study available to the Animals and Standing Committees for their consideration.

Directed to the Animals Committee

16.72 The Animals Committee should review the study undertaken in accordance with Decision 16.71 and make recommendations, as appropriate, to the Standing Committee.

Directed to the Standing Committee

16.73 The Standing Committee should consider the recommendations of the Animals Committee made in accordance with Decision 16.72, and make its own recommendations, as appropriate, for communication to the Parties or for consideration at the 17th meeting of the Conference of the Parties.

Directed to Parties and donors

- 16.74 All relevant Parties are urged to assist those commissioned to undertake the abovementioned study in any way possible, including through the provision of necessary information about legal and illegal trade in wild cheetah specimens.
- 16.75 Parties and donors are encouraged to provide funding to the Secretariat to finance the study on cheetah trade.

- 3. In accordance with Decision 16.71, the CITES Secretariat contracted an independent consultant to undertake a study on the legal and illegal trade in wild cheetahs, and the impact of this trade on the conservation of wild species. This study along with an executive summary of the study, are attached as Annexes to the present document. The study is available in English and the executive summary is available in English, French and Spanish. The Secretariat expresses its sincere appreciation to the European Commission for the funding support it provided to implement this Decision.
- 4. On 24 January 2014, the Secretariat issued Notification to the Parties No. 2014/007 inviting Parties to contribute information to the study. In response to the Notification, reports were received from Greece, Namibia, Poland, South Africa and Zimbabwe; Sudan and Uganda submitted information directly to the consultant. The World Customs Organization (WCO) provided data on seizures reported by WCO members since 2011, and several conservation organizations involved in research on the trade in cheetahs, or with experience of such trade, also contributed documentary material to the study.
- 5. The Secretariat draws the attention of the Animals Committee to the following findings of the study:
 - East Africa is the region with the highest recorded levels of illegal trade in live cheetahs, and where this trade likely has the greatest negative impact on wild populations. The study suggests that the Middle East, and notably the Gulf States, is the primary destination of live cheetahs from East Africa, and that they transit via the Horn of Africa and Yemen.
 - The study identifies the importance of legislative and regulatory controls in detecting and preventing illegal trade in cheetahs in countries with consumer markets for illegally imported live wild cheetahs.
 - The study suggests that the Gulf States could adopt measures to tackle region-wide problems of uncontrolled keeping of and illegal trade in big cats. The study further encourages Parties with consumer markets for live cheetahs to ensure that the effective implementation of the Convention is supported by national policies on ownership and trade in big cats.
 - The study found that East African countries could benefit from the development and adoption of a common strategy to deal more effectively with confiscated live cheetahs, focusing on areas and regions where confiscations are taking place and insufficient capacity exists to shelter confiscated live animals. The Secretariat notes that specialized agencies or organizations, including the international zoo community, might be able to assist in putting such a strategy in place.
 - The study found that legal trade in CITES Appendix I trophies from Namibia and Zimbabwe is generally considered to have supported the conservation of cheetahs in these countries, and that the CITES quota system appears to operate in a satisfactory manner.
 - The study indicates that it is currently unclear whether South African authorities can certify with confidence that all live cheetahs that are exported as specimens bred in captivity meet all the Convention's bred-in-captivity conditions.
 - It is reported that South Africa's CITES Management Authority recently announced that it would exercise increased national oversight of provincial captive cheetah registration systems in order to ensure a uniform implementation of protected species regulations.
 - The study suggests that South Africa needs to enact and maintain strict national oversight of captive breeding and export of live cheetahs.
 - Little information is currently available on the illegal trade in live cheetahs, cheetah skins or other specimens in northern, western and central Africa, or in the Islamic Republic of Iran home to the last wild cheetah population in Asia. The study also reports that the conservation status of cheetahs in these regions might have deteriorated to the point that the impact of any illegal trade could be significant. Available information on the illegal trade of cheetahs in these regions in Africa suggests the use of big cat parts and derivatives, possibly including from cheetahs, for traditional medicinal purposes, and the availability of fake cat specimens to meet such demand.
- 6. The Secretariat considers that further research is required, to document the conservation status of cheetahs in northern, western and central Africa and the Islamic Republic of Iran, as well as the impact of illegal trade. Internationally coordinated enforcement efforts to target this particular illegal trade might also be required.

Recommendation

7. The Animals Committee is invited to review the study contained in the Annex to the present document, undertaken in accordance with Decision 16.71, and make recommendations, as appropriate, to the Standing Committee.

AN ASSESSMENT OF CONSERVATION IMPACTS OF LEGAL AND ILLEGAL TRADE IN CHEETAHS ACINONYX JUBATUS.

Report to the 27th meeting of the CITES Animals Committee

Kristin Nowell, CAT and IUCN SSC Cat Specialist Group

Executive Summary

Introduction. The cheetah *Acinonyx jubatus*, the world's fastest cat, is included in CITES Appendix I since 1975, to which in 1992 the following annotation was added: "*Annual export quotas for live specimens and hunting trophies are granted as follows: Botswana: 5; Namibia: 150; Zimbabwe: 50. The trade in such specimens is subject to the provisions of Article III of the Convention*". It is listed as Vulnerable on the IUCN Red List with a declining population of fewer than 10,000, found primarily in the savannas of Africa, with a very small and Critically Endangered remnant Asiatic population in Iran.

Cheetahs are somewhat unusual for a big cat in that they can be tamed relatively easily, especially if acquired while young, and there is an ancient tradition in Southwest and Central Africa of trained cheetahs serving as royal hunting animals, factors which inform the current demand for pet cheetahs and the trade in live animals.

Cheetahs face a variety of threats to their existence in the wild, including illegal international trade, which was addressed at the 16th meeting of the Conference of the Parties [CoP16, Bangkok, 2013; see document CoP16 Doc 51 (Rev 1)]. Parties adopted Decision 16.71, engaging a study of legal and illegal trade in wild cheetahs, and to assess the impact of this trade on the species conservation in the wild. Of particular concern is illegal trade in live animals. The study should determine the source of cheetahs in illegal trade, the transit routes of illegally trafficked cheetahs, and document the measures taken by Parties to deal with or dispose of confiscated live specimens. The study is to be reviewed by the Animals and Standing Committees, with the latter making recommendations concerning trade in cheetahs for consideration at the 17th meeting of the Conference of the Parties in 2016.

Methods. The CITES Secretariat issued Notification to the Parties No. 2014/007 of 24 January 2014, and invited Parties to contribute information to this study. In response to the Notification, reports were received from Greece, Namibia, Poland, South Africa and Zimbabwe, along with additional information provided from Sudan and Uganda, and these contributions are referenced as *in litt.* in the present document. Conservation organizations which have researched trade issues for cheetahs also contributed published and unpublished information. A literature review and Internet searches in English, French and Arabic were conducted, focusing on news reports, government websites, and social media.

Trade overview. From 2002-2011, in terms of wild cheetah specimens annual legal trade has averaged 153 (mainly hunting trophies from Namibia), and the annual average for captive-bred live animals is 88 (mainly from South Africa). While confiscations do not necessarily have to be reported in annual reports to CITES, they nevertheless have averaged three per year. This study has collected numerous additional records and reports indicating that the level of illegal trade is higher, and could be affecting and threatening most wild populations. With differences in the status of wild populations, and the character and regulation of legal and illegal trade, this report is divided into **regional trade assessments**.

The assessments begin with **East Africa**, the region with the most evidence of illegal trade in live cheetahs and where it likely has the greatest negative impact on wild populations. Most countries in East Africa flagged illegal trade as a concern in their national cheetah action plans, and at a 2012 Horn of Africa Wildlife Enforcement Workshop for CITES and wildlife enforcement officials. Nongovernmental organizations working in the region have records of government confiscations of over 40 young cheetahs, primarily in the semi-autonomous region of Somaliland, from 2011 to 2013, with many more observations and second-hand reports of illegal trade in cubs. A high mortality rate (70%) is evident from the known outcomes of confiscations in Somaliland and Ethiopia. Surviving animals were relegated to wildlife rehabilitation and zoological facilities. Although the exact

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origin and means of capture of the cubs is unclear, based on interdictions and interviews with traders it appears that the animals are opportunistically collected from ethnic Somali regions, including parts of Ethiopia and Kenya, and perhaps beyond. East Africa has a known cheetah population of about 2,500 (in Ethiopia, Kenya, South Sudan, Tanzania and Uganda), with numbers and status unknown across much of the Horn of Africa region.

The primary destination of live cheetahs from this region, based on multiple confirmations and lines of evidence, are the Gulf States, and the primary means of transport is by boat out of the Somali regions, to the coast of Yemen, and across Yemeni borders by vehicle. This trade has been ongoing for some time (for example, 39 cheetah cubs smuggled primarily out of Somalia between 1998-2002 were confiscated by Customs authorities of the United Arab Emirates and relegated to a wildlife facility). Dozens of recent news articles and hundreds of social media images and videos suggest that private ownership of cheetahs (and other big cats) is popular throughout the Gulf region. In public, cheetahs have been filmed riding as car passengers and being walked on leashes. In peoples' homes, cheetahs are shown pacing around living rooms and tussling with their owners, including young children. High prices of up to 10,000 USD are reportedly paid for these animals, and it is clear that many owners treasure them and aspire to the best of care (even purchasing treadmills to keep them fit). However, generally survivorship of cheetahs kept in inappropriate conditions is low, according to forensic examinations and the experience of several veterinarians. Information suggests that there have been several instances of escaped cheetahs (and even more for other animals, including lions and baboons) causing havoc and injury. The keeping of big cats in residential areas across the Arabian Peninsula poses serious environmental and safety risks, both to people as well as the cats.

The illegal trade has endangered not only the cheetah subspecies from the Horn of Africa (A. j. soemmeringii) but may potentially also affect the last remaining population of 40-100 Asiatic cheetahs in Iran (A. j. venaticus), situated equally close by. While the availability of captive-bred cheetahs has increased in the UAE in recent years, possibly contributing to a relative decline in illegal wild imports in that country, authorities there have still seized more than 20 cubs since 2010. The consumer countries of the Arabian Peninsula (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE) are Party to CITES and prohibit wild cheetah imports (except for noncommercial purposes in accordance with Article III of the Convention). This study was not able to obtain detailed information on regulation of captive cheetah (and other big cat) national trade and ownership outside licensed zoological facilities in the Gulf states, but from public information (including statements of officials to journalists) many of these pets would appear to be illegal or in the process of becoming so. Ajman municipality, one of the seven constituent emirates of the UAE, has taken the definitive legal step of prohibiting possession of all "wild" (nondomesticated) animals and reptiles in homes, apartments and hostels. A news article on a 2013 animal welfare law enacted in Saudi Arabia referred to official statements that a cooperative approach among Gulf states was being taken with others considering adoption of similar legislation. Such a cooperative approach could also be considered to tackle the region-wide problems of uncontrolled keeping of and trade in big cats, as policies and practice have been insufficient to deter the spread of illegally imported wild cheetah cubs. Authorities should implement measures to ensure that their national policies regarding ownership and trade in big cats supports the effective implementation of the Convention.

In North, West and Central Africa, there are only five known wild cheetah populations, possibly totaling 450 animals, and range States consider illegal trade to be a significant threat. Although there are no known confiscations of cheetahs (live or otherwise) and few observations of illegal trade and possession, it is likely that cheetahs get absorbed into a widespread illegal market for big cat skins used for traditional ceremonial purposes and *médico-magigues*. Lion appears to be the primary species sought after for medicinal purposes, and the illegal trade appears to have a similar dynamic to the illegal trade in tiger parts in Asia - other big cat species are drawn in as alternatives or substitutes, in this case leopard and cheetah. Also similarly, fakes are more commonly observed than genuine big cat parts and items. This pertains as well to Sudan, where traditional men's shoes (markoob), made of spotted cat fur despite prohibitions and an abundance of fake items, are sufficiently in demand as luxury items to be considered a threat to cheetah populations in South Sudan and neighboring countries. Faux cat products do have the potential to replace wild-sourced items, as shown by the wide embrace of cat pattern prints by the fashion world rather than actual furs, as in the 1960s-70s. However, in these cases, while the consumer may be aware that the item they purchase is fake, if they aspire to the genuine item this can perpetuate demand and illegal trade. Moreover, despite some peoples' positive experiences using big cat parts, real or fake, as spiritual or consumptive medicine, this is not only illegal but also potentially dangerous if their use replaces appropriate medical care.

Southern Africa has the largest regional population of cheetahs, with a single panmictic population spanning six countries that totals an estimated 6,200 animals. Most cheetah occur on private lands where competing large predators have been eliminated, but they have widely been viewed as a threat to livestock and game, and farmers have live-trapped cheetahs for many years (adults and young) as a means of predator control. The legal trade in trophies under CITES Appendix I quota from Namibia and Zimbabwe (with hunting packages

priced from 10-20,000 USD) is generally considered to have been supportive of the cheetah's conservation on private lands. Overall, the CITES quota system seems to operate in a satisfactory manner, and the legal trade in specimens resulting from these annotations may be neutral or beneficial for the conservation of the species in the wild.

South Africa is the world's largest exporter of live cheetahs, and the only country to have registered two commercial captive-breeding operations with the CITES Secretariat in compliance with Resolution Conf. 12.10 (Rev. CoP15) on *Registration of operations that breed Appendix-I animal species in captivity for commercial purposes.*¹ Animals bred in these two operations meet the CITES requirements for bred-in-captivity, and may be exported for commercial purposes as they are 'deemed to be specimens of species included in Appendix II.' However, South African cheetah exports have been primarily reported as noncommercial (for conservation purposes, to zoos), and most have been exported from facilities not registered with CITES. For an Appendix-I captive-bred live animal to be exported from South Africa, it must be "individually and permanently marked in a manner so as to render alteration or modification by unauthorized persons as difficult as possible." Microchips are most commonly employed, but there are concerns that a microchip alone is not sufficient to guarantee that the animal is of captive origin, as a chip could easily be implanted into any wild-caught cheetah.

Cheetahs are notoriously difficult to breed in captivity - for example, North American cheetahs have excellent genetic variation as well as housing and veterinary care, yet only 23 out of 111 females have had offspring, and in 2013 a national Cheetah Breeding Center Coalition was set up among nine facilities, with the aim of a sustainable zoo population of cheetahs within 10 years. Although some South African facilities like the De Wildt (now Ayn van Dyk) Cheetah Centre, one of the two registered with CITES, have been very successful, producing more than 600 cubs in the past 30 years, cheetah experts suspect that some facilities in South Africa may not have mastered the challenge and are illegally trading, nationally and internationally, in live-captured wild animals. Researchers have interviewed dozens of observers in recent years - primarily farmers and also conservation officials - who have reported illegal international movement of live-captured wild cheetahs between Botswana, Namibia and South Africa. Researchers, as well as national authorities in South Africa, have found it difficult to obtain the necessary provincial records to monitor domestic captive breeding activities and national trade. At present, it is unclear whether South African authorities can certify with confidence that all animals that are exported as specimens bred in captivity meet all the Convention's bred-in-captivity conditions. South Africa's CITES Management Authority recently announced that it would exercise increased national oversight of the provincial captive cheetah registration system, with the aim of ensuring uniform implementation of protected species regulations.

Most live cheetahs have been seized by Governments in East Africa, the Middle East and Southern Africa. **Confiscated live animals are primarily dealt with** by relegation to wildlife or zoological facilities as soon as possible after interception, mostly in country, but some are also exported to appropriate facilities. Confiscated live animals do not seem to be euthanized as facilities willing to take them have generally been found, although high mortality rates are evident (70% of 30 cubs confiscated in Somaliland and Ethiopia, and 48% of 27 cubs confiscated in the UAE, Jordan and Kuwait). Moving confiscated cheetahs to holding facilities inside or outside the country where the seizure took place has been a workable solution, although it depends on the facilities having sufficient resources and expertise to care for the animals. Most cheetahs confiscated in East Africa and the Middle East are too young to consider release into the wild, but that has been a viable option in southern Africa, where many adult cheetahs are live-trapped on private lands as unwanted potential problem animals. Both southern and East Africa are home to several NGOs with an established record of working with governments to accept, rehabilitate and often release such cheetahs in areas where owners and managers will accept them.

There seem to be two principal markets for illegal live cheetahs: southern Africa (largely supplied within the region) and the Middle East (largely supplied from East Africa). The latter is more significant and lucrative. Live animals supplying it have been confiscated primarily at the transit and consumer portions of the trade chain, rather than the source, so there is little information to indicate which wild populations are being affected. The young cheetahs may be taken from areas unknown to conservationists, but possibly from known resident

¹ Article VII, paragraph 4, of CITES states that "Specimens of an animal species included in Appendix I bred in captivity for commercial purposes, . . . , shall be deemed to be specimens of species included in Appendix II". In Resolution Conf. 12.10 (Rev. CoP15) on Registration of operations that breed Appendix-I animal species in captivity for commercial purposes, the Conference of the Parties to the Convention has agreed to an interpretation of the provision, as follows: "Parties shall restrict imports for primarily commercial purposes, as defined in Resolution Conf. 5.10 (Rev. CoP15), of captive-bred specimens of Appendix-I species to those produced by operations included in the Secretariat's Register and shall reject any document granted under Article VII, paragraph 4, if the specimens concerned do not originate from such an operation and if the document does not describe the specific identifying mark applied to each specimen".

populations as well. In southern Africa, the largest cheetah population seems to have been essentially stable over the past 10-15 years and the impact of illegal trade is unclear; it may absorb some animals that would have been otherwise removed or destroyed. Although there is little information on illegal trade in live animals or cheetah skins from Iran as well as North, West and Central Africa, the conservation status of cheetahs in these regions has deteriorated to the point that the impact of any illegal trade is probably significant.

Based on the key findings of this study, the following considerations are of particular relevance:

Legislation: Parties which have been identified in this study as consumer markets for illegally imported live wild cheetahs (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates) should be requested to submit a report on the legislative and regulatory controls in place and in development regarding cheetahs in captivity, as well as enforcement of said controls. Compulsory registration for Appendix-I listed species, combined with individual identification marking, could be envisaged

National enforcement: The Gulf states, as the prime destination for illegal wild cheetahs, need to significantly step up enforcement efforts at the borders and internally. These countries should financially and technically support East Africa to combat illegal trade in cheetahs and enhance in situ conservation efforts.

The Somali regions in the Horn of Africa, and Yemen were identified as key transit points for the illegal live animal trade (affecting not only cheetahs but many other species). Both the administrative authorities and the local NGOs with whom they cooperate should be supported by Parties to improve capacity to address illegal wildlife trade and undertake targeted enforcement actions.

Illegal cheetah trade has largely been detected at the consumer and transit points, rather than the source, and this is particularly true of the live animal trade. Range states should be much more vigilant in enforcing their national legislation concerning the protection of and trade in cheetahs, but also be supported in their efforts to improve monitoring of wild cheetah populations in order to detect and counter trade-related offtake.

South Africa should consider implementing additional measures to reliably register, mark and trace captive-bred cheetahs, and be encouraged to exercise greater national oversight and more regular controls of captive cheetah facilities, and to ensure that all facilities breeding cheetah for commercial (not for conservation) purposes are registered with the CITES Secretariat according to Resolution Conf. 12.10 (Rev CoP15).

International coordination: Similar to the ways in which regional wildlife trade control organizations have focused on illegal tiger trade in Asia (sharing information among network members and between networks, capacity building seminars and workshops), the cheetah should receive greater attention from the Lusaka Agreement Task Force (Eastern and southern Africa), and Wildlife Enforcement Networks in the regions of the Horn of Africa (HA-WEN), West Asia (WA-WEN), Southern Africa (WENSA) and Central Africa WEN/Central African Forests Commission (COMIFAC).

The international community has recognized the need to deploy a broader spectrum of government resources to counter illegal wildlife trafficking. Parties who are part of the multi-national maritime security task forces operating in the Gulf of Aden and surrounding waters should take under consideration the potential to provide briefings to them which could support greater detection and deterrence of illegal wildlife trade

Demand reduction: Approaches to reduce demand should be studied in the different types of consumer market identified: exotic pets, luxury traditional shoes (Sudan), and big cat skin ceremonial/medicinal use or *médico-magiques* (West and Central Africa). The nature of the demand for pet cheetahs in the Gulf states is such that demand reduction initiatives have a good chance of success. It is apparent that people who buy cheetah cubs do so out of a love of the animal, and for predator conservation, that is half the battle. People may also not be aware of the difficulties and dangers of keeping big cats, or its potential illegality.

(English only / únicamente en ingles / seulement en aglais)

AN ASSESSMENT OF CONSERVATION IMPACTS OF LEGAL AND ILLEGAL TRADE IN CHEETAHS ACINONYX JUBATUS

Report to the 27th meeting of the CITES Animals Committee

Kristin Nowell, CAT and IUCN SSC Cat Specialist Group

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1. Introduction

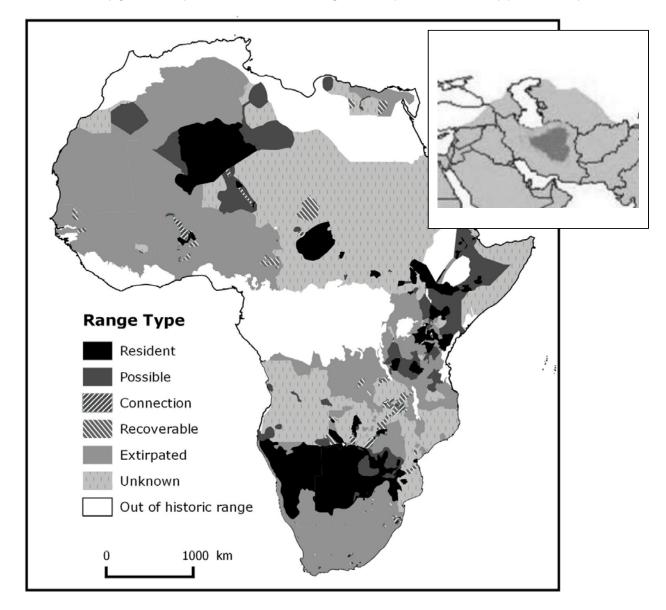
The cheetah *Acinonyx jubatus* is listed as Vulnerable on the IUCN Red List of Threatened Species, with a declining population of less than 10,000. Its Red List status will be reassessed for the 2015 Global Mammal Assessment (Durant et al., in prep.). Like the lion *Panthera leo*, the cheetah is found primarily in African savanna habitats, which are rapidly being converted to agricultural and other forms of development (Riggio et al. 2012). Cheetahs have been lost from such areas, and moreover protected savannah reserves that contain large populations of lions often have lower densities of cheetah due to interspecific competition. Southern Africa is the region with the largest cheetah population, mainly found on commercial livestock and game ranching areas where larger competing predators (lion and hyena) have been extirpated (Lindsey et al. 2013), but where

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many landowners still consider the cheetah a problem animal. In this region, however, and elsewhere, cheetahs are protected species and may not be taken without a permit (IUCN Cat SG *in litt.* 2014).

Cheetah status is unknown in many African countries, but these areas of potential range are not considered likely to still hold significant populations (Figure 1). It is certain, however, that the cheetah has disappeared from large areas of its historic range, in North and West Africa and especially in Southwest Asia. It is extinct in India, Pakistan, Afghanistan and on the Arabian Peninsula (Mallon and Budd, 2011); the cheetah survives today in Asia only in the deserts of eastern Iran where it is classified as Critically Endangered (subspecies *A. j. venaticus*). Paleogenetic analysis indicates that African and Asian cheetahs have been isolated from each other for millennia (Charruau et al 2011). The same analysis supports recognition of a distinct subspecies in the Horn of Africa region, *A. j. soemmeringii*, while cheetahs in East and Southern Africa are closely related. The classification and taxonomy of cheetahs in North, West and Central Africa is still being studied (IUCN 2012).

Figure 1. Knowledge of cheetah distribution in Africa (WCS/ZSL Rangewide Program for Cheetah and African Wild Dogs *in litt.* 2014)



Inset: Historic (light-shaded) and current cheetah range in Asia (Eslami et al. 2010) (not to scale)

Cheetahs face a variety of threats to their existence in the wild, including habitat loss, bushmeat hunting of their prey base, conflict with livestock owners, among others (Durant et al. in prep.). Illegal international trade was flagged as an additional important threat by all three African regional cheetah conservation strategies (IUCN 2007a,b; IUCN 2012). This subject was on the agenda at CITES CoP16 (CoP16 Doc 51 Rev 1). The CITES Secretariat noted that illegal trade in live cheetahs and skins was highlighted as a current problem by several country representatives (Djibouti, Ethiopia, Somalia, South Sudan and the Sudan) at a workshop on wildlife trafficking in the Horn of Africa, held in Addis Ababa, Ethiopia, in October 2012.

At CoP16, the Parties adopted Decision 16.71, engaging a study of the legal and illegal trade in wild cheetahs, and an assessment of the impact of this trade on the species' conservation in the wild. The illegal trade in live cheetahs was flagged as of particular concern at COP16, and is given emphasis in this study (Figure 2). While other live big cats have been traded and kept captive for centuries, the cheetah has an unusual history throughout Southwest Asia and into India of having been tamed and trained to hunt antelope for their owners (Divyabhanusinh, 1995) (Figure 3). Consuming meat caught by trained hunting animals finds sanction in the Muslim holy book, the Qur'an (Thapar et al. 2013).

2. Methods

The following methods were employed for this study.

Analysis of the CITES Trade Database

Searches were conducted for *Acinonyx jubatus* in various combinations as shown in Table 1. Graphs and tables in this report are derived from CITES Trade Database outputs unless otherwise noted as to source.

Consultation with CITES Party governments and governmental bodies

Parties were requested in Notification 2014/007 to contribute to this study. Information received from Parties is referenced in this document as *in litt.* (2014). The World Customs Organization provided data on seizures from their database for use in this study. With the assistance of contributing conservation organizations, selected Range State government authorities were also contacted as a follow-up.



Figure 2. A dying cheetah cub for sale in a Yemeni coastal village, probably of wild origin and smuggled by boat out of Somaliland (Sheffer and Kennedy 2013)



Royals with their prized pet, getting ready for the hunt.

Figure 3. It was a mark of privilege to have wild-caught cheetahs, tamed and trained to hunt antelope, in India and Southwest Asia for centuries (Thapar et al. 2013)

Interviews with cheetah trade researchers

Working through the network of members and associates of the IUCN Species Survival Commission's Cat Specialist Group, organizations which have recently focused on illegal cheetah trade were identified and interviewed in late 2013-early 2014 (Table 2). Interviews included both structured and unstructured elements, and were conducted by email and telephone. These specialists also contributed published and unpublished papers and reports, and compiled information from their files, including their own interviews with veterinarians, trophy hunting managers, law enforcement personnel, land owners, other wildlife researchers, and traders. Individual cases of illegal trade were verified by photo or direct observation unless otherwise noted. Interview information is referenced in this study by the contributing organization's name or acronym as *in litt*.

Internet searches

Internet searches were conducted in English, French and Arabic, focusing on news articles, government websites, and social media.

Geographic terminology

Key information from this report was collected in what is referred to as Somaliland, the semi-autonomously administered region of western Somalia bordering the Gulf of Aden. No information was obtained from the neighboring semi-autonomously administered region of Puntland, nor Somalia, which is Party to CITES, but has been subject to a recommendation to suspend all trade since 2002.

3. Overview from the CITES trade database

3.1. CITES-regulated trade

3.1.1. Wild cheetahs

The cheetah *Acinonyx jubatus* has been listed on CITES Appendix I since 1975. When Namibia acceded to the Convention in 1990 it held a reservation for the species. As the delegation explained at the Eighth Conference of the Parties in Kyoto, Japan in 1992, attaching a commercial value to their populations was considered "as a prime means for the species conservation." (Com I.8.1 (Rev)). Namibia withdrew its reservation upon Parties

agreement to an Appendix I annual quota of 150 live animals and hunting trophies. Quotas were additionally granted to Zimbabwe (50) and Botswana (5). The Appendix I annotation notes that trade in such specimens is subject to the provisions of Article III of the Convention, essentially that permits are required both for party of import and export/re-export. Since 1992, no proposals have been submitted to the Conference of the Parties to amend these annotations. The cheetah is among only a handful of Appendix I-listed species to have a quota established through an annotation in the Appendices itself (for the Appendix-I listed species *Panthera pardus* (trophies and skins), *Diceros bicornis* (trophies) and *Capra falconeri* (trophies), for example, this is provided through dedicated Resolutions).

Table 1. CITES Trade Database Searches for Acinonyx jubatus	
Years: 1990-2012	
Gross Exports =total quantity (re)exported	
Gross Imports =total quantity imported	
Net Exports =the positive difference between total (re)exports (gross) and imports (gross)	,
Net Imports =the positive difference between total imports (gross) and (re)exports (gr	ross)
Net Exports – Source: Wild	
Net Exports – Term: Hunting Trophies	
Net Exports – Term: Live	
Net Imports – Term: Live; Source: Wild	
Gross Imports – Exporter: South Africa; Term: Live	
Comparative Tabulations – Exporter: South Africa; Term: Hunting Trophies	
Comparative Tabulations – Exporter: South Africa; Term: Live	
Comparative Tabulations – Confiscations/Seizures	
Table 2. Organizations contributing information to this study	
Action for Cheetahs – Kenya (ACK)	
Breeding Centre for Endangered Arabian Wildlife (BCEAW) (UAE)	
Cheetah Conservation Botswana (CCB)	
Cheetah Conservation Fund (CCF)	
Conservation of the Asiatic Cheetah Project (CACP) (Iran)	
DeCouvrir et Aider la Nature (DECAN) (Djibouti)	
Endangered Wildlife Trust (EWT) (South Africa)	
IUCN Species Survival Commission Antelope and Cat Specialist Groups	
Panthera	
Rangewide Program for Cheetah and African Wild Dogs (joint project of Wildlife Society and Zoological Society of London) (RWCP)	Conservation
Welthungerhilfe (Somaliland autonomous region of Somalia)	
World Customs Organization (WCO)	
World Wildlife Fund (WWF)	

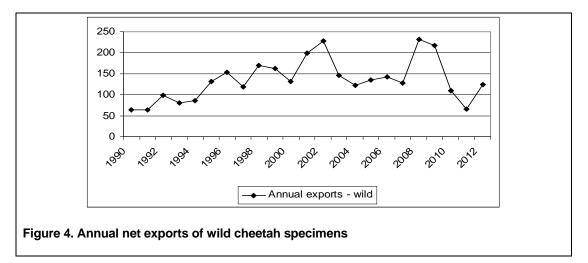
CITES annual report data from 1990-2012 was analyzed for an overview of legal trade in cheetah specimens (Table 1). The type of specimen most frequently exported is biomedical samples, demonstrating the relatively strong scientific research interest in this species, particularly in Namibia, responsible for more than 34,000 out of approximately 35,500 net exports of wild cheetah biological specimens. Animals are not generally removed from the wild for the purpose of obtaining such specimens, although to some extent trade levels do reflect such removals (e.g., trophy-hunted animals and "problem" animals live-trapped on farms: Namibia CITES MA *in litt.*

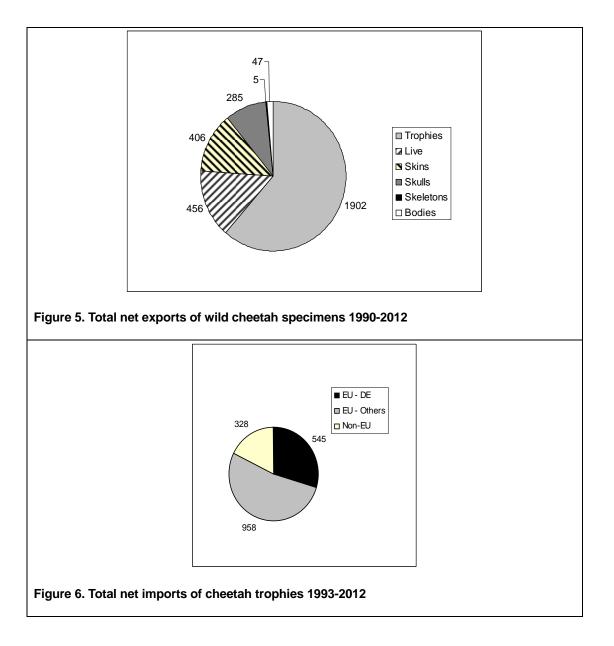
2014). This international movement of samples has helped monitor wild populations and provide a reference database with the potential to aid law enforcement through genetic determination of origin, and Parties are requested to streamline and facilitate permits for scientific research, following Namibia's example (Panthera, RWCP *in litt.* 2014).

Considering the other main forms of legal cheetah trade, total net exports have varied from over 50 to nearly 250 cheetah specimens per year (Figure 4), and averaged 153 over the decade from 2002-2011. Trophies have been the most frequently traded type of specimen (over 60% of total), followed by live animals, skins and skulls (Figure 5). The majority of trophies have been imported by member States of the European Union (82% of net imports) (Figure 6), with Germany being the main destination (CITES Trade Database; Namibia, Poland CITES MAs *in litt.* 2014). Namibia has been the major exporter, and will be discussed in more detail in the regional section on Southern Africa.

3.1.2. Cheetahs certified as captive-bred

The Appendix I quota for trade in live wild cheetahs was instituted in 1992 principally to give commercial value to a 'pest' species through trophy hunting, but also because cheetahs breed poorly in captivity (CITES Doc 8.22 [Rev]). Since that time, however, improved management and knowledge of cheetahs unusual mating and reproductive parameters (such as the finding that females are induced ovulators, stimulated by a specific male vocalization: Kaplan 2009) has led to greater success in captive breeding, although only in a few facilities (33 out of 241 facilities monitored by the International Cheetah Studbook) in the US, EU, UAE and South Africa (Marker 2012). The facilities that report breeding success are typically large, hold numerous animals and are not open for public viewing. They monitor reproductive parameters and have multiple large enclosures allowing for separation between the sexes and provide conditions similar to what cheetahs would experience in the wild (Bradford-Wright 2013). Probably the most successful facility has been South Africa's DeWildt (now Ayn van Dyk) Cheetah Centre, which has produced over 600 cubs in 30 years (Bertschinger et al. 2008). Still, success has been difficult to replicate: North American cheetahs have excellent genetic variation as well as housing and veterinary care, yet only 23 out of 111 females have had offspring (Leeds 2012), and in 2013 a national Cheetah Breeding Center Coalition was set up among nine facilities, with the aim of a sustainable zoo population of cheetahs within 10 years (SDZ 2013).



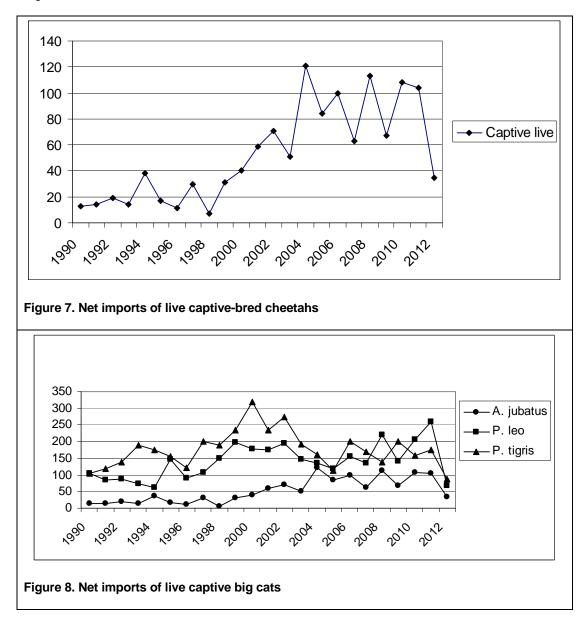


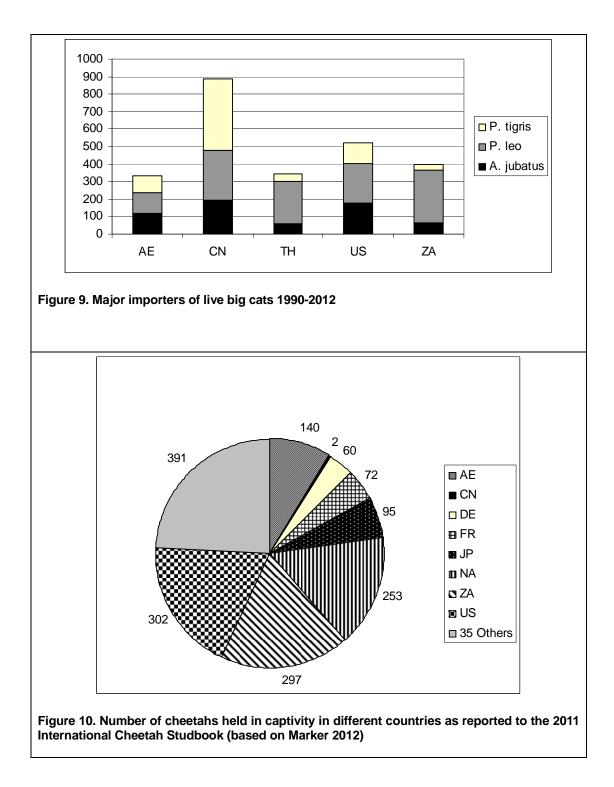
The number of live cheetah imports recorded as captive-bred has increased markedly over the last decade to an average of 88 per year (Figure 7). Article VII, paragraph 4, of CITES states that "Specimens of an animal species included in Appendix I bred in captivity for commercial purposes, . . . , shall be deemed to be specimens of species included in Appendix II". In Resolution Conf. 12.10 (Rev. CoP15) on Registration of operations that breed Appendix-I animal species in captivity for commercial purposes, the Conference of the Parties to the Convention has agreed to an interpretation of the provision, as follows: "Parties shall restrict imports for primarily commercial purposes, as defined in Resolution Conf. 5.10 (Rev. CoP15), of captive-bred specimens of Appendix-I species to those produced by operations included in the Secretariat's Register and shall reject any document granted under Article VII, paragraph 4, if the specimens concerned do not originate from such an operation and if the document does not describe the specific identifying mark applied to each specimen".

Article VII, paragraph 5, of the Convention relates to specimens of Appendix-I species bred in captivity for noncommercial purposes, and states that:

Where a Management Authority of the State of export is satisfied that any specimen of an animal species was bred in captivity or any specimen of a plant species was artificially propagated, or is a part of such an animal or plant or was derived therefrom, a certificate by that Management Authority to that effect shall be accepted in lieu of any of the permits or certificates required under the provisions of Article III, IV or V. In accordance with Article VII, paragraph 5, of the Convention, it is noted in Resolution Conf. 12.10 (Rev. CoP15) on Registration of operations that breed Appendix-I animal species in captivity for commercial purposes that the import of specimens of Appendix-I species bred in captivity not for commercial purposes that are covered by a certificate of captive breeding does not require the issuance of an import permit and may therefore be authorized whether or not the purpose is commercial.

South Africa has grown over the last decade to become the major exporter, but there are indications that wildcaught cheetahs may be illegally entering the captive export trade, which will be discussed in more detail in the regional section on Southern Africa.





Net imports of live captive animals are compared for three big cat species in Figure 8. Annual net imports of live captive cheetahs have risen in recent years to levels comparable with lions and tigers. Imports of the three species for five major importers are compared in Figure 9. No importer shows a strong bias for cheetahs in comparison to the other species, but the United Arab Emirates is notable for having imported roughly similar numbers since 1990.

Most major importers of live cheetahs have collections which contribute information to the International Cheetah Studbook, with the exception of China, which has a very low participation rate (Figure 10). The known global captive cheetah population (241 facilities in 43 countries) is 1,614 animals, and the total number is higher given that many captive cheetahs are not recorded. Namibia's large captive population consists mainly of cheetahs live-trapped and removed from the wild as problem animals (Marker, 2002 and 2012).

3.2. Illegal trade

Not all Parties include seizures and confiscations in their CITES annual reports (source code 'i'), and when they do, records are referring to illegal specimens that were confiscated upon import (rather than from domestic law enforcement action). The Standing Committee, with the assistance of its Working Group on Special Reporting Requirements, is considering appropriate means for collecting statistical information on illegal trade through the annual report. The US and UK (GB) have instituted regular reporting for a long period of time, and a selected range of their reported cheetah confiscations is shown in Table 3, along with others from a search of the CITES Trade Database. Skins and live animals were the most frequently encountered types of cheetah specimen in illegal trade.

Figure 11 shows that annual reported seizures in trade databases of skins and live animals generally amount to a fewer than five specimens per year. Few seizures of live animals have been reported until recently. Fifteen of the 20 live cheetah cubs seized by the UAE in 2010 were identified in the CITES Trade Database as originating from Somalia. Since not all seizures are reported, these figures could underestimate law enforcement effort as well as illegal trade levels.

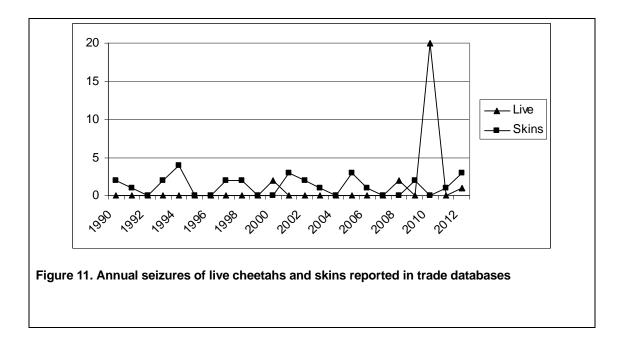
4. Regional trade assessments

Governments and cheetah specialists have worked together to develop four regional conservation strategies and programs (IUCN 2007a;b; IUCN 2012; ICS 2013). There are regional differences in the status of wild populations, and the character and regulation of legal and illegal trade. There are regional enforcement structures in place and in development to counter illegal trade – the Lusaka Agreement Task Force linking Eastern and Southern Africa, and Wildlife Enforcement Networks in the regions of the Horn of Africa (HA-WEN), West Asia (WA-WEN), Southern Africa (WENSA) and Central Africa WEN/Central African Forests Commission (COMIFAC). For each region, this study aims to determine the source of cheetahs in illegal trade, the trade routes of illegally trafficked cheetahs, and document the measures taken by Parties to deal with or dispose of live confiscated specimens. The regional assessments begin with East Africa, the region with the most evidence of illegal trade in live cheetahs.

Party reporting seizure	Live	Skins*	Skin Pieces	Skin products	Trophies	Derivatives	Pairs of Shoes
UK**	3	6			2		
US		13	65	5	3	6	1
UAE	20						
Kuwait	2						
Other EU**		9		3	3		
Totals	25	28	65	8	8	6	1

*Skins: A 2000 entry from China of 146 cheetah skins seized from Hong Kong was not included as it seemed a possible recording error. **UK and Other EU: includes seizure data for EU countries 2011-2013 from the Customs Enforcement Network database (WCO)

A comparative tabulation was cleaned to indicate only seizures on import, rather than re-export, for educational or scientific purposes, of seized items. For example, live cheetahs of confiscated origin were exported from the UAE to zoological facilities in Morocco and Greece in 2011; such records are not included in the table.



4.1 East Africa

4.1.1. Cheetah status and trade impact

The region holds 15 known cheetah populations, with an estimated total of approximately 2,500 adults, although only five populations are considered large (approx 200) (Figure 12). There are large areas where cheetah range and status are unknown (CAR, Eritrea, Somalia, and Sudan, and parts of Chad, Ethiopia, Kenya, South Sudan and Tanzania), but they are considered unlikely to hold significant populations. The evidence from countries with relatively complete information (Burundi, Ethiopia, Kenya, Rwanda, Tanzania and Uganda) suggests that a marked contraction in the cheetah's geographic range has occurred (IUCN 2007a).

There is essentially no legal trade from countries in the region recorded in the CITES trade database. In the region, only South Sudan is not yet Party to CITES. Somalia has been subject to a recommendation to suspend all trade since 2002. Somaliland does not have facilities for housing confiscated animals, and has exported cheetah cubs to a rescue center in neighboring Ethiopia (Born Free 2011, 2012a-b).

Illegal trade in live animals, as well as skins, was flagged as an important threat to the cheetah by many countries in the region during consultative conservation and law enforcement exercises (Table 4).

4.1.2. Illegal trade in live wild cheetahs

Illegal shipment of live wild cheetah cubs out of the Somali region by boat and by air across the Gulf of Aden to the Arabian peninsula was known to be happening in relatively large volume 10-15 years ago. Five cheetah cubs were rescued from illegal trade in Djibouti by the founder of the DECAN Cheetah Refuge in 2000-2002 (Lawrence 2011). In 2006, in one of the few reports on wildlife trade in Somalia, Amir (2006) noted that from his surveys of markets around the Mogadishu region, that live cheetahs were "particularly sought after," and reported that one cub fetched a local price of US\$1,000.

In the UAE, a six-week old cheetah cub reportedly fetched US\$3,000-\$5,000 (de Haas van Dorsser 2002, Garstecki 2006). From 1998-2002, 39 young cheetahs, identified primarily as originating from Somalia, were confiscated at the Sharjah airport by Customs and relegated to the Breeding Center for Endangered Arabian Wildlife, which has since become one of the world's foremost skilled at breeding cheetahs in captivity. The Center still receives young confiscated cheetahs annually from government authorities, but the numbers have decreased sharply over the past decade, suggesting that illegal imports to that country may have declined (BCEAW *in litt.* 2014), possibly linked to recent legal imports of captive-bred cheetahs from South Africa. Still, recent UAE seizures of cheetah cubs remain significant compared to other countries (Table 3 and Figure 17).



Figure 12. Cheetah resident range in Eastern Africa 2010 (RWCP *in litt.* 2014), and estimated population sizes (reproduced from IUCN 2007a)

Table 3.2 Areas in eastern Africa considered by participants to support resident cheetah populations. Population estimates are derived from a number of different methodologies and have a very wide margin of error. Locations are shown in Figure 3.5.

Name	Country	Trans- boundary?	Area (km²)		Population estimate (adults)	
		boundary ?	Total	Protected	Total	Protected
Afar	Ethiopia	no	4,073	997	40*	10:
Blen-Afar	Ethiopia	no	7,342	6,497	70*	60
Ogaden	Ethiopia	no	11,095	0	110*	0
Omo Mago/Borena	Ethiopia	possibly	25,010	17,281	250*	170
Yangudi Rassa	Ethiopia	no	2,768	2,768	30*	30
Laikipia/Samburu	Kenya	no	47,390	2,074	450†	20
Badingilo NP	Sudan	no	7,482	1,266	70*	12
Boma NP	Sudan	possibly	19,294	13,106	190*	130
Kidepo-Uganda	Uganda/Sudan	yes	3,332	833	12†	3
Radom NP	Sudan	possibly	6,122	3,491	60*	30
Southern NP	Sudan	no	12,973	9,629	130*	100
Katavi-Ugalla	Tanzania	no	20,917	9,163	150*	90
Maasai Steppe	Tanzania	no	17,743	3,222	100*	30
Ruaha	Tanzania	no	26,530	20,040	200†	150
Serengeti/Mara/Tsavo	Kenya/Tanzania	yes	98,616	36,177	710†	260
	310,687	126,544	2,572	1,095		

†population sizes estimated by delegates using a variety of methodologies; ‡sizes of protected populations estimated by multiplying total population size by the proportion of total land area falling inside protected areas.

Moreover, recent records of illegal trade from the Somali regions indicate that the problem of cheetah cub smuggling persists, and at a level apparently higher than any other part of cheetah range, based on confiscations and observations of illegal trade. The Cheetah Conservation Fund (CCF) has compiled records of

confiscations (many arranged through cooperation between national authorities and conservationists) as well as of illegal trade. Earlier records are scarce, and likely to reflect an absence of active trade monitoring efforts rather than an absence of trade. Verified records are those in which NGOs observed and/or facilitated the disposition of animals (most were photographed, e.g. Figure 16), whereas reports of illegal trade were communicated by others to researchers. In recent years, particularly in the semi-autonomous region of Somaliland that borders the Gulf of Aden, there are numerous verified confiscations, totaling 43 animals in the period 2011-2013 (Figure 13), as well as many more observations and reports of illegal trade in live cheetah cubs (Figure 15). The number of reported cases of illegal trade indicates significant market interest in the species. A high mortality rate for the young animals is evident from the known outcomes of confiscations (Figure 14 and 16).

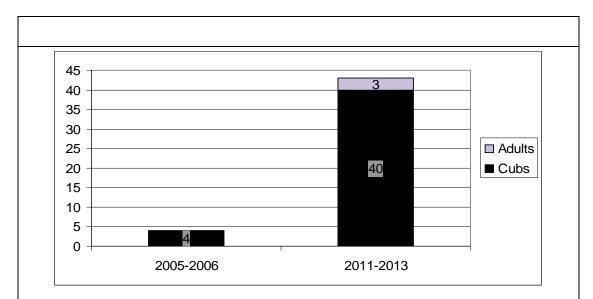
While Somaliland appears to play the most active role in the illegal export of live cubs, the source of these animals is unverified (although genetic analysis of confiscated animals could provide some insight [CCF *in litt.* 2014]). Ethiopia is most frequently mentioned as the origin, but it is probably a transit route from Kenya as well (Welthungerhilfe *in litt.* 2014), There is little cheetah breeding in the region and the animals are likely to have been collected from the wild. Cheetah mothers do not defend their cubs as some other larger predators might, and the most likely method of obtaining cubs is through opportunistic tracking or sighting the mother's movements and snatching them when they are too young to flee.

While researchers in Kenya did interview a pair of men in the ethnic Somali Garissa region of Kenya who claimed to specialize in tracking and monitoring the movements of cheetah mothers (ACK *in litt.* 2012), it is unlikely that there are many specialized hunters for live cubs, but more likely wild animal traders who have communicated their interests to pastoralist communities. Traveling around Kenya on a national cheetah survey in 2004-2007, researchers were approached by "many people" offering to collect cubs from the wild, not understanding the nature of the researchers' interest. Cheetah cubs (and other orphaned young predators) are still confiscated regularly enough in Kenya so that a specialized rehabilitation facility for them has been approved by the Kenya Wildlife Service (ACK 2012).

Confiscations in Ethiopia en route to Somaliland (Mesfin 2011), as well as information gathered by trade monitors (CCF *in litt.* 2014), indicates that many cheetah cubs leaving Africa via Somaliland did not originate there. Conveyance methods out of Ethiopia have included both vehicle and camel (CCF *in litt.* 2014). It appears that Somaliland middlemen are primarily obtaining cheetah cubs from a network of ethnic Somalis in Ethiopia and Kenya, and their contacts extend into Tanzania, although small cubs would be unlikely to survive that extended journey (Welthungerhilfe *in litt.* 2014). Three live cheetahs confiscated in Tanzania were adults, held in captivity for probable sale in the city of Arusha, and all three were later rehabilitated and released back into the wild (ZSL 2011).

Osman (2006) observed that most live animals left Somalia by air, and this continues, as evidenced from the 2010 confiscation of 15 cheetah cubs (11 of which subsequently died), from two Emirati and one Somali national at the Dubai airport (Todorova 2010). But the more common route for cheetah cubs to reach the Arabian peninsula from Somalia is also the more traditional, by boat, one common type being the dhow, a cargo-carrying vessel employed around the Indian Ocean and Arabian Sea for more than 500 years.. In his paper, "The geography of present-day smuggling in the western Indian Ocean: the case of the dhow," Martin (1979) documented extensive unregulated movement of people and goods between East Africa and the Arabian peninsula. This continues today, with a wide range of boats and a wide range of cargoes (Sheffer 2013, Welthungerhilfe *in litt.* 2014).

Table 4. Countries in East Africa which have recently flagged illegal cheetah trade as a threat						
Country	Regional cheetah conservation strategy	National cheetah action plan	2012 Horn of Africa Wildlife Enforcement Workshop/2013 CITES COP16			
Djibouti	Х	N/A	Х			
Ethiopia	Х	Х	Х			
Kenya	Х	Х	Х			
Somaliland/Somalia	Х	N/A	Х			
South Sudan	Х	Х	Х			
Sudan	Х	N/A	Х			
Tanzania	Х	Х	N/A			
Uganda	Х		Х			



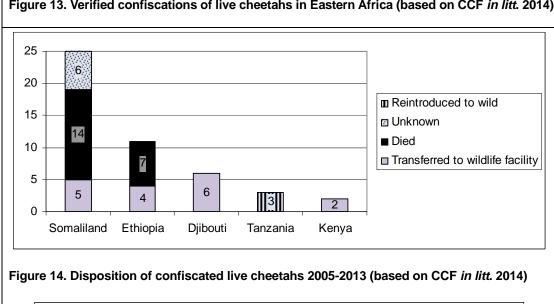
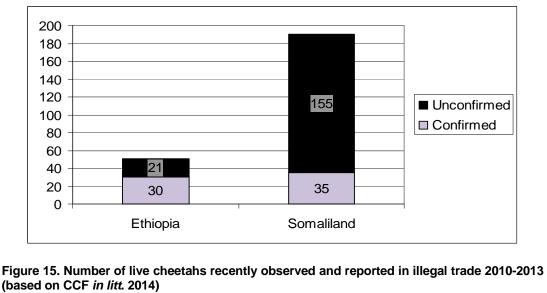
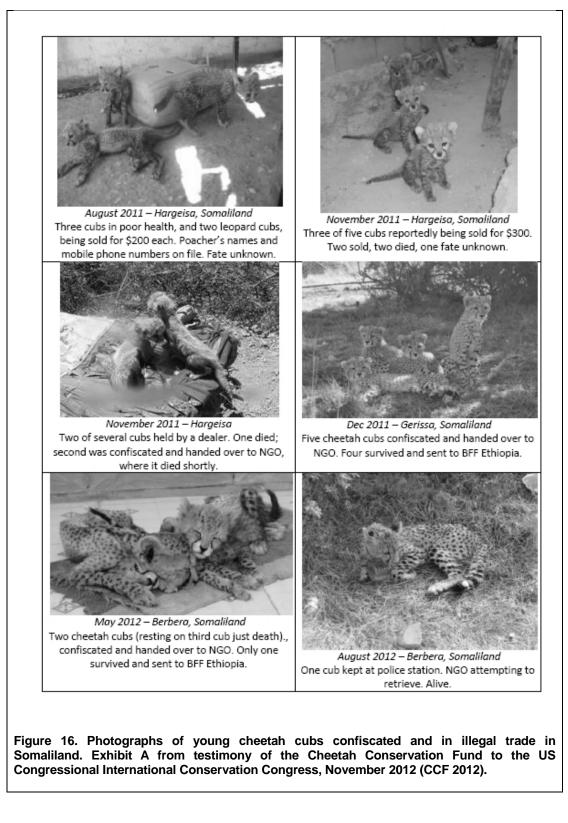


Figure 13. Verified confiscations of live cheetahs in Eastern Africa (based on CCF in litt. 2014)





Yemen is now home to a large Somali refugee population, and its southwestern coast is as little as 30 km from the African continent. A year-long investigation there by journalists documented cheetah cubs, along with other live African wildlife, being smuggled by boat out of Somaliland, through Yemen, and up the coastal road to the border crossing with Saudi Arabia (Sheffer 2013, Sheffer and Kennedy 2013). Illegal trade in cheetahs (and other African wild animals) is opportunistic and low-volume compared to other types of smuggling activity in the region. Still, it is apparently profitable, comparing prices from observations of cases of illegal trade along the trade chain (Table 5).

While few people have had the opportunity to contact or question those involved in the illegal cheetah trade out of East Africa to the Arabian peninsula, one newspaper journalist located, interviewed and quoted a 27-year-old UAE national from Abu Dhabi who is known to sell cheetahs illegally in the Gulf states:

"These cheetahs are mainly exported from African countries to Somalia. From there, they are exported to Yemen and then it is smuggled into the UAE from Saudi borders. This is done by highly experienced people who have been doing this for a very long time. We buy these cheetahs which are aged about one month old for Dh15,000 (US \$4,084). Then, we sell each between Dh35,000 to Dh40,000 to buyers (US \$9,529-\$10,890). The price can go higher depending on the quality of the cheetahs and the buyers. Many of these cheetahs die on the way from Africa to the UAE due to the bad transportation methods used while moving them from one place to the other. At the end, only 10 to 15 cheetahs survive and this is what we get. The demand on these cheetahs is very high as they are very popular pets for many rich individuals in the GCC. We keep them in our farms for a month till we get the buyers. These are mainly wealthy individuals who like keeping such pets at their farm houses or villas" (Ahmed 2010).

Numerous online news articles and social media posts attest to the popularity of cheetahs, along with other big cats and exotic animals, as pets in the Gulf States (Table 6). The news articles shown in the table are all unique, not repetitive of the same incident. Such incidents include escaped cheetahs, one of which pounced on seven campers in a tent and bit one of them on the back of the neck one night in Kuwait before it was fetched by its owner (Aziz 2013). Each year from 2010-2012 authorities in the UAE had to capture escaped pet cheetahs after being alerted by the public; all three animals that were involved in these incidents were young adults less than 20 months old (Huang 2010, El Shammaa 2011, Salem 2012). In Saudi Arabia an escaped cheetah was shot by police (Khan 2011).

Most articles in Table 6 are from UAE newspapers, although every Gulf state is represented. There are hundreds more social media posts, including photos and videos of owners with their cheetah pets, and images taken by passersby of big cats cruising in cars or being walked on leash (Figure 17). A Dubai Men's College student documentary visited exotic cat owners in the UAE, and the filmmaker said, "The idea of making the film came from the phone as pictures of exotic cats are being exchanged all the time. So I wondered who these people were and where the animals came from" (DMC 2012). "The number of big cats has definitely been increasing and cheetah is the largest population we're dealing with," one veterinarian told an Abu Dhabi newspaper (Simpson 2012).

Veterinarians in the region have reported seeing numerous young cheetah cubs, many of them gravely diseased or ill (Lloyd 2007, CCF *in litt.* 2014, Table 6). In 2007 one veterinarian in Saudi Arabia told reporters she estimated she had seen 100 cheetah cubs on separate occasions over a six month period (Anon. 2007). Dubai's Central Veterinary Research Laboratory carried out post mortem examinations on 58 large felines in 2011-2012; samples from 22 cheetahs were analyzed for parasitology and 11 were mounted by the taxidermy department (CVRL 2012) (not all cheetahs were from private owners; some came from zoological facilities [CCF *in litt.* 2014]). The main reasons for death were cited as inappropriate diet and ethylene glycol poisoning, presumably from accidentally drinking antifreeze fluid (Simpson 2012). Staff at one clinic in the UAE estimated that most young cheetahs survive just 3-4 months in private hands (CCF *in litt.* 2014).

Table 6. Recent news articles on cheetah and exotic pets in the Gulf States

Ahmed, M. 2010. Huge market for smuggled cheetahs: Filthy rich like to show off the dangerous pets. Emirates 24/7, 14 Oct

Almazroui, A. 2012. Keeping a big cat at home isn't cool; it's just plain cruel. The National, 24 November.

Anon. 2012. Cheetah smuggling soars in Kuwait. Kuwait Times, 30 October.

Anon. 2013a. Keeping wild animals as pets has become a menace in UAE: Lion, cheetah and tiger cubs are in high demand, fetching Dh15,000-Dh50,000. Emirates 24/7, 14 May.

Anon. 2013b. PHOTOS; Cheetah for sale in Qatar (sold). Doha News, 24 January.

Anon. 2013c. 37 smuggled lions and tigers seized. Arab News, 7 March.

Anon. 2007. Wild practice. Saudi Gazette, 16 Sept.

Anon. 2006. Gators and tigers add to your stature. Arab News, 19 Mar.

Aziz, Al Anzi. 2013. Fright night in Almtalaa: Cheetahs storms the tent of seven youth. Al Rai (Kuwait), 17 February (in Arabic).

Das, R. 2014. Trainer's call of the wild: huge demand to train cheetahs and leopards in the Gulf region. Times of Oman, 15 Feb.

DMC. 2012. DMC students shine at Gulf Film Festival with exotic cats documentary. Dubai Mens College, 11 April.

Eipe, NZ. 2012. Illegal. Exotic. Blatant. JustHere Qatar, 8 February.

Elwazer, S. 2012. Lions, tigers become problem pets in the Gulf. CNN, 4 April.

Fattahova, N. 2013. Kuwait develops taste for wild, wild animals – Buying, breeding illegal wildlife on the rise. Kuwait Times, 28 Aug.

Leate, F. 2013. A clamp on animal trade is pledged.

Marker, L. 2013. Ending the illegal pet trade in cheetahs. Huffington Post, 1 March.

McLain, S. 2011. Exotic animals are not your pets. The National, 4 June.

Neild, B. 2010. Gulf cheetah panic spotlights illegal animal trade. CNN, 30 Dec.

Nye, J. 2013. The rich guys of Instagram show off their 'ultimate status symbols' ... big cats: How mega-wealthy Arab men are accessorising their supercars and powerboats with lions and cheetahs. Daily Mail, 17 November.

Ponce de Leon, J. 2013. Fight illegal trade by refusing to buy exotic pets. Gulf News, 3 Dec.

Sheffer, J. 2013. Lion breeder in Yemen cashes in on Gulf demand for exotic pets: Conservationists criticize flourishing trade in animals bound for private collections in Saudi Arabia, Qatar and the Emirates. The Guardian, 3 Feb

Sheffer, J. and Kennedy, T. 2013. Yemen: Arabia's wildlife supermarket. Al Jazeera, 13 August.

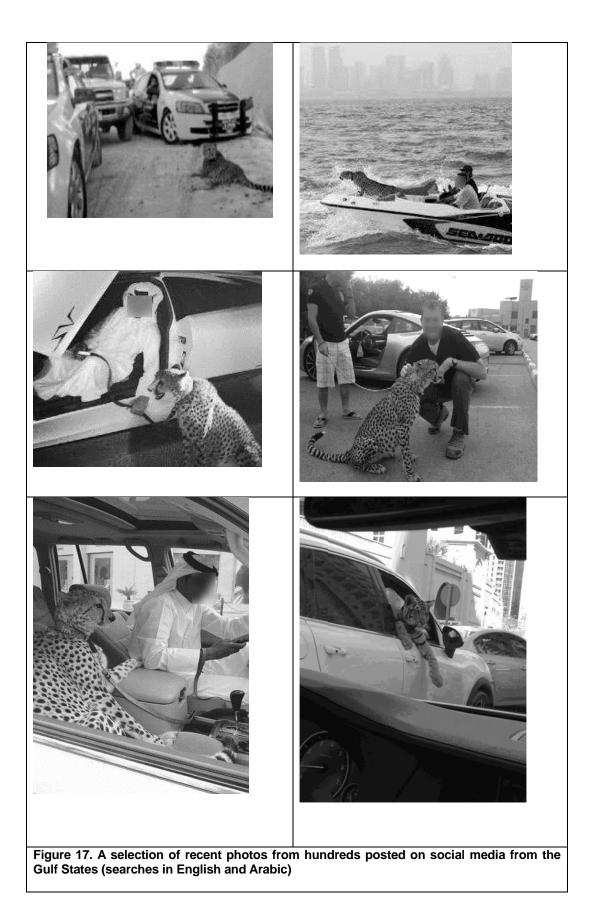
Simpson, C. 2013. Illegal wildlife trade in big cats is thriving on UAE websites. The National, 12 Feb.

Simpson, C. 2012. More big cats being imported to UAE. The National, 28 January.

Toumi, H. 2013. Lion caught roaming Kuwait streets. Gulf News, 8 Sept.

Townson, P. 2009. Qatar: Growing number of cheetahs kept as "pets." Gulf Times, 8 July.

York, G. 2011. War-torn Somalia serving as transit route for wildlife smugglers. The Globe and Mail, 24 May updated 24 Aug 2012.



Still, many have survived to adulthood and are obviously treasured by their owners, some going to great lengths to ensure them a comfortable existence. A recent article in the Times of Oman interviewed an Indian animal trainer, and included a photograph of him with one of his cheetah subjects. He said he had nine recent requests from Oman to train cheetahs and leopards, and had previously worked with privately held cheetahs in Bahrain. He said owners want their pets to behave well in front of their relatives and friends, and also to be able to take them along on trips to the desert. He advised them to get treadmills to keep their cheetahs fit (Das 2014).

Cheetahs are seen in social media postings inside homes and playing roughly with young children. The keeping of big cats in residential areas across the Arabian peninsula poses serious environmental and safety risks, both to people as well as the cats. It poses concerns for the welfare of both human and animals, threatens wild populations (both source populations and the endemic species of the region), and risks disease (Mohamed 2013). The editor of *999*, the English language magazine of the UAE Ministry of Interior, launched a recent investigation of the black market trade in exotic pets, and said, "Wild animals belong in the wild. They do not belong in an SUV cruising down city roads; they do not belong in a confined space where they become depressed and aggressive; and they certainly do not belong on the streets, where they could end up if their owners leave them to starve. Unfortunately, they serve as status symbols for some people. These exotic pet owners do not realise that they are putting city residents in danger and also contributing to the illegal trade in wildlife. We encourage everyone to report wild animal sightings in UAE cities so that we can all help to put an end to this social menace." (Anon. 2013b)

Journalists have interviewed some owners who are well aware that their young cheetah was smuggled in illegally, as they found their cub through personal contacts (e.g., Anon. 2012). Finding a cub for sale is not necessarily a difficult process; the 999 magazine investigation found a cheetah cub for sale within 18 minutes of looking, by asking a person selling parakeets in a souq (Anon 2013b). From 2012-2013 the Cheetah Conservation Fund in Namibia dissuaded nearly ten separate inquiries sent by email from people around the Arabian peninsula seeking to purchase or care for cheetah cubs (CCF *in litt.* 2014).

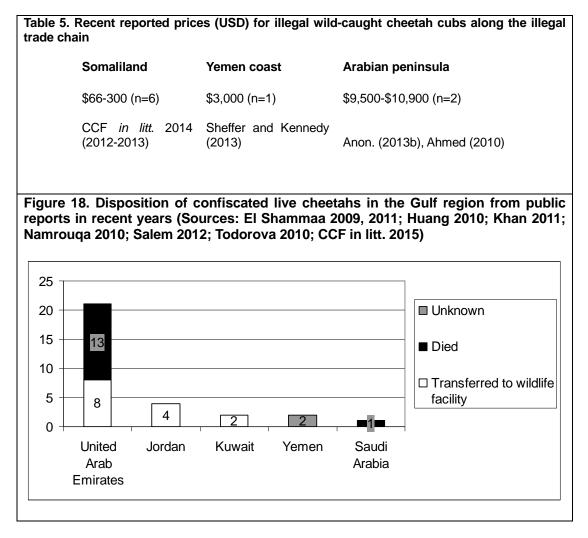
Cheetah cubs and other exotic animals are openly advertised on regional e-commerce websites, although some administrators try to remove any ads for exotic animals (e.g., Dubizzle: Croucher 2011). A one-month survey by IFAW found nearly 800 live animal advertisements, with just a fifth claiming to have necessary legal documents. Many said the animals were captive-bred, such as this posting on a Dubai classified ads site: "We are a breeder of a wide variety of exotic animals such as cheetah cubs, cougar cubs, jaguar cubs, leopard cubs, black panther babies, lion cubs, yellow and white Siberian tigers and Bengal tiger cubs," (Simpson 2013). Some advertisers say they are based outside the region, such as two companies supposedly based in Cameroon which answered a Bahraini reporter's request to obtain exotic big cat cubs (Leate 2013). Research has turned up a number of ads in the region connected to South Africa as well (Marnewick 2012). More detailed investigation is required to determine if animals advertised or the companies that advertise them actually exist.

Figure 18 shows disposition of confiscated live cheetahs as gathered from recent news reports. Some of the seizures took place during transit (15 cheetah cubs seized in Dubai from a flight from Somalia - Todorova 2010 and 4 cheetah cubs seized from a car at the Jordan checkpoint on the border with Saudi Arabia, reportedly en route to Syria: Namrouqa 2010), but most represent domestic confiscations by authorities. These publicized reports understate the interdiction level; for example, one observer reported that Saudi Arabia has confiscated a "substantial" number of cheetahs in the last four years (BCEAW *in litt.* 2014). Dubai Customs told participants at the 15th annual Arabian Biodiversity Conservation Workshop in February 2014 that they had just confiscated seven young cheetahs, and transferred them to several wildlife facilities (IUCN *in litt.* 2014).

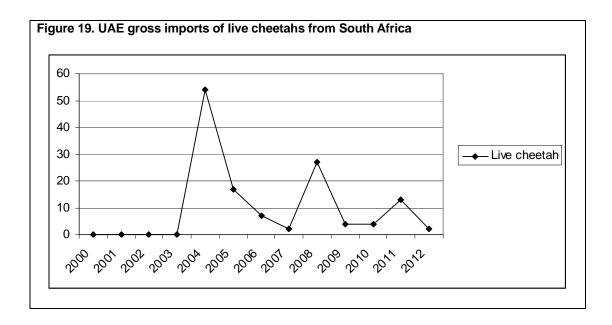
Longtime observers of the trade in the UAE believe that levels, at least in that country, have declined sharply since 2005, and that at least part of the domestic pet cheetah population market consists of locally captive-bred cheetahs of South African origin (BCEAW *in litt.* 2014). The UAE imported 76 cheetahs from South Africa as captive-bred animals from 2005-2012 (Figure 19); a large proportion of these went to one facility in 2005, Al Bustan Zoological Centre, which participates in the international cheetah studbook and has since seen 68 births (deKock 2012, CCF *in litt.* 2014). Most import transactions shown in Figure 19 were recorded as mainly for zoological and breeding purposes, but from 2008-2012 more than 30 South African captive cheetahs were imported to the UAE for personal purposes, suggesting that at least some of the privately-held cheetahs there were acquired legally. However, this route to ownership is now closed, as the UAE banned the import of cheetahs and other big cats except to licensed facilities in a ministerial decree in July 2012 (Simpson 2013).

Very few imports of captive live cheetahs are reported in the CITES Trade Database for the remaining Gulf states.²

This study found several examples of efforts to reduce demand for big cats as pets. Some newspaper columnists have written opinion pieces (e.g., "Keeping a big cat at home isn't cool, it's just plain cruel": Almazroui 2012), and the International Fund for Animal Welfare has started a campaign with an initial focus on the dangers such pets pose to children (Mohamed 2013). Demand reduction approaches could include working with cultural and religious leaders. For example, in 1992 the Grand Mufti of Yemen issued a proclamation (fatwa) against the use of rhino horn (for traditional dagger handles, supplied by illegal international trade). This edict formed an important part of a rhino horn demand reduction and educational awareness campaign launched at several zoos around the country (Vigne and Martin 2008). An approach for the cheetah could be complicated by the ancient tradition of hunting and reference to it in the Qur'an. Two online issuers of fatwas considered the question of whether the eating of meat from an animal killed by one's hunting cheetah is in conformity with Islam, and were of divided opinion (Questions 2028 and 2031 on Islam-Wa-Sunnah.com Fatwa site). However, although hunting gazelles with cheetahs is still practiced today (as evidenced by photos and videos posted on social media), the main demand for the illegal cub trade is as exotic pets, and it is on this aspect that demand reduction efforts should focus.



² Bahrain (2012) and Oman (2008) joined CITES relatively recently; the other four Gulf states have been Party and reporting trade for at least the past 12 years.



This study was not able to obtain detailed information on regulation of captive cheetah (and other big cat) national trade and ownership outside licensed zoological facilities in the Gulf states, but from public information (including statements of officials to journalists) it appears to be largely illegal or in the process of becoming so (Eipe 2012, Anon. 2013b,c,d; Leate 2013, Simpson 2013, Das 2014, Fattahova 2014), Ajman, one of the seven constituent emirates of the UAE, has taken the definitive legal step of prohibiting possession of all wild animals and reptiles in homes, apartments and hostels. Ajman's Executive Director of Health and Environment told a reporter that the new Law 54 was passed following surveys carried out by the department and complaints received by citizens and residents, and anyone in violation would receive "a penalty of 10,000 Dirham (or \$2,720) and the animal will be transferred to a zoo or reserve park." He added, "Ajman is the first to pass such a law.We hope that others will do the same" (Laylin 2012). Another article on a new animal welfare law enacted in Saudi Arabia referred to official statements that a cooperative approach among Gulf states was being taken with others considering adoption of similar legislation (Anon. 2013d). Such a cooperative approach could also be considered to tackle the region-wide problems of uncontrolled keeping of and trade in big cats, as policies and practice have been insufficient to deter the spread of illegally imported wild cubs. Authorities should implement measures to ensure that their national policies regarding ownership and trade in big cats support the effective implementation of the Convention.

4.1.3. Illegal skin trade

In the Sahel region, from Algeria (Belbachir in prep.) to Sudan in particular, cheetah skins have been prized for making traditional men's slipper shoes, known as markoob in Sudan. Most are made of ordinary shoe leather, but exotic species, particularly python and spotted cat are valued as luxury items (IUCN Antelope SG, Loro and Seme 2012). Leopard or cheetah markoob might cost up to \$250, and as formal footwear for ceremonial occasions like weddings this practice is "deeply rooted in Sudanese culture," (Sudan CITES MA *in litt.* 2014). This is illustrated as well by a 50-year old leopard markoob in a shoe museum, and a painting, posted on Instagram, of a traditionally dressed man with his spotted cat slippers (Figure 20). That there is a certain appreciation of cat skin markoob is reflected in this recent web blog comment (2011): "I would not give [you] so much as a cat, for a cat's skin may be used to produce markoob." While perhaps demand for cat markoob is largely restricted to older men of means (perhaps 1-2% of the population) (Sudan CITES MA *in litt.* 2014), other photos posted on social media show young men in stylish Western dress "representing" with their python markoob, indicating that demand for these shoes may come in several flavors.

Another social media post contained a plea from a local Sudan resident for a campaign to halt the practice of wearing shoes made from endangered species skins (and in fact the Sudan CITES MA [*in litt.* 2014] reports that national environmental societies have done a lot to raise awareness on this issue). The accompanying photo from the concerned citizen, though, appeared to include fake rather than real spotted shoes. Fakes were frequently seen in online photos of shoemakers in Khartoum. Some shoes, however, appear genuine (Figure 20).

In South Sudan, both fake and real cheetah skins have been seized (Figure 20), along with leopard skins. Interviews with rangers, police and locals around South Sudan's Badingilo National Park indicated that most

considered the demand for markoob to be a strong incentive driving local cheetah poaching, with skins being transported north to Sudan (Loro and Seme 2012).

Python and leopard shoes, and one cheetah skin, were among recent violations presented at the Horn of Africa Wildlife Enforcement workshop by the delegation from Sudan (Mahgoub 2012). Sudan's CITES Management Authority (*in litt.* 2014) reports that rangers are finding it more difficult to confiscate shoes made from protected species because shop keepers are more wary about displaying them.

Elsewhere in the region, spotted cat skins have been part of traditional ceremonial wear for many ethnic groups, but there are few observations of illegal skin trade, or confiscations. In 2005, researchers observed several cheetah and leopard skins recently confiscated in Kenya near the border with Tanzania, where the skins were believed to have originated (ACK *in litt.* 2012). A cheetah skin recently confiscated in Uganda, near the resident cheetah population in Kidepo National Park, is believed by authorities to be about ten years old (Uganda CITES MA *in litt.* 2014).

Figure 20. Spotted cat skins are valued for traditional men's shoes (markoob) in Sudan



A painting posted on Instagram from Sudan and tagged #markoob (June 2013). The man's slipper shoes in the painting's center are yellow and spotted.



Confiscated cheetah skin (2011) at South Sudan CITES Management Authority headquarters in Juba (RWCP *in litt.* 2014)



A leopard markoob shoe from Sudan, 1960, in the Bata Shoe Museum in Toronto, Canada



Possibly genuine cheetah markoob, posted on a Sudanese social media site, June 2013

4.2. North, West, and Central Africa

4.2.1. Cheetah status and trade impact

Cheetahs have largely been extirpated from this region (Figure 1), and range countries are concerned that illegal trade, although seldom observed, has the potential to pose a serious threat to those that remain. There are only five known cheetah populations, with an estimated total of approximately 450 adults, thinly distributed over arid desert and savanna regions (Figure 21). While there are large areas of unknown range (including Libya, northern Niger, Chad and Central African Republic), they are unlikely to hold significant populations. The evidence from countries with relatively complete information (Mali, Algeria, Nigeria, Burkina Faso) suggests that a marked contraction in the cheetah's geographic range has occurred (IUCN 2012).

All countries in this region are Party to CITES, and since 1990 very few exports of any type of cheetah specimen have been recorded in the CITES Trade Database.

Illegal trade was treated as a leading threat to the cheetah in the regional conservation planning process: "Cheetah in this region are reported to be hunted for their fur, for cultural purposes, and for the live animal trade. Although there are no data on the magnitude of this threat, the small sizes of cheetah populations in this region, and the relatively large proportion of participants who considered this factor a likely threat, suggest that such hunting may well raise serious concerns." A key objective of the regional cheetah strategy is "reducing the pressure of illegal offtakes" (IUCN 2012). At the regional strategy workshop the government representative of Niger voiced strong concern about skin trade (to Nigeria) and for medicinal use, and controlling illegal trade is a key objective for the PAPE project supporting the W Park Complex, which holds West Africa's only known cheetah population (Figure 21) (RWCP *in litt.* 2014).

4.2.2. Illegal skin trade: North Africa

In the Sahel region of North Africa, (Lhote 1946, DeSmet 2003) cheetah skins have been used for many years for a variety of purposes: as rugs and prayer rugs, decorative hangings, ornamental camel saddle pads, and slippers. No current information was found for other countries, but in Algeria (home to the largest population in the region (Figure 21), cheetah skin pieces are also valued in local folk medicine around the Ahaggar Cultural Park (as protection against "the evil eye"). Interviews with local men there who had actually hunted cheetahs in the past indicated that they were motivated by a perceived need to protect livestock, rather than for skin trade per se. A few cheetah skins have been observed for sale in the market in Ghardaïa (northern Algeria), but the origin is not known and they could possibly have been smuggled in from neighboring countries. Skins have not been seen in the market in Tamanrassat, the largest town near the wild population, and there are no known incidents of live capture of wild Algerian cheetahs for illegal trade. Illegal trade does not appear to be the leading threat to the cheetah in this part of the region, but with numbers so low and thinly distributed it remains an area of concern (Belbachir in prep.).

4.2.3. Illegal skin trade: West and Central Africa

Although rarely encountered in the market due to the cheetah's rarity in the region, skins appear to be the main type of cheetah product in illegal trade. Demand does not seem species-specific; rather cheetah skins feed into a generalized market for "leopard," "panther" or otherwise spotted skins. Whole skins of leopard and cheetah can be distinguished with some elementary training, but skin pieces can be more difficult and positive identification would require the use of forensic techniques such as genetic analysis or hair microscopy.

Spotted or big cat skins are in demand whole (eg.,as in the ones photographed for sale in Conakry, Guinea in February 2009: Figure 22) for decorative or ceremonial purposes, in pieces for garments and accessories (shoes, bags, and garment trim) as well as for use in traditional medicine, or *médico-magiques*. This encompasses a range of practices from medical (seeking to cure a physical ailment) to the spiritual and mystical. Researching the range of traditional, medical and magical uses for large carnivore parts in Benin, where cheetahs are rare, Sogbohossou (2006) found many reported uses for lion skins and bone but was able to document only one use for a cheetah part: its anus will purportedly attract the man or woman of the user's desires.

In West and Central Africa, medicinal demand for big cats is centered on the lion. One survey, carried out around Nigeria's Yankari National Park, found more than 22 lion parts considered of medicinal value, with most of the over 200 interviewees saying they had used lion parts in the past, and half within the past three years (Born Free Fdn 2008). This medicinal demand for lion parts has a similar dynamic to the tiger parts trade in

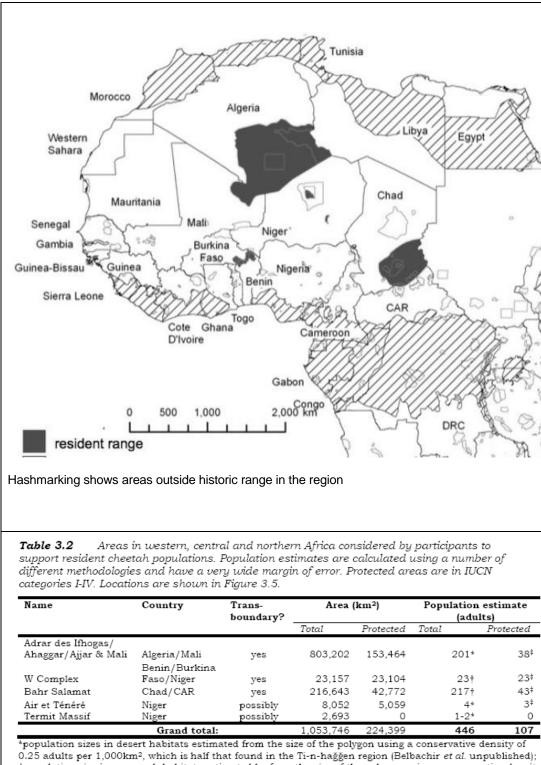
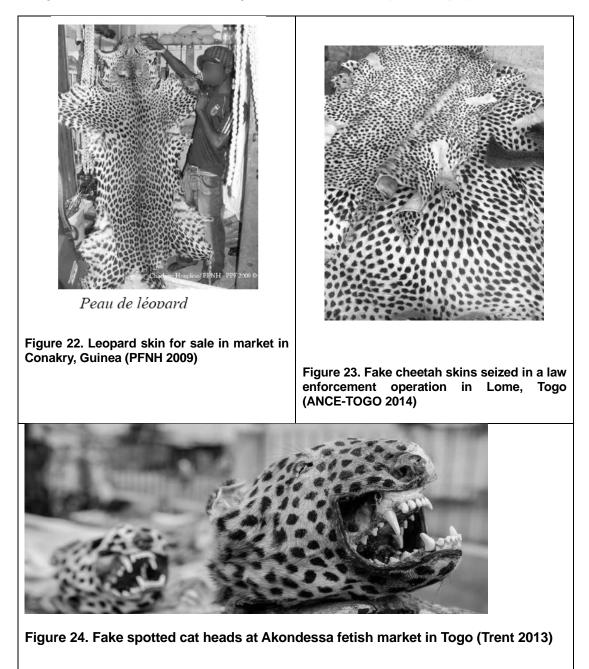


Figure 21. Cheetah resident range in North, West and Central Africa, and estimated population sizes (reproduced from IUCN 2012)

^{*}population sizes in desert habitats estimated from the size of the polygon using a conservative density of 0.25 adults per 1,000km², which is half that found in the Ti-n-hağğen region (Belbachir *et al.* unpublished); †population size in savannah habitats estimated by from the size of the polygon using a conservative density of 1/1000km²; [‡]sizes of protected populations estimated by multiplying total population size by the proportion of total land area falling inside protected areas. Asia – other threatened big cat species (in this case leopards and cheetahs) are drawn in as alternatives or substitutes.

Also similarly, fakes are frequently observed by and reported to researchers (Panthera, RWCP *in litt.* 2014). For example, a recent seizure in Togo was reported as consisting of 15 'panther' (= Leopard) skins and 10 panther heads (Figure 23). However, the items are fake, and the spot pattern resembles more cheetah than leopard rosettes. Similar fake spotted items (heads and skins) have been photographed at Togo's famous Akondessa fetish market in the capital Lome (Figure 24 and Watt 2012).

The prevalence of fakes is indicative of a continued demand. While fakes may replace items in the market that otherwise would be illegally sourced from the wild, they could perpetuate demand when consumers aspire to the genuine wild item rather than making a conscious choice of an (often cheaper) alternative.



Year	Product Seized	Country of seizure	Quantity
2001	Skins	GB	2
1993	Skins	US	1
1995	Leather products	US	1
1996	Leather products	US	1
1997	Pairs of shoes	US	1
2008	Skin pieces	US	1
2009	Leather products	US	1
2009	Skins	US	2

Despite some peoples' positive experiences using big cat parts, real or fake, as spiritual or consumptive medicine, this is not only illegal but also potentially dangerous if their use replaces appropriate medical care.

Genetic analysis of lion and leopard skins encountered in trade have shown that big cat parts have been transported far from their place of wild origin (L. Bertola pers. comm. 2014), and this transnational illegal trade is often intertwined with illegal trade in other species. For example, 12 leopard skins and a piece of lion skin were found among a large seizure of great ape body parts in Gabon in January 2011 (Anon 2011). Five leopard skins were among a major haul of ivory and rhino horn when Hong Kong Customs seized a container from Nigeria in August 2013 (Inocencio 2013). Nigeria is a known regional hub for illegal wildlife traffic, and, increasingly, Chinese road workers and loggers who smuggle skins into Asia (Panthera 2011). No cheetah skins were reported seized by countries in the region in the CITES Trade Database, but the US and UK have reported several cheetah skin seizures originating from Nigeria (Table 7). Congo has also been identified as a potential destination for illegal cheetah skins (RWCP in litt. 2014).

None of the countries in the region have reported the export of live cheetahs in the CITES Trade Database. However, several independent online searches of adverts for cheetah cubs have found sellers claiming to be based in Cameroon (Marnewick 2012, CCF *in litt.* 2014), although it is unknown if the cats or companies actually exist or are just an Internet advance fee fraud scam. A Bahrain-based journalist did contact two purportedly Cameroon-based sellers – one offered to transport a "hand-tamed" 16-week-old lion to Bahrain for US\$2,900; another offered African king cheetahs for \$2,500, and white lion and Siberian tigers for \$3,200. The company's representative said they would use an "animal express agency" and the cats would come with a health certificate and official papers (Leate 2013). In 2014 a case arose of fraudulent CITES permits from Cameroon associated with the trade in four cheetahs that were claimed to be captive bred to a European country (CITES Secretariat *in litt.* 2014).

Illegal trade pressures have contributed to the endangerment of other big cats in the region – the lion in West Africa was recently assessed by IUCN as Critically Endangered (Henschel et al 2014 and in prep.), and skin trade in West and Central Africa contributed to the leopard's "uplisting" by IUCN from Least Concern to Near Threatened. With cheetahs so scarce, and having been recently extirpated in many range States in the region, any trade pressure could contribute to further reductions.

4.3. Iran: Cheetah status and trade threat

Still widely distributed in Southwest and Central Asia until the 20th century, the last remaining population of Asiatic cheetahs (subspecies *A.j. venaticus*) survives in the eastern deserts of Iran. It is regarded as Critically Endangered by IUCN, with numbers estimated at 40-100 (ICS 2013, Khosravifard 2013). It survives today mainly due to major investments in its conservation by a government-NGO partnership, the Conservation of the Asiatic Cheetah Project (CACP). Occurring at low density, in areas with low wild prey availability and increasing numbers of livestock, illegal offtakes for trade-related purposes would represent a serious additional threat to the other known causes of mortality (road kills and illegal killing in protection of livestock). There are only two verified reports in the last decade of illegal live capture and possession, with perhaps a vague intention to sell, of cheetahs in Iran (Jowkar et al. 2008, Panthera *in litt.* 2012). There is a single unverified report of a live cheetah smuggled by boat out of the country across the Persian Gulf (CACP *in litt.* 2014).

4.4. Southern Africa

4.4.1. Cheetah status and trade impact

The region holds 6 known cheetah populations, with an estimated total of approximately 6,200 adults, with the vast majority in a population that is the largest in Africa (ranging over 1 million km2) and transboundary, covering six countries (Figure 25). In South Africa, cheetahs have been reintroduced into more than 22 fenced reserves, estimated to hold in total an additional 204 cheetahs (South Africa CITES MA *in litt.* 2014). There are large areas where cheetah range and status are unknown (Angola, Mozambique and Zambia: Figure 1), but these areas are considered unlikely to hold significant resident populations (IUCN 2007b).

All countries in the region are Party to CITES, and of the regions considered in this study only southern Africa legally exports cheetahs for commercial purposes. Three countries in southern Africa have CITES annual quotas, agreed by the Conference of the Parties at its eight meeting in 1992, for export of wild live cheetahs and hunting trophies (Namibia – 150, Zimbabwe – 50; Botswana – 5). These quotas are part of an annotation of the species in Appendix I, and as such are legally binding for all Parties to the Convention (unlike quotas for Appendix I-listed species that are mentioned in species-specific Resolutions or Decisions, which are 'soft law'). Over the past decade, Botswana has not used its quota, while Namibia and Zimbabwe have allocated their quotas almost entirely to hunting trophies.

Trophy hunting in Namibia (Figure 26) and Zimbabwe is generally considered to have assisted conservation of the largest cheetah population by providing a financial incentive for landowners to maintain them (Lindsey et al. 2013, Zimbabwe CITES MA *in litt.* 2014). An internet search of trophy hunting operations indicates that a cheetah is a high-value hunt package, with client prices ranging from \$10-20,000. Nearly 40% of 150 potential clients interviewed at a major American hunting convention were interested in a cheetah trophy hunt (Lindsey et al. 2011). The trophy trade is not considered a threat in either Namibia or Zimbabwe's draft and yet to be adopted national cheetah action plans. Both action plans however highlight the need for trophy trade to remain well-regulated and monitored (MET 2013, ZPWMA 2009).

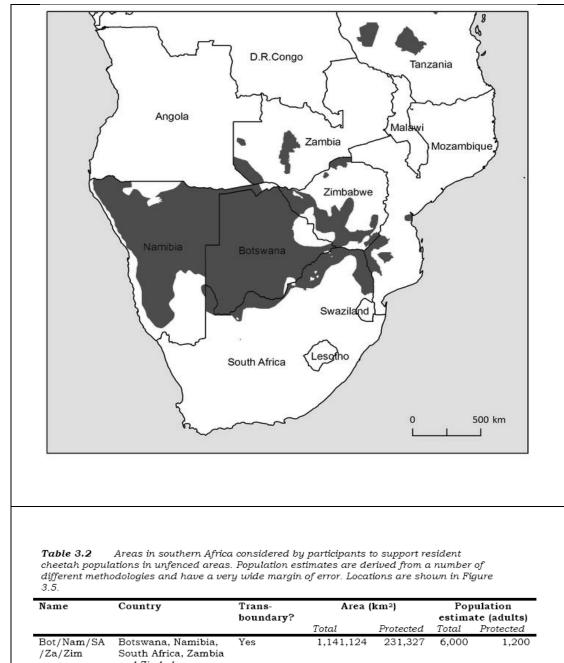
The only legal form of trade (both national and international) identified as a potential threat in national action plans and the regional conservation strategy is the captive cheetah trade (Table 8). Namibia was formerly the primary supplier of cheetahs to the captive trade, and most of the world's captive cheetahs are of Namibian stock (Marker 2002). Although in recent years very few wild cheetahs have been exported under the Appendix I quota system, one of the original justifications for including live animals was that cheetahs are difficult to breed in captivity ("According to the International Cheetah Studbook, the sustainability of the world's captive population depends on continued importation...of live animals from Namibia:" CITES Doc. 8.22 [Rev.]). Understanding of the conditions and techniques to achieve successful reproduction has improved, and more facilities around the world have successfully bred cheetahs (33 facilities in 2011: Marker 2012). Over the past decade, South Africa has become the world's biggest exporter of cheetahs recorded as captive-bred, and is the only country with CITES-registered commercial Appendix I breeding operations for cheetahs. Despite these successes, there is concern that live-trapped wild animals are illegally entering the legal captive export trade (Lindsey 2011, Marnewick 2012).

The large population in Botswana, Namibia, South Africa and Zimbabwe occurs mostly outside protected areas (livestock and game ranches as well as communal farmlands) where "local control over resource use is high" (South Africa CITES MA *in litt.* 2014). Cheetahs are still widely viewed as an undesirable threat to livestock (Lindsey and Marnewick 2011; CCB, CCF in litt. 2014); as an example, 80% of communal farmers interviewed in Zimbabwe said they would kill cheetahs even if not currently experiencing any livestock predation (Thomas 2011). Particularly in the first three countries, large steel cage traps are used to capture cheetah, placed around marking trees used by cheetahs (identifiable by scats and other sign), with brush used to channel the animal into the trap, or live animal bait (as cheetahs do not scavenge) (Marker 2002) (Figure 27).

In the past, many were subsequently shot; illegally, cheetahs are reportedly still killed (Thomas 2011; CCB, CCF, EWT, South Africa CITES MA *in litt.* 2014), a practice colloquially known as "shoot, shovel and shut up," although probably at lower levels than in the past. The number of permits issued to landowners to remove wild cheetahs from their property used to be quite substantial in Namibia, averaging nearly 300 per year from the mid-1980s-1990s and several times higher in previous decades (Nowell 1996). Since then Cheetah Conservation Botswana and Cheetah Conservation Fund in Namibia, among others, working with both landowners and government authorities, have taken possession of unwanted live cheetahs and have extensive experience with translocation and release back to a wild existence, although that is not always possible (CCB, CCF *in litt.* 2014). Currently few permits are issued in any of the four countries for lethal cheetah control or live cheetah removal (Lindsey and Marnewick 2011; CCB, CCF, CITES MAs of South Africa and Zimbabwe *in litt.*

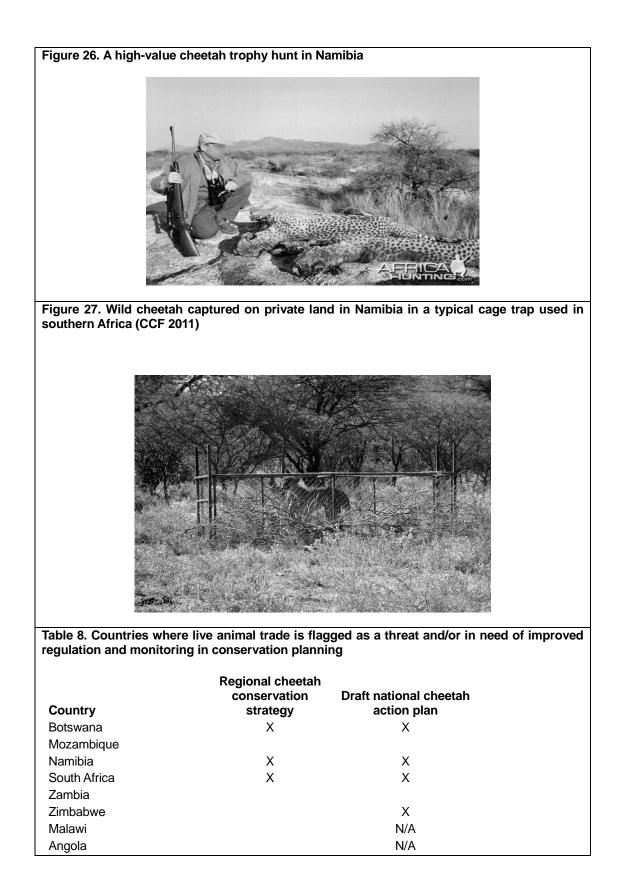
2014). However, the practice of live trapping in these countries continues, and animals captured without permits form a potential illegal source for the legal trophy and captive trades.





Grand total:			1,170,479	258,264	6,260	1,460
Matusadona	Zimbabwe	No	1,328	1,328	20	20
Mana Pools	Zimbabwe	No	1,965	1,965	20	20
Bassa	1		_,			
Cabora	Mozambique	Yes	2,417	0	20	0
Liuwa Plains	Zambia	No	2,899	2,899	20	20
Kafue	Zambia	No	20,745	20,745	200	200
	and Zimbabwe					

population sizes estimated from the size of the polygon using a conservative density of 1 adult per 100km²;



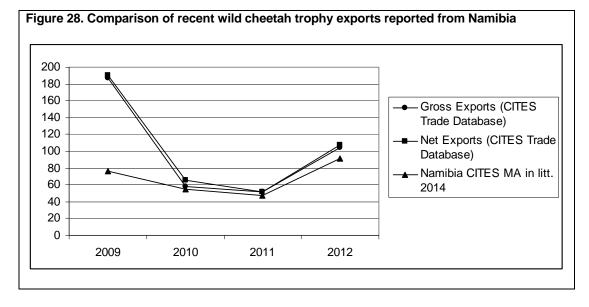
Skin trade was flagged in the regional cheetah strategy as a secondary threat. There have been a few recent confiscations of skins in the region, including in Zambia (Interpol 2012, Mendelson 2012, CCF *in litt.* 2014), and a recent observation of cheetah skins for sale in Angola (CCF *in litt.* 2014). However, this trade appears to be opportunistic and as curios, with little to indicate organized demand as for the captive trade.

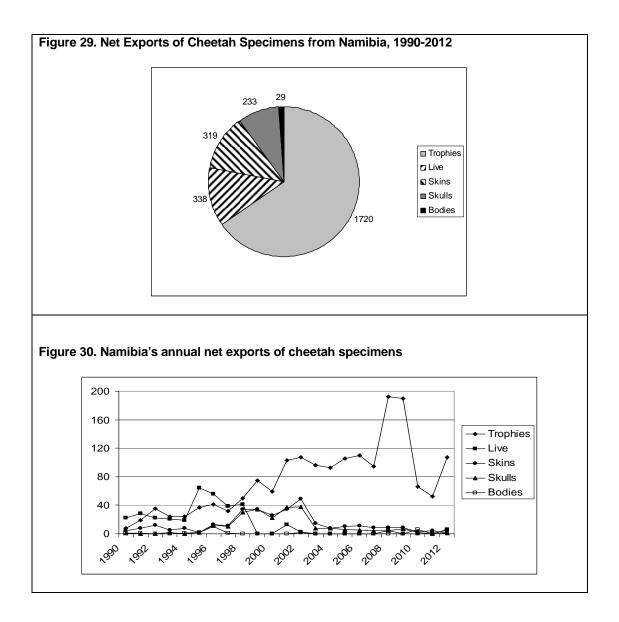
There are no records of any illegal trade in cheetah live animals, skins, or parts and derivatives in Zimbabwe (Zimbabwe CITES MA *in litt.* 2014) and researchers concur that there are few reports to indicate illegal trade as a problem in that country, (RWCP *in litt.* 2014). While there are no registered captive breeding facilities for cheetah in Zimbabwe, there have been inquiries about keeping cheetahs as pets (Zimbabwe CITES MA *in litt.* 2014) and improvements in captive policies and trade monitoring are included in the country's draft national cheetah action plan (ZPWMA 2009).

4.4.2. Trade in hunting trophies

Hunting trophies have been the main component of legal trade since the early 1990s, and Namibia has been the primary exporter (90% of total net trophy exports shown in Figure 5). Zimbabwe has exported an average of fewer than ten trophies per year (CITES Trade Database and Zimbabwe CITES MA *in litt.* 2014), and Botswana has not reported any export of cheetah trophies under its quota of five.

In Namibia in April 2009, a moratorium on cheetah trophy hunting was put into effect for a subsequent period of about a year (Anon. 2009, CCF *in litt.* 2014). CITES Trade Database records (both gross and net exports) indicate that Namibia's exports exceeded its quota of 150 in both 2008 and 2009. There may be recording errors, since figures provided by Namibia's CITES MA (*in litt.* 2014) of trophy exports for 2009 do not correspond to the Trade Database records for that year (Figure 28). Recorded separately from hunting trophies, Namibia exported a relatively large number of skins and skulls in the 1990s (totals shown in Figure 29), but few since 2001-2002, when total exports of cheetah specimens (187 and 199 trophies, live animals, skins and skulls) also appear to have exceeded the quota (Figure 30). The management of the quotas in Namibia needs to be better understood and may need improvement to avoid trade in excess of allocated quotas.





It is permissible under Article III of the Convention to export cheetah trophies without an Appendix I quota, and 24 were reported in the CITES Trade Database as net exports over this period from South Africa, and 1-3 each for several other African countries, including Kenya, Tanzania and Zambia. The CITES Management Authority of South Africa noted that from its hunting register record no cheetah was hunted as a trophy animal from 2006-2012, and that the purpose code H is also used by them for export of whole bodies (natural mortalities) (South Africa CITES MA *in litt.* 2014).

South Africa's Scientific Authority recently undertook a preliminary non-detriment finding concerning the possibility of establishing a trophy hunting quota for cheetah, and found that "there are insufficient data available on population size and trend and inadequate information on the scale of illegal hunting to advise on a sustainable quota," (South Africa CITES MA *in litt.* 2014).

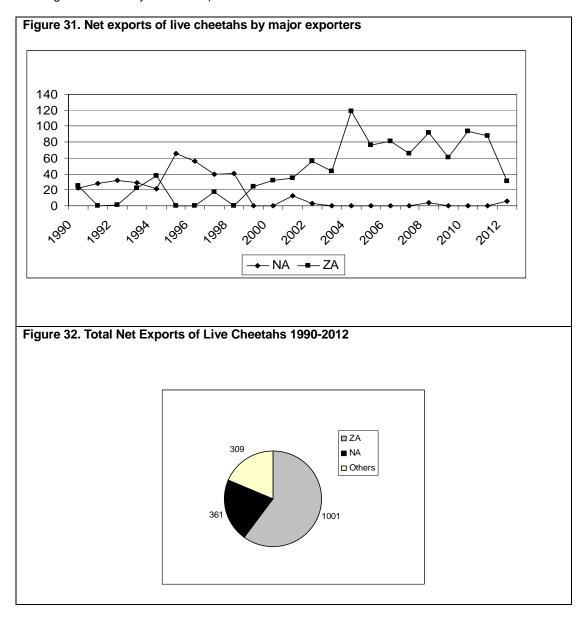
4.4.3 The live animal trade

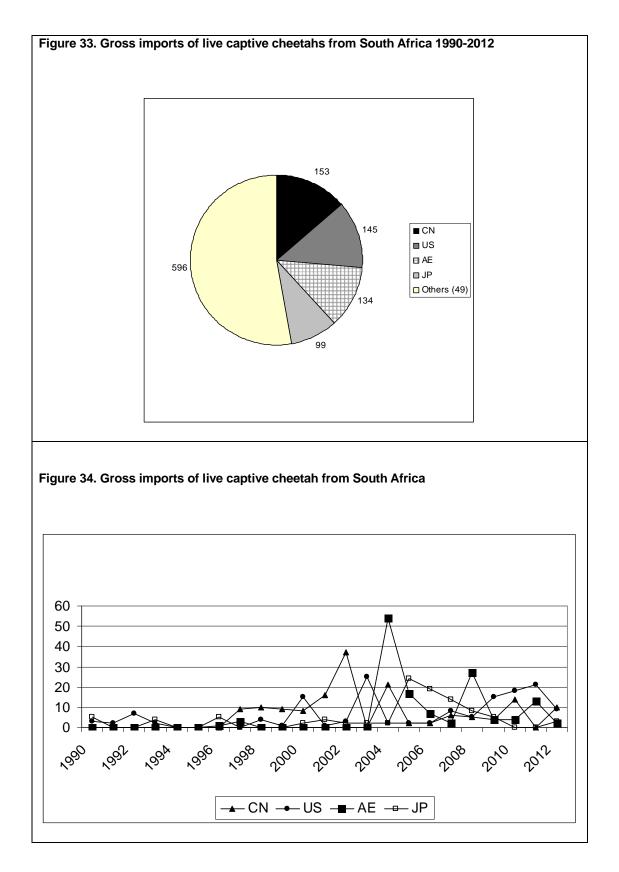
The major exporters of live animals have been Namibia and South Africa – Namibia for wild (in the 1990s), and South Africa for captive (particularly in the 2000s (Figures 31 and 32). Namibia has largely ceased exporting live wild animals and has allocated its quota almost entirely to trophy hunting in recent years. According to records of the South African CITES Management Authority, 786 live cheetah were exported from 2002-2011 (South Africa CITES MA *in litt.* 2014).

South Africa has exported cheetahs to many countries from 1990-2012, but nearly half (531) have gone to four countries: China, Japan, the United Arab Emirates, and the US (Figure 33). Gross imports for these four

countries were higher during the most recent decade, particularly for the UAE (Figure 34). While most imports to these countries were reported as destined for zoos under transaction purpose, UAE reported the import of more than 30 live cheetahs for personal purposes from South Africa in 2008-2011.

South Africa is the only country which has registered with the CITES Secretariat Appendix I captive breeding operations authorized to export cheetahs for commercial purposes: DeWildt (now Ayn van Dyk) Cheetah and Wildlife Centre and Hoedspruit Endangered Species Centre. The South Africa CITES Management Authority (*in litt.* 2014) notes that "the majority of live cheetah exported from South Africa originate from captive facilities not necessarily registered with CITES," but which are registered according to national legislation with provincial authorities. Less than 5% of South Africa's cheetah exported as Z (zoo) (Figure 35), and under Article III of the Convention this type of trade is considered noncommercial and exporting facilities need not be registered with the CITES Secretariat. Under South African CITES implementation legislation, provinces administer certificates for international trade in listed species, and bred-in-captivity specimens can only be exported by facilities which have registered with their provincial government according to regulations under this law (South Africa CITES Management Authority *in litt.* 2014).

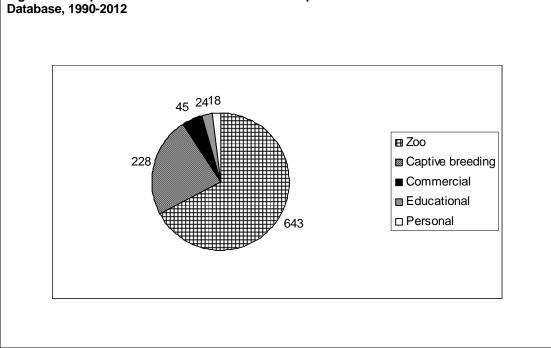




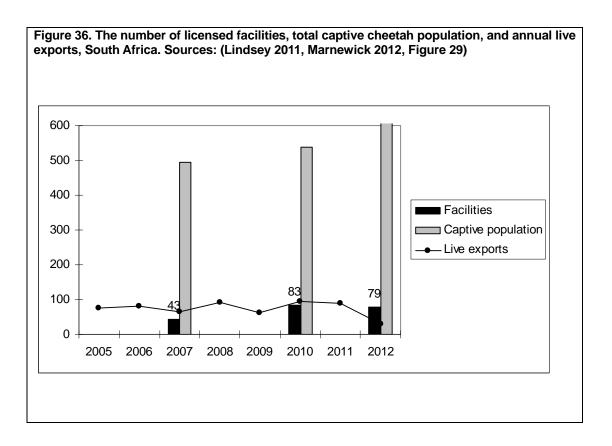
Provinces have been licensing more captive cheetah facilities recently; the number of facilities has risen faster than the total estimated captive cheetah population and the annual captive export trade (Figure 36). Many of the new facilities are small, with fewer than five cheetahs (Lindsey 2011). While only about 20 facilities are licensed by provincial authorities to breed cheetahs, a survey of captive facilities suggests that more are attempting to breed (Marnewick 2012). Most facilities are open to the public and offer some sort of touch or

petting experience; some are private collections (Marnewick 2012). Although "description of the strategies used by the breeding operation, or other activities, that contribute to improving the conservation status of wild populations of the species" is a required part of the facility registration application process (South Africa CITES Management Authority in litt. 2014), and many facilities request donations from the public in support of such programs, a survey of eleven facilities found that most (ten) "did not appear to be directly involved with any type of conservation work that directly benefits the free-roaming cheetah population through funding or field projects" (Marnewick 2012). Some of the same facilities that breed lions for "canned" trophy hunts (currently legal in South Africa for this species) also are licensed to keep cheetah (Marnewick et al. 2007). 17 South African facilities contribute to the International Cheetah Studbook (Marker 2012), and recent attempts to set up coordinating associations for captive cheetah facilities have failed, with few being willing to participate (Marnewick 2012).

Cheetah experts suspect that some facilities in South Africa may not have mastered the challenge of breeding cheetahs and are instead trading illegally in live-captured wild animals (BCEAW, CCF, EWT in litt. 2014). Researchers have interviewed dozens of observers in recent years - primarily farmers and also conservation officials - who have reported illegal international movement of live-captured wild cheetahs between Botswana. Namibia and South Africa (Klein et al 2007, Marnewick et al 2007, Lindsey and Marnewick 20011, Lindsey 2011, Marnewick 2012, CCB, CCF in litt 2014). According to these reports, the Botswana border may see the most significant movement of live animals into South Africa, destined for captivity. Captive cheetahs have also reportedly been smuggled from South Africa to Namibia and used illegally for "canned" trophy hunts (according to its published policy the government of Namibia will not issue a trophy permit for other than a free-roaming adult, along with other conditions: MET 2014). Most hunting operators offer to refund most of a client's money if a cheetah is not actually taken, so some may be tempted to resort to illegal purchase and release of a live animal. While no confiscations were found to have been documented at any country borders, animals are reportedly moved by vehicle and private aircraft. All three countries have made, with the help of cheetah conservation organizations, occasional confiscations of live cheetahs held without permits in captivity from private landowners who were seeking to sell them or keep them as pets (CCB 2009, Lindsey and Marnewick 2011, CCB, CCF in litt. 2014). Still, despite these reports, there are no verified interdictions of illegal international trade (Lindsey 2011; Namibia, South Africa, Zimbabwe CITES MAs in litt. 2014; CCB, CCF, EWT, RWCP in litt. 2014).







It is clear the captive industry in South Africa is interested in acquiring additional wild animals. From 2009-2012, over 40 cheetahs were removed (with permits) from fenced reserves and into captivity. Some of these were donated, and approximately half were sold at an average price of approximately \$1500 (cheetahs sold between reserves also at approximately the same price). About one quarter of these wild cheetah went to one of the CITES-registered commercial breeding facilities, Hoedspruit (van der Merwe 2014, EWT *in litt.* 2014). The South African CITES Management Authority is investigating this issue (*in litt.* 2014) to ensure that permits for the removal of wild-living cheetahs were issued appropriately and to determine if such animals "are likely exported as captive individuals."

Some cheetahs may be illegally moved into captivity when captured from the South African free-roaming population of about 400 (EWT *in litt.* 2014) to 550 (South Africa CITES MA *in litt.* 2014), on ranchland in the northern border regions. Provincial records from recent years indicate that, nationally, an average of eight cheetahs per year are legally removed (with permits) as problem animals, and provincial officials reported receiving information on an average of one case per year of illegal skin trade, "poaching" and illegal trophy hunting (Lindsey and Marnewick 2011). The South African CITES MA [*in litt.* 2014] is investigating a recent case of a wild cheetah being advertised for a hunt. Reports from farmers' to researchers indicate that illegal offtakes for problem animal control occur as well (Lindsey and Marnewick 2011). The South Africa] is opportunistic and/or unselective. This includes informal, illegal control of damage causing cheetah following losses of domestic stock or wildlife (which is conducted in an effort to reduce the population size) and harvest of live cheetahs for the captive trade (in order to maximize financial returns). Little information is available on the trends or extent of this harvest."

For an Appendix I captive-bred live animal to be exported from South Africa, it must be "individually and permanently marked in a manner so as to render alteration or modification by unauthorized persons as difficult as possible" (South Africa CITES Management Authority *in litt.* 2014). Microchips are most commonly used (Lindsey 2011, Marnewick 2012). One of the only reported confiscations of a live cheetah outside the Gulf region took place recently in the UK where one cheetah out of four flown from a safari park in South Africa through London to Russia was seized by the UK Border Agency's specialist CITES team for lack of a microchip (and transferred to a wildlife facility within the UK) (UK Home Office 2012).

It can be difficult for law enforcement authorities seizing live cheetahs to determine if they are genuinely captive-bred. Genetic testing can reliably identify an individual, provided there is a reference sample (which is why there have been calls for South African authorities to require "genetic passports" for captive cheetah

exports [Lindsey and Marnewick 2011]). However, as a law enforcement tool it is still imperfect to reliably distinguish where the animal came from. Most of the world's captive cheetah population is descended from Namibian cheetahs, including the South African captive population (Marker 2002, 2012). Geneticists looked at microsatellite DNA in samples taken from six cheetahs confiscated by provincial authorities from a farm in South Africa near the border with Botswana, suspected to be of Botswanan origin, but due to lack of regional variation evident in their library of reference samples were unable to determine whether the animals were from Botswana, Namibia, South Africa, or captive-bred (Kotze et al. 2008).

There are concerns that a microchip alone is not sufficient to guarantee that the animal is of captive origin, as a wild-caught cheetah could be easily implanted. Researchers as well as national authorities have found it difficult to obtain the necessary provincial records to monitor captive breeding and trade (Lindsey and Marnewick 2011, CCF *in litt.* 2014), and a centralized database has been recommended (Marnewick 2012). At present it is unclear whether South African authorities can certify with confidence that animals exported under CITES meet the Convention's bred-in-captivity requirements. The South African CITES MA (*in litt.* 2014) recently announced that it would exercise increased national oversight of the provincial captive cheetah registration system with the aim of ensuring uniform implementation of protected species regulations.

5. Key findings

Legal trade in wild cheetahs (net exports, primarily hunting trophies from Namibia) has averaged 153 annually from 2002-2011 (based on the figures from the CITES Trade Database; the average would be slightly lower if the figures provided by Namibia's CITES MA [*in litt.* 2014] were used). Three southern African countries have had an Appendix I quota since 1992 totaling 205 per year. Legal trade in live animals (captive-bred, 90% from South Africa) averaged 88 per year over the same period. Confiscations (skins and live animals) reported in the CITES Trade Database over the same period average just three per year. However, this study has collected information demonstrating that the level of illegal trade could be much higher than indicated by reported confiscations, threatening most wild populations.

East Africa is the region where there are the most records of illegal trade, and where it likely has the greatest negative impact on wild populations. The primary organized source of demand is the exotic pet trade on the Arabian Peninsula. The exact origin of the wild-caught cheetah cubs which supply this demand is unclear, but the trade is mainly carried out by ethnic Somalis throughout the Horn of Africa region, and has been ongoing for at least 15 years. Smuggling by boat across the Gulf of Aden is facilitated by Yemen's large population of displaced Somalis. While piracy in the Gulf of Aden has been successfully deterred (BBC 2014), other forms of maritime crime, including wildlife trafficking, represent a continued challenge to authorities in Yemen and the Somali regions, who are already facing bigger ones. Once in Yemen the trade is apparently taken over by Gulf state citizens, and the price of an animal that has survived reportedly reaches up to \$10,000.

There are multiple indicators that private ownership of cheetahs is popular throughout the Gulf region, including dozens of news articles, hundreds of social media posts, and the observations of NGOs that have researched the issue. There is some captive breeding in the region, but it is unclear how many of the region's cheetah pets were legitimately acquired, as no national monitoring systems are in place outside licensed facilities. This study was not able to obtain detailed information on regulation of captive cheetah (and other big cat) national trade and ownership outside licensed zoological facilities in the Gulf states, but from public information (including statements of officials to journalists) many of these pets would appear to be illegal or in the process of becoming so. Ajman municipality, one of the seven constituent emirates of the UAE, has taken the definitive legal step of prohibiting possession of all "wild" (nondomesticated) animals and reptiles in homes, apartments that a cooperative approach among Gulf states was being taken with others considering adoption of similar legislation. Such a cooperative approach could also be considered to tackle the region-wide problems of uncontrolled keeping of and trade in big cats, as policies and practice have been insufficient to deter the spread of illegally imported wild cheetah cubs. Authorities should implement measures to ensure that their national policies regarding ownership and trade in big cats support the effective implementation of the Convention.

A smaller organized source of demand that could fuel illegal trade is the traditional use of cheetah skins for luxury male footwear in Sudan. Skins are the main form of illegal cheetah trade as well in West and Central Africa, where these and other body parts are valued as traditional medicines and fetishes. Cheetahs are scarce in the few regional areas to potentially supply these markets – South Sudan, and the five known resident cheetah populations in North, West and Central Africa, and authorities view illegal trade as a serious threat. There are very few records of illegal trade in or confiscations of genuine cheetah products, but a similarity between the luxury shoe and *médico-magiques* markets is that many fakes are observed for sale. Faux cat products do have the potential to replace wild-sourced items (Panthera 2013), as shown by the wide embrace of cat pattern prints by the fashion world rather than actual furs, as in the 1960s-70s. However, in these cases,

while the consumer may be aware that the item they purchase is fake, if they aspire to the genuine item this can perpetuate demand and illegal trade. Moreover, despite some peoples' positive experiences using big cat parts, real or fake, as spiritual or consumptive medicine, this is not only illegal but also potentially dangerous if their use replaces appropriate medical care.

Iran has little evidence of illegal trade, but holds the world's only wild population of the Critically Endangered Asiatic cheetah, and its proximity to the uncontrolled captive trade in the Gulf region requires that the conservation community should be on guard to prevent any illegal trade precedents.

Southern Africa has the largest and most viable cheetah population. Overall, the CITES quota system seems to operate in a satisfactory manner, and the legal trade in specimens resulting from these annotations may be neutral or beneficial for the conservation of the species in the wild.

Captive breeding was not considered contributory in any significant way to the conservation of wild cheetahs in any of the three African regional planning processes. While the captive cheetah industry in South Africa plays an important role in raising awareness and generating revenue for local economies, the trade in captive animals in South Africa was flagged as a threat to cheetahs within the country and in neighboring countries as well (especially Botswana). Strict national oversight is required in South Africa of captive breeding operations and export trade to ensure adherence to regulations and that CITES permits or certificates are not issued for illegally sourced wild cheetahs.

Live animals have been confiscated by governments in East Africa, the Middle East, and southern Africa. High mortality rates are evident (70% of 30 cubs confiscated in Ethiopia and Somaliland, and 48% of 27 cubs confiscated in Jordan, Kuwait and the UAE). Live animals are generally relegated to wildlife rehabilitation or zoological facilities as soon as possible after interception, primarily in country, but also exported. Kenya has a government-run wildlife orphanage, but its capacity is being exceeded and animals are sometimes sent to private facilities (ACK 2012). While this seems to be a workable solution, it depends on the facilities' having sufficient resources to care for the animals.

Most cheetahs confiscated in East Africa and the Middle East are too young to consider release into the wild, but that has been a viable option in southern Africa, where many adult cheetahs are live-trapped on private lands as unwanted potential problem animals. The region is home to several NGOs with an established record of working with governments to accept, rehabilitate and often release such cheetahs in areas where owners and managers will accept them.

There seem to be two principal markets for illegal live cheetahs: southern Africa (largely supplied within the region) and the Middle East (largely supplied from East Africa). The latter is more significant and lucrative. Live animals supplying it have been confiscated primarily at the transit and consumer portions of the trade chain, rather than the source, so there is little information to indicate which wild populations are being affected. The young cheetahs may be taken from areas unknown to conservationists, but possibly from known resident populations as well. In southern Africa, the largest cheetah population seems to have been essentially stable over the past 10-15 years and the impact of illegal trade is unclear; it may absorb some animals that would have been otherwise removed or destroyed. Although there is little information on illegal trade in live animals or cheetah skins from Iran as well as North, West and Central Africa, the conservation status of cheetahs in these regions has deteriorated to the point that the impact of any illegal trade is probably significant.

6. Recommendations

Based on the key findings of this study, the following considerations are of particular relevance:

Legislation

Parties which have been identified in this study as consumer markets for illegally imported live wild cheetahs (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates) should be requested to submit a report on the legislative and regulatory controls in place and in development regarding cheetahs in captivity, as well as enforcement of said controls. Compulsory registration for Appendix-I listed species, combined with individual identification marking, could be envisaged.

National enforcement

The Gulf states, as the prime destination for illegal wild cheetahs, need to significantly step up enforcement efforts at the borders and internally. These countries should financially and technically support East Africa to combat illegal trade in cheetahs and enhance in situ conservation efforts.

The Somali regions in the Horn of Africa, and Yemen were identified as key transit points for the illegal live animal trade (affecting not only cheetahs but many other species). Both the administrative authorities and the local NGOs with whom they cooperate should be supported by Parties to improve capacity to address illegal wildlife trade and undertake targeted enforcement actions.

Illegal cheetah trade has largely been detected at the consumer and transit points, rather than the source, and this is particularly true of the live animal trade. Range states should be supported in their efforts to improve monitoring of wild cheetah populations in order to detect and counter trade-related offtakes.

South Africa should consider implementation of additional measures to reliably mark and trace captive-bred cheetahs, and should be requested to provide a report on its efforts to exercise greater national oversight of registration of captive cheetah facilities, and to ensure that all facilities breeding cheetah for commercial (not for conservation) purposes are registered with the CITES Secretariat according to Resolution Conf. 12.10 (Rev CoP15).

International coordination

Similar to the ways in which regional wildlife trade control organizations have focused on illegal tiger trade in Asia (sharing information among network members and between networks, capacity building seminars and workshops), the cheetah should receive greater attention from the Lusaka Agreement Task Force linking Eastern and Southern Africa, and Wildlife Enforcement Networks in the regions of the Horn of Africa (HA-WEN), West Asia (WA-WEN), Southern Africa (WENSA) and Central Africa WEN/Central African Forests Commission (COMIFAC). In southern Africa, the Southern Africa to focus on illegal crossborder live cheetah trade.

The international community has recognized the need to deploy a broader spectrum of government resources to counter illegal wildlife trafficking (G8 Leaders Communique 2013, United Nations 'Group of Friends' Against Wildlife Trafficking 2014, London Conference on Illegal Wildlife Trade 2014, United States National Strategy for Combating Wildlife Trafficking 2014). Parties who are part of the multi-national maritime security forces operating in the Gulf of Aden and surrounding waters (CMF 2014, EUNavFor 2014) should take under consideration the potential to provide briefings to them which could support greater detection and deterrence of illegal wildlife trade

Demand reduction

The nature of the demand for pet cheetahs in the Gulf states is such that demand reduction initiatives have a good chance of success. It is apparent that people who buy cheetah cubs do so out of a love of the animal, and for predator conservation, that is half the battle. People may also not be aware of the difficulties and dangers of keeping big cats, or its potential illegality. Approaches to demand reduction in this region deserve further study, and Parties may wish to call for one.

A similar study is recommended for West and Central Africa (big cat skins and other body parts for ceremony and medicine). The study should explore ways in which the medical community could be engaged to warn people of the potential dangers of using big cat parts as medicine. The role of fakes should be evaluated, with consideration of the potential application of work being done with communities in other regions, such as in South Africa where faux alternatives to real leopard skins are being tried out with communities using them for ceremonial purposes (Panthera 2013). More research effort should be put into documenting illegal trade in both real and fake cat products in the region.

The other significant source of demand identified in this study, the luxury traditional men's shoe (markoob) market in Sudan, is also deserving of further research into potential demand reduction approaches and opportunities.

Dealing with confiscated live cheetahs

East African countries should consider the need to develop a joint strategy to effectively deal with confiscated live specimens, focusing on areas and regions where confiscations are taking place and insufficient capacity exist to shelter confiscated live animals. Centers that can take care of confiscated animals should to be identified, promoted and supported. The region should reach out to the international zoo community to seek technical assistance, and should work with designated NGOs or rescue centers for coordination and advice on the disposal of confiscated live animals.

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