

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



Eighteenth meeting of the Conference of the Parties
Colombo (Sri Lanka), 23 May – 3 June 2019

Species specific matters

African lion (*Panthera leo*)

REPORT OF THE SECRETARIAT

1. This document has been prepared by the Secretariat, in consultation with the Chairs of the Animals and Standing Committees.

Background

2. At the 17th meeting of the Conference of the Parties (CoP17, Johannesburg, 2016), Decisions 17.241 to 17.245 on *African lions* (*Panthera leo*) were adopted as follows:

Directed to the Secretariat

17.241 *Subject to external funding, the Secretariat shall, in collaboration with African lion range States, the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the International Union for Conservation of Nature (IUCN):*

- a) *investigate possible mechanisms to develop and support the implementation of joint lion conservation plans and strategies, taking into consideration existing lion conservation plans and strategies;*
- b) *develop an inventory of African lion populations across its range, taking due consideration of existing inventories developed by African lion range States;*
- c) *support the development of relevant databases by African lion range States;*
- d) *develop strategies to reinforce international cooperation on the management of lions;*
- e) *undertake studies on legal and illegal trade in lions, including lion bones and other parts and derivatives, to ascertain the origin and smuggling routes, in collaboration with TRAFFIC and/or other relevant organisations;*
- f) *undertake a comparative study of lion population trends and conservation and management practices, such as lion hunting, within and between countries, including the role, if any, of international trade;*
- g) *support capacity-building in lion conservation and management, including where appropriate the making of non-detriment findings where a range State requests it;*
- h) *support public awareness raising as well as education programmes in African lion range States, in order to support co-existence between humans and lions and to promote measures for the conservation and recovery of African lion populations;*

- i) *promote fundraising, as part of its overall fundraising initiatives, to support the effective implementation of conservation and management plans and strategies for African lion and for a CITES Task Force on African lions;*
- j) *create a portal on the CITES website to permit, amongst other things, the posting and sharing of information and voluntary guidance on the making of non-detriment findings for African lion; and*
- k) *report on the progress relating to paragraph a) – j) to the 29th and 30th Animals Committee meetings.*

Directed to the Animals Committee

17.242 *The Animals Committee shall consider the report of the Secretariat and submit recommendations to the 69th and the 70th Standing Committee meetings and the African lion range States, as appropriate.*

Directed to the Standing Committee

17.243 *The Standing Committee shall, at its 69th and 70th meetings:*

- a) *consider the reports submitted by the Animals Committee in terms of Decision 17.242;*
- b) *recommend further actions to be taken; including the possible need for the development of a Resolution on the conservation of African lion;*
- c) *establish a CITES Task Force on African lions, inviting the participation of all African lion range States, consumer states for lion parts and derivatives, and relevant enforcement bodies, including the members of the Task Force of the International Consortium on Combating Wildlife Crime (ICWC);*
- d) *provide terms of reference and modus operandi for this Task Force; and*
- e) *consider the establishment of a multi-donor technical trust fund to attract funding and direct resources for the work of the CITES Task Force on African lions and to support the effective implementation of conservation and management plans and strategies for African lion.*

Directed to African lion range States

17.244 *Directed to African lion range States African lion range States are encouraged to collaborate in implementing the decisions contained in Decisions 17.241 paragraphs a) - j) and 17.243 paragraph c).*

Decision directed to all Parties, governmental, intergovernmental, non-governmental organisations, donors and other entities

17.245 *Directed to all Parties, governmental, intergovernmental, nongovernmental organizations, donors and other entities All Parties, governmental, intergovernmental, non-governmental organizations, donors and other entities are encouraged to support the African lion range States and the Secretariat: a) in their efforts to conserve and restore this iconic species across the continent, taking into consideration existing land-use practices; and b) in implementing the decisions contained in Decision 17.241 paragraphs a) - j).*

3. The Animals and Standing Committees reviewed progress with the implementation of these decisions at their 29th and 30th (AC29, Geneva July 2017; AC30, Geneva, July 2018), and 69th and 70th (SC69, Geneva November 2017; SC70, Sochi, October 2018) meetings, respectively. These reviews were based on reports from the Secretariat (documents AC29 Doc. 29, [AC30 Doc. 25](#), [SC69. Doc. 58](#) and [SC70 Doc. 54.1](#)), and a document from Niger, submitted to SC70 as Chair of the Standing Committee's intersessional working group on African lions, which had been established at SC69, as explained in paragraph 21 below (document [SC70 Doc. 54.2](#)). The considerations of the Animals and Standing Committees resulted *inter alia* in proposals for

several new draft decisions on African lion for consideration by the present meeting of the Conference of the Parties.

4. As had been recommended by the Standing Committee at SC70, further discussions on the implementation of Decision 17.243, taking into account the information and draft recommendations in documents SC70 Doc. 54.1 and 54.2, took place at the First Meeting of Range States for the Joint CITES-CMS African Carnivores Initiative (ACI1; Bonn, November 2018; see paragraphs 27 and 28 below).

Implementation of Decision 17.241

5. The Secretariat collaborated closely with the Convention on Migratory Species (CMS) and the International Union for Conservation of Nature (IUCN) to advance the considerable amount of work called for under Decision 17.241. With the generous financial support received from Belgium, the European Union, Germany and Switzerland, several activities could be implemented or progressed, as indicated below. However, given the limited resources and time available, it was not possible for the Secretariat to implement the full range of activities called for in Decision 17.241. The Secretariat therefore proposes that the activities be amended where needed to focus on CITES-related work and be continued after the 18th meeting of the Conference of the Parties (CoP18, Colombo, 2019), as explained in the paragraphs below and shown in Annex 1.
6. Several components of Decision 17.241 call for long-term, broad engagements and actions, some of which extend beyond the purview of the Convention and may be more pertinent to CMS. In order to better cluster and assign activities, the CITES and CMS Secretariats contracted the IUCN/Species Survival Commission Cat Specialist Group (IUCN/SSC Cat SG) to develop a guiding document to provide overarching context and priorities for lion conservation and management across sub-Saharan Africa, with a focus on the range of issues in Decision 17.241.
7. The guiding document, entitled *Guidelines for the Conservation of Lions in Africa* (GCLA), collates up-to-date information, concepts, best practice experiences and recommendations on: the status of lions in sub-Saharan Africa; lion conservation strategies and plans; survey and monitoring methods; practical conservation solutions; capacity development; public awareness and education; sharing data and information; and implementation structures¹.
8. A first version of the GCLA was shared with the African lion range State representatives that attended ACI1 for review and approval. Based on the discussions held at this meeting, a second version of the GCLA has been prepared and made available to the present meeting as an information document. The executive summary of the document is also available in Annex 2 to the present document (available only in English and in French). The Secretariat notes that the various sections that compose the GCLA are intended to be regularly revised and updated in consultation with African lion range States and other relevant stakeholders. The content of the GCLA informs priority areas for the conservation of lions in Africa, and can therefore facilitate the cooperation between African lion range States under the scope of CITES and CMS.

Implementation of Decision 17.241, paragraphs a), b), c) and d): Implement African lion conservation plans; undertake population inventories; support databases; develop cooperation and management strategies

9. The activities in subparagraphs a) to d) partially fall outside the scope of the Convention, and only limited progress could be accomplished. In document AC30 Doc. 25, the Secretariat explained how the *Guidelines for the Conservation of Lions in Africa* intended to contribute to the implementation of paragraphs a), b), c) and d) [as well as f) and g)] of Decision 17.241. Specifically, the GCLA integrates existing regional (², ³) and national lion conservation strategies, and provides, *inter alia*, advice on reinforcing international and intercontinental cooperation; strategies for conserving transboundary lion populations; the latest data on the distribution and status assessments of lions in sub-Saharan Africa; practical guidance for conducting lion surveys; and examples of lion management databases.

¹ *Guidelines for the Conservation of Lions in Africa. Draft version 1.0. October 2018. IUCN SSC Cat Specialist Group for the CITES and CMS Secretariats.* https://www.cms.int/sites/default/files/document/cms-cites_aci1_inf.11_lion-guidelines_e.pdf

² IUCN SSC Cat Specialist Group. 2006a. *Conservation Strategy for the Lion in West and Central Africa*. IUCN, Yaounde, 44 pp. Available in [English](#) and [French](#) (accessed on 01.10.18).

³ IUCN SSC Cat Specialist Group. 2006b. *Conservation Strategy for the Lion in East and Southern Africa*. Johannesburg, South Africa, 55 pp. Available [here](#) (accessed on 01.10.18).

Implementation of Decision 17.241, paragraph e): Undertake studies on legal and illegal trade in lions

10. A study on *The legal and illegal trade in African lions*, conducted by TRAFFIC, was presented in Annex 1 to document SC70 Doc. 54.1. Draft versions of this study had been reviewed and commented upon by the Animals Committee and by the Standing Committee's intersessional working group on African lions.
11. The recommendations from the Animals Committee and the Secretariat that ensued from their review of this study (see document SC70 Doc. 54.1) were further discussed at AC11. The discussions resulted in draft decisions which have since been revised by the Secretariat, in consultation with the Chairs of the Animals and Standing Committees and are being proposed for consideration by the Conference of the Parties in Annex 1.

Implementation of Decision 17.241, paragraph f): Undertake a comparative study of lion conservation and management practices

12. The study called for in Decision 17.241, paragraph f) could not be undertaken due to a lack of resources but seems to remain pertinent. The Secretariat therefore proposes that this activity be extended, as shown in the draft decisions in Annex 1. The *Guidelines for the Conservation of Lions in Africa* collated information and advice on best conservation and management practices for lions which could inform this study.

Implementation of Decision 17.241, paragraph g): Support capacity-building in lion conservation and management, including in the making of non-detriment findings

13. By regularly collecting and making available materials and research results concerning lion conservation and management, the *Guidelines for the Conservation of Lions in Africa* are expected to be useful for multiple stakeholders and assist in building capacity. Additionally, the webportal that the CMS Secretariat is developing (see paragraph 15) is intended to disseminate information and capacity-building materials in support of lion management and conservation in Africa.
14. In support of Decision 17.241, paragraph g), best hunting management practices and guidance on non-detriment findings for trade in trophies of African lions were presented in document AC30 Doc. 10.2, submitted to AC30 by the European Union.

Implementation of Decision 17.241, paragraphs h) and j): Support public awareness raising and education in African lion range States; create a dedicated lion portal on the CITES website

15. CMS made an in-kind contribution to the implementation of paragraphs h) and j) of Decision 17.241 by developing a joint webportal with CITES and the IUCN/SSC Cat Specialist Group. This webportal is currently under development, and its concept and layout were introduced to range State representatives at AC11 in November 2018. It shall be hosted on the CMS website, and maintained by the three bodies.

Implementation of Decision 17.241, paragraph i): Promote fundraising

16. At the request of the Standing Committee, the Secretariat issued [Notification to the Parties No. 2018/042](#) on 30 April 2018 with information on existing funding opportunities for supporting African lion conservation activities, the implementation of relevant plans and strategies, and the actions outlined in Decision 17.241, paragraphs a) to j). In the Notification, the Secretariat drew the Parties' and African lion range States' attention to intergovernmental and non-governmental organizations that contribute to African lion conservation efforts, and opportunities for collaboration in this regard.

Implementation of Decision 17.241, paragraph i): Reporting to the Animals Committee

17. The Secretariat submitted reports to AC29 and AC30 (see documents AC29 Doc. 29 and AC30 Doc. 25), as explained in paragraph 3, and assisted the Animals Committee in its subsequent reporting to the Standing Committee in document SC70 Doc. 54.1.
18. Progress on the implementation of the various activities mentioned in Decision 17.241 was also discussed at AC11, as requested by the Standing Committee. As explained in paragraph 29 below, the participants to AC11 agreed on recommendations for draft decisions that could be submitted for consideration at CoP18. This included a revision of Decision 17.241 with activities focusing, to the extent possible, on the specific inputs that CITES can bring, and taking into account the Joint CITES-CMS African Carnivores Initiative and the *Guidelines for the Conservation of Lions in Africa*.

Implementation of Decision 17.242

19. The Animals Committee considered the reports of the Secretariat at its 29th and 30th Animals meetings, as referred in paragraph 3, and submitted its recommendations to the Standing Committee and the African lion range States at SC70 in document SC70 Doc. 54.1.
20. The Chair of the Animals Committee attended ACI1, and actively contributed to the further discussions by range States on the recommendations made by the Animals Committee, and the development of the draft decisions presented in Annex 1.

Implementation of Decision 17.243

21. In the context of its implementation of Decision 17.243, the Standing Committee established at SC69 an intersessional working group on African lions, the mandate and composition of which can be found in documents SC69 [summary record](#) and SC70 Doc. 54.2.
22. At SC70, Niger, as Chair of the Standing Committee's intersessional working group on African lions, reported in document SC70 Doc. 54.2 that participation in the working group had remained limited. Its draft recommendations contained an outline for a dedicated resolution on African lion, as per paragraph b) of Decision 17.243. Concerning the actions called for in paragraphs c) and d) [on the establishment of a CITES Task Force on African lions], and paragraph e) [on the establishment of a multi-donor technical trust fund], the working group proposed that they be the subject of revised or extended draft decisions to be considered at CoP18.
23. At SC70, the Standing Committee noted that Decision 17.243 has not yet been implemented and recommended that it be further discussed at ACI1 in November 2018, taking into account the information and draft recommendations in documents SC70 Doc. 54.1 and 54.2. The Standing Committee encouraged African lion range States to provide further inputs and comments to Niger, as Chair of the intersessional working group on African lions, on the draft recommendations contained in document SC70 Doc. 54.2 prior to ACI1 [see [SC70 Sum. 5](#) (Rev. 1)].
24. At ACI1, Decision 17.243 was discussed in detail. The outcomes of these discussions can be summarised as follows:
 - a) There was no consensus among the range States of African carnivores represented at ACI1 concerning the need to develop a CITES resolution dedicated to African lion.
 - b) The range States of African carnivores represented at ACI1 agreed that the "CITES Task Force on African lions" should be replaced by a CITES Task Force on big cats, and draft decisions to this effect were agreed upon for consideration by the Conference of the Parties.
 - c) The establishment of a multi-donor technical trust fund for lions or for African carnivores should be discussed in the context of the activities undertaken under the Joint CITES-CMS African Carnivore Initiative and its work programme (see document CoP18. Doc. 96).
25. At ACI1, the Secretariat explained that, in the context of the results of the lion trade study and the implementation of Resolution Conf. 12.5 (Rev. CoP17) on *Conservation of and trade in tigers and other Appendix-I listed Asian big cat species*, the Task Force could focus on enforcement issues relating to illegal trade in big cat species from Africa, Asia and Latin America. The Task Force could *inter alia* examine possible linkages between illegal trade in the different species, exchange intelligence and other information, and develop strategies to improve international cooperation.

Reporting to CoP18

26. The Secretariat had pointed out in document AC30 Doc. 25 that Decisions 17.241 to 17.245 on African lion had no noticeable deadlines for their implementation, and that there was no clearly stated requirement to report on their status at CoP18. It therefore proposed to prepare a document on African lion for CoP18 after ACI1. At AC30, the Animals Committee supported this suggestion, and recommended that the Secretariat work with the Chairs of the Animals and Standing Committees in finalizing its report to CoP18. The Standing Committee, at SC70, endorsed this suggestion.

First Meeting of Range States for the Joint CITES-CMS African Carnivores Initiative (ACI1)

27. In November 2018, 31⁴ (out of 47) range States of four African carnivore species (African lion, leopard, cheetah and African wild dog; the 26 African lion range States are indicated in the footnote below) participated in the First Meeting of Range States for the Joint CITES-CMS African Carnivores Initiative (ACI1, Bonn, 5 to 8 November 2019), represented by CITES Management Authorities, CMS National Focal Points, or both (see document CoP18 Doc. 96).
28. As had been recommended by the Standing Committee at SC70, and shown in paragraph 24 above, the range State representatives discussed Decision 17.243 at ACI1, as well as the draft recommendations in documents SC70 Doc. 54.1 and 54.2. This resulted in proposals for new or revised CITES decisions on African lion for consideration at CoP18 ([CMS-CITES/ACI1/Outcomes.2](#), Annex 2 for ACI1's results concerning African lion; and [CMS-CITES/ACI1/Outcomes.1](#) for the meeting's communiqué).

Consolidation of draft decisions for consideration at CoP18

29. As indicated in the paragraphs above, two work streams generated draft decisions on African lion for consideration at CoP18: (i) recommendations resulting from the review by the Animals Committee of the study *The legal and illegal trade in African lions*, and the additional recommendations by the Secretariat (see document SC70 Doc. 54.1); and (ii) recommendations resulting from the review by the range States represented at ACI1 of progress with the implementation of Decisions 17.241 and 17.243 (and for the latter, taking into account the information and draft recommendations in documents SC70 Doc. 54.1 and SC70 Doc. 54.2). These two work streams resulted in draft decisions agreed at ACI1, which are contained in CMS-CITES/ACI1/Outcomes.2, as already indicated in paragraph 28 above.
30. After ACI1, and in consultation with the Chairs of the Animals Committee and Standing Committee, the Secretariat further edited and rearranged these draft decisions on African lion to edit text, avoid duplication, and streamline the activities being proposed. The resulting draft decisions are presented in Annex 1. An estimated budget and source of funding for the implementation of the proposed decisions is presented in Annex 3.

Recommendations

31. The Conference of the Parties is invited to:
 - a) adopt the draft decisions on African lions (*Panthera leo*) and big cats presented in Annex 1; and
 - b) agree that Decisions 17.241 to 17.245 can be deleted.

⁴ **Angola, Benin, Botswana, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Egypt, Equatorial Guinea, Eswatini, Ethiopia, Gabon, Ghana, Guinea, Kenya, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Senegal, Somalia, South Africa, United Republic of Tanzania, Togo, Tunisia, Uganda, Zambia and Zimbabwe. [in bold: African lion range States]**

Draft decisions on *African lions (Panthera leo)* and *big cats*

Directed to the Secretariat

- 18.AA Subject to external funding, the Secretariat shall, in collaboration with African lion range States, the Convention on Migratory Species (CMS) and the International Union for Conservation of Nature (IUCN) and, as appropriate, taking into consideration the joint CITES-CMS African Carnivores Initiative and the *Guidelines for the Conservation of Lions in Africa*:
- a) support the implementation of activities in joint African lion conservation plans and strategies that relate to trade in African lion specimens and the implementation of CITES and, as needed, the review of such plans and strategies;
 - b) jointly with CMS undertake a comparative study of African lion population trends and conservation and management practices, such as lion hunting, within and between countries, including the role, if any, of international trade;
 - c) support capacity-building in African lion conservation and management including where appropriate, in the making of non-detriment findings by range States and the implementation of Resolution Conf. 17.9 on *Trade in hunting trophies of species listed in Appendix I or II*;
 - d) assist in maintaining a joint CITES-CMS webportal on African lions, that also allows for the posting and sharing of information and guidance on the conservation and management of African lions;
 - e) share the *Guidelines for the Conservation of Lions in Africa* and any relevant update with the Animals Committee for its review, as appropriate; and
 - f) report on the implementation of the present Decision to the Animals Committee and the Standing Committee as appropriate, and to the Conference of the Parties at its 19th meeting.
- 18.BB The Secretariat shall, subject to external resources:
- a) establish and convene, in consultation with the Standing Committee, a CITES Big Cats Task Force (Task Force), focusing on big cat species from Africa, Asia and Latin America, and consisting of representatives from Parties most affected by the illegal trade in big cats, the International Consortium on Combating Wildlife Crime partner organizations, other Parties and organizations, as appropriate, and experts who the Secretariat determines may contribute to the Task Force;
 - b) provide support to the Task Force allowing it, *inter alia*, to:
 - i) discuss enforcement and implementation issues related to the illegal trade in specimens of big cats;
 - ii) as deemed appropriate, exchange intelligence and other information on the illegal trade in big cats; and
 - iii) develop strategies and make recommendations to improve international cooperation regarding the enforcement of CITES concerning illegal trade in specimens of big cats; and
 - c) report the findings and recommendations of the Task Force to the Standing Committee for its consideration, and for making its own recommendations as appropriate.
- 18.CC The Secretariat shall, subject to external resources:
- a) conduct further research and analysis on the legal and illegal trade in lions and other big cats to better understand trends, linkages between trade in different species, and the commodities in trade which contain, or claim to contain, such specimens;

- b) assess whether the trade in lion specimens reported under purpose code “H” follows the guidance in Resolution Conf. 12.3 (Rev. CoP17) on *Permits and certificates*, paragraph 3 h), and whether additional reporting specificities or descriptions are needed;
- c) develop guidance materials for the identification of lion and other big cat specimens in trade in consultation with relevant experts;
- d) develop and support, in consultation with relevant experts, the use of appropriate forensic-type techniques for identifying lions and other big cat species in trade;
- e) share relevant information generated through the implementation of this Decision with the CITES Big Cats Task Force; and
- f) report on the implementation of the present Decision to the Animals and Standing Committees as appropriate, and to the Conference of the Parties at its 19th meeting.

Directed to the Animals Committee

18.DD The Animals Committee shall:

- a) review the *Guidelines for the Conservation of Lions in Africa* and any relevant update, as appropriate;
- b) review the information reported by the Secretariat under Decisions 18.AA and 18.CC, and submit recommendations to the Secretariat, the Standing Committee and African lion range States, as appropriate.

Directed to the Standing Committee

18.EE The Standing Committee shall:

- a) consider the reports submitted by the Animals Committee and the Secretariat, as per Decisions 18.AA to 18.DD, and make recommendations to the Animals Committee, the Secretariat and African lion range States, as appropriate; and
- b) report on the implementation of Decision 18.BB, and formulate recommendations as appropriate, to the Conference of the Parties at its 19th meeting.

Directed to Parties

18.FF Parties, including range States and consumer countries of African lion, as relevant, are encouraged to:

- a) increase enforcement efforts to detect illegal, unreported or misreported trade in specimens of African lion and other big cats;
- b) use the information generated by South Africa’s Barcode of Wildlife Project developed for priority CITES species to improve traceability when importing lion specimens from South Africa;
- c) provide details on the observed and/or removed lion body parts in trade when collecting and communicating data on illegal killing and illegal trade in lions to CITES in their annual reports; and
- d) cooperate on lion conservation, including by sharing information on lion populations, illegal killing and illegal trade.

Directed to Parties, governmental, intergovernmental, non-governmental organizations, donors and other entities

18.GG All Parties, governmental, intergovernmental, non-governmental organizations, donors and other entities are encouraged to support African lion range States and the Secretariat in their efforts to conserve and restore African lions across their range, taking into consideration the *Guidelines for the Conservation of Lions in Africa*; and in implementing Decisions 18.AA to 18.CC, and 18.FF.

Guidelines for the Conservation of Lions in Africa (Version 1.0, developed by the IUCN/SSC Cat Specialist Group) Executive Summary

1. The Guidelines for the Conservation of the Lion in Africa (GCLA) contribute to implementing [CITES Conference of the Parties Decision 17.241](#) and [CMS Conference of the Parties Decision 12.67](#) on the conservation of *Panthera leo* in Africa. The lion is included in Appendix II of both Conventions, and is listed as Vulnerable in the IUCN Red List. The GCLA provide practical guidance for the survey, conservation and management of lion populations in Africa, to facilitate the implementation of the Regional Conservation Strategies and National or Regional Action Plans developed based on these Strategies. CITES and CMS are joining forces in the African Carnivore Initiative to conserve iconic African carnivores, and the GCLA should assist this effort by providing a compendium of ideas, practical concepts and tools developed to date or in the future in English and French. It is meant to be a “living document” that will continuously integrate new instruments tools, concepts and experiences as they are being developed or new insight becomes available.

2.1. Since it was first assessed in 1996, the lion has always been listed as Vulnerable on the IUCN Red List of Threatened Species (hereafter: Red List). The most recent Red List assessment performed a time trend analysis of census data for relatively well monitored lion populations. From these, the authors inferred a decline of 43% over three lion generations and showed a dichotomy across the continent: Sample lion populations increased by 12% in four southern African countries (Botswana, Namibia, South Africa and Zimbabwe) and in India, while an observed decline of 60% in sample populations was inferred for the remainder of its African range. However, the representativeness of some data was disputed, e.g. by Tanzania who has now launched a nation-wide lion survey to contribute to more complete assessments in the future. In a regional assessment for West Africa, less than 250 remaining lions were estimated, resulting in the lion being assessed as Critically Endangered in West Africa.

2.2. The Regional Conservation Strategies listed 83 ‘Lion Conservation Units’ which contained an estimated total of 33,292 lions. These areas now contain an estimated 22,941 lions. Additional populations not listed in 2006, raise this total to 24,477 lions in 85 remaining populations, plus a “meta-population” of 628 lions in 44 small fenced reserves in South Africa. The decline in these estimates is consistent with the different data set used for the Red List assessment. The remaining populations in Africa cover a total surface area of approximately 2.5 million km², which is approximately 12.6% of the historical range.

2.3. The direct threats to lions as identified are: Human-lion conflict, prey depletion, habitat loss, killing of lions for their body parts either for local traditional medicine or to Asia and Asian diaspora, and other (poor protected area management, unsustainable offtake, disease, etc.).

2.4. The lion population in West and Central Africa, extending into the Horn of Africa and making up the subspecies *Panthera leo leo* together with the only population in India, is of particular concern. The status remains uncertain in many countries with the occasional, unconfirmed reports suggesting dispersal into former range. However, there are also positive signs in some areas. For example, a previously undocumented population on the border of Sudan and Ethiopia could be the third largest relatively stable population after WAP and Benoue.

2.5. Within a few strongholds, lions are not threatened with imminent extinction; some populations, especially in southern Africa, are likely to persist for decades. However, rapid declines in numbers and range indicate that lions may disappear from many parts of Africa.

3.1. The Regional Conservation Strategies for West and Central Africa, and for East and Southern Africa were developed at a workshop in 2005 in Douala and in 2006 in Johannesburg, respectively. Whereas East and Southern Africa share a common Strategy, the document for West and Central Africa contains separate Strategies for the two regions. In 2015, the CMS Secretariat commissioned an evaluation of the implementation of the Strategies. In answer to a questionnaire for the review, the responding countries considered the Strategies important or very important documents. The review concluded that the main threats to lions and the conservation challenges had not changed.

3.2. The over-arching Regional Conservation Strategies (Chapter 3.1), should be transferred into more concrete and specific Action Plans, either on a national level or on a regional/population level, as recommended in the 2006 Lion Conservation Strategies. Up to now, we are aware of 13 African countries that have developed National Action Plans for lions or more general strategies or action plans that include lions. We recommend, as

a next strategic planning step, to develop conservation plans at the level of transboundary population or metapopulation.

4.1. CITES and CMS, the two species-oriented international conventions under the auspice of the United Nations, have agreed on a [joint work programme 2015–2020](#), which provides a framework for cooperation. The CITES and CMS Secretariats jointly developed the African Carnivores Initiative (ACI) with the objective to bring more coherence to the implementation of existing CITES and CMS Resolutions and Decisions related to African wild dog, cheetah, leopard and lion, recognising that the four species overlap in their distribution and that overall threats, and the conservation measures called for to address them, are comparable to the four species. The Decisions adopted by CITES CoP17 and CMS CoP12 on the African lion are largely overlapping and provide for a set of broad conservation measures ranging from the collection of data and the improvement of conservation and trade management, to capacity building for Government officials and awareness raising in local communities. This first version of the GCLA was developed as a framework for lion conservation to support Governments and other stakeholders in their conservation activities.

4.2. Coordinated conservation efforts and international co-operation between range countries should be based on thorough strategic planning for its long-term success. The IUCN SSC has developed guidelines for the strategic planning for species conservation and the IUCN SSC Cat SG developed practical guidelines for strategic and project planning in cat conservation. The purpose of a careful planning process helps building partnerships, getting the buy-in from stakeholders and local people, and thus enhances the implementation of widely accepted and supported conservation measures. The Strategic Planning Cycle consists of the following steps: 1) Preparation, 2) Status Review, 3) Strategy, 4) Action Plan, 5) Implementation and 6) Monitoring & Evaluation. The circle implies that conservation is an adaptive process.

4.3. In some areas, lions roam widely and cyclically and predictably cross international borders. Many important lion populations are transfrontier populations, and many of the ecosystems that represent lion strongholds are contiguous across multiple national borders. It is therefore appropriate that lion conservation and management should be the subject of collaboration between countries, or even across regions, to benefit from conservation efforts that are harmonised between the relevant Range States. The recognition of the importance of transboundary lion management recently was one of the arguments leading to the listing of this species on Annex II of the Bonn Convention (CMS). To our knowledge, a species-focused transboundary action plan currently only exists in the W-Arly-Pendjari-Oti-Mandouri Transboundary Biosphere Reserve, with a further plan in the Kavango Zambezi Transfrontier Conservation Area in the process of being published.

5. Population size and trends of large carnivores are difficult to determine but are needed to inform conservation actions. Depending on the context at each site, counting or surveying African lions can vary from them being relatively easily monitored right down to the level of individual recognition, through to relatively coarse estimates of indices of relative abundance or probability of occupancy). For lions there is not yet one standardised method used to estimate density or abundance. Total counts of known individuals can be achieved in some areas and are a very effective tool for monitoring vital rates in lion populations. However, perhaps in the majority of instances practitioners are best advised to use indices of the population size. One such approach, track counts, relies on the relationship between frequencies with which tracks (spoor) are detected and an estimate of the actual density. The other commonly used approach is call-up stations, which works well for apex carnivores such as lions and spotted hyaenas (*Crocuta crocuta*). We recommend call-up surveys as the preferred method for surveying lions in areas where they occur in moderate to high densities and readily approach vehicles, and favour spoor surveys in low density areas and at sites where lions are known to be wary of people.

6.1. Some African lion populations have crucial range on human-dominated community land, particularly around protected areas. This co-occurrence of lions with humans often leads to conflict, especially where livestock are also present. In addition to the visible costs of depredation and human attack, there are many 'hidden' costs of conflict. Truly understanding the drivers of conflict in different sites, including underlying issues, is important, but may take a long time. Once the dynamics of the conflict have been assessed, the following steps can be taken to move from conflict to coexistence: (i) reduce direct threats posed by lions, (ii) offset remaining costs using financial mechanisms (cf. Chapter 6.9), (iii) increase community engagement with conservation, (iv) address cultural and other underlying causes of conflict, (v) empower communities, reduce vulnerabilities and secure natural resources, and (vi) develop mechanisms where lions and other wildlife are seen as a net benefit.

6.2. The majority of the lion range today is in formal protected areas (PAs) or is closely associated with PAs. The Red List assessment 2015 used mainly data from PAs and found many of these protected populations in decline. Illegal hunting (poaching) of lions and especially of their wild prey base inside PAs is a major contributor to such declines. The lion must now be regarded as highly conservation-dependent in which ensuring the integrity and status of PAs is essential to the species' long-term future. Even in the lion range within existing formally protected

areas, lion populations could be 3–4 times higher than they currently are if ecological potential was realised. Mostly, such recovery cannot occur without first achieving effective protection of the site in terms of law enforcement patrols, law enforcement management and intelligence and investigations. The primary limitation to achieving this is usually financial. There are different options for long-term collaborative management partnerships between African statutory wildlife authorities and conservation NGOs to address funding and capacity shortfalls in PAs. Relative to the killing of lions in situ, international trade and trafficking of lions has historically been considered a low conservation priority with limited impact on wild populations. The number of hunting trophies exported by range states steadily increased until about a decade ago. The total number of trophies from wild lions subsequently decreased while the total overall continues to increase until 2016, due to massive growth in exports by South Africa of captive-bred lion trophies. Both forms of legal trade, in trophies and bones, have the potential to impact wild lion status.

6.3. The depletion of prey is recognised as one of the greatest, most pervasive and long-term threats to the conservation and viability of many of the world's large carnivore species, including lions. Across Africa, the conservation status of ungulate populations is not homogenous. Prey depletion is a consequence of one or several immediate anthropogenic pressures, including the unsustainable hunting of wildlife for meat, 'bushmeat', the loss of habitat and exploitive competition between wild ungulates and domestic livestock. The status of ungulate populations however is also correlated to wider and more pervasive factors including economic investment in and management of protected areas (PAs), local economic development, quality of governance and levels of corruption, regional conflict and war, wildlife disease and climate change. In this chapter, we first present the different reasons for the decline of prey populations, before summarising possible solutions.

6.4. Africa's human population is growing at an unprecedented rate, the current population being predicted to have almost trebled by 2060, from 1.1 billion to over 2.8 billion people. Whilst there is a moral imperative to develop Africa's economies for the benefit of Africans and alleviation of poverty, if the continent's unique fauna, flora and ecosystems are to survive, conservationists and African governments need to plan for zonation of development and prioritisation and preservation of critical habitats. Wide-ranging species such as lions may need particular attention. The African protected area network protects 56% (926,450 km²) of extant lion range. However, effective conservation of African lions may hinge not only on protection and management of the current network of national protected areas, but also on identifying and protecting the habitat that links protected areas to allow long term gene-flow. Methods in landscape ecology can provide empirical evidence to identify threats to habitat linkages and for prioritisation and conservation of critical habitats contributing to habitat connectivity within current lion range. Such initiatives also provide policy makers with clear visualisation of planning needs. Within the framework of creating landscapes that contribute to protection of lion populations, the attitudes and motivations toward lion conservation of human communities that live within putative habitat linkages between core protected lion populations are of utmost importance.

6.5. This sub-chapter provides an overview of lion trophy hunting (also known as (tourist) safari hunting or sport hunting) and suggested best practices if it is used as part of a country's wildlife management strategy. We focus here on the hunting of wild lions. Guidelines for the management of 'managed wild lions' have been developed in [South Africa's Biodiversity Management Plan for the Lion](#). It is worth noting that the 10 countries where trophy hunting has recently occurred collectively represent around 70% of remaining wild African lion range and around 75% of the wild population. Trophy hunting can maintain lion range under a wildlife-based land use and generate substantial economic revenue, which often support the country's wider conservation efforts. It can generate positive conservation and development impacts when well managed, but can also have negative impacts on individual lion populations, especially where harvest rates are high. According to [CITES Resolution Conf. 14.7 \(Rev CoP15\)](#), exports of species should be maintained at a level that has no detrimental effect on the population of the species, and according to the [import requirements for lion trophies by the U.S. Fish and Wildlife Service](#) (which have been also recommended to other governments), trophy hunting should also help improve the status of lions in the wild. Here, we provide some general guidance intended to help ensure that where trophy hunting is practiced, it minimises the risk of detriment to the population and maximises the chance of effective conservation.

6.6. The CITES convention requires that a permit is issued only where the exporting Scientific Authority has determined that trade is not detrimental to the survival of the species. Although there is no single formula that can be applied to every situation, it is possible to define a set of guidelines that will help the Scientific Authority of a Range State to evaluate the potential impact of trade on the conservation status of a particular species. As per [Resolution Conf. 16.7 \(Rev. CoP17\)](#), there are various ways in which a Party's Scientific Authority can make NDFs. However, extant lion populations can be generally placed into one of two categories: known – those for which robust population data exist; and unknown – those that are data deficient (the majority). For the lion populations that are data deficient, a far more cautious and restrictive approach to harvest must be applied. With regard to the guiding principles contained in Conf. 16.7, the NDF for lion may include: information relating to distribution, status and trends of populations based on national conservation plans, where applicable, and which

inform harvests; and a review of the sustainability of harvest levels taking into account all mortality sources affecting the wild population of the species, including mortality due to illegal killing. Given that minimum age, sex, and rate of off-take restrictions may be safely and practically applied for trophy harvest in populations of unknown status, these criteria are preferable to ensure sustainability.

6.7. Livestock depredation is most serious where wild prey has been reduced by overgrazing, agricultural development or widespread bushmeat poaching, and where traditional livestock management practices have been abandoned. Some individual lions persist in taking livestock despite protective measures. In such cases, precisely targeted lethal Problem Animal Control (PAC) of identified persistent stock raiders is far preferable to indiscriminate killing by individuals or communities. In most countries, local or national wildlife authorities are legally tasked with the removal of persistent problem animals. [Living with Lions](#) has been working with Laikipia ranchers since 1997 to assist in conserving predators while minimising depredation losses. In 2001, 20 lions were known to have been shot on the ranches, declining to two in 2017.

We offer the following recommendations to wildlife conservation authorities: It is essential to have a clear definition of what constitutes a problem animal that warrants removal, and these may vary depending on land use, conservation priorities and other factors. The first response of a PAC team should be to investigate the circumstances of livestock loss to assess measures short of killing a lion which might resolve the problem. The decision to remove a lion should only be made when there is evidence that people are doing their part to avoid depredation. Poison should never be used under any circumstance. Translocation is only justifiable when animals are moved into vacant habitat that have no or very few resident lions and where humans will no longer kill them, i.e. newly created reserves. It is essential that good records be kept of all complaints and interventions, including details of the complaints, the results of investigations, details of any interventions performed, and whenever possible, follow-up monitoring of results.

6.8. The overarching goal of African lion conservation efforts should be – besides securing the survival of viable populations – to restore any missing ecological processes and allow populations to recover on their own with the minimum amount of human intervention. Where it is not possible to restore ecological processes, lion conservation efforts should seek to mimic natural processes using appropriate interventions such as reintroduction, genetic management and, in extreme cases, genetic rescue. This chapter complements the [IUCN Guidelines for Reintroductions and Other Conservation Translocations](#).

If connectivity cannot be restored (Chapter 6.4), any (meta-)population smaller than 50 prides will likely require some human intervention to ensure long-term genetic sustainability. Ideally this would be through regular reinforcement events with suitable individuals, typically male lions to mimic nomadic males moving into a new area with occasional translocation of females to mimic less common lioness migration. In cases where a population is already experiencing inbreeding, a genetic rescue effort may be necessary. In cases where lions are extinct in an area, reintroduction is the only way to speed up the re-establishment of lion populations in the area. Individuals must be selected carefully regarding their origin, demographics and genetics and tested for diseases and parasites. Growth phases and genetic diversity must be monitored closely, and inbreeding should be prevented. The introduction of new individuals into an existing population may be designed so as to mimic a take-over. However, for any release, a release strategy must be decided, and the habitat requirements must be secured beforehand.

6.9. Lions generate significant economic revenue at national scales, as they are one of the most sought-after animals by both photographic tourists and trophy hunters. However, in marked contrast, live lions usually have very little, no, or even negative value for local Africans who live alongside them. The challenge is how to effectively translate the international value of live lions down to a local scale, so that it not only offsets the costs imposed by them but is also sufficient to incentivise long-term coexistence. Financial approaches intended to improve lion conservation and coexistence include: (i) compensation and insurance schemes, (ii) revenue-sharing and employment in conservation services, (iii) conservancies and other community wildlife areas, (iv) conservation products, (v) conservation performance payments, and (vi) landscape-level business models. Ultimately, there is no single solution which will ensure the equitable, sustainable transfer of the global value of lions to a local level. However, there is a considerable range of approaches, both traditional and novel, which can help not only to offset the local costs of lions, but also to ensure that they are ultimately seen as a net benefit to the people most affected by their presence.

7.1. Having well-trained people is as vital in nature conservation and management as in any other field. We present a number of training opportunities in Africa or online. We would also like to refer you to [“Protected Area Staff Training: Guidelines for Planning and Management”](#) from the IUCN Best Practice Protected area Guidelines Series and the [Réseau des Institutions de Formation Forestière et Environnementale de l'Afrique Centrale](#) (RIFFEAC).

7.2. In 2008, WildCRU started a [Diploma in International Wildlife Conservation Practices](#) aimed at young, practical conservationists from developing countries. To enrol, applicants have to go through a [competitive selection procedure](#). The program involves 7 months of intensive, residential tuition at WildCRU. The course is made possible by a donation from the Recanati-Kaplan foundation which covers all course related costs (tuition, visa and travel costs) and students – having gone through a competitive selection procedure – receive a living stipend and are provided with housing on site at WildCRU. The aim is that once graduated they will build on their role as a field biologist and conservation practitioner, working within a national or regional wildlife management and protected area systems organisation, for NGOs or as independent practitioner. In addition, their knowledge and expertise will benefit their colleagues through informal peer-learning, skills transfer and the encouragement of critical thinking and debate.

7.3. The implementation of NAPs requires good coordination, to ensure that different departments, and sometimes different ministries, deliver on the activities outlined in the plans. A model which has proven effective in implementing NAPs is that used by the Range Wide Conservation Programme for Cheetah and African Wild Dogs. Here, once the NAP is developed by the government and relevant stakeholders, the national wildlife authority agrees to appoint a National Coordinator. Such an individual is, ideally, based within the most relevant wildlife department within the country concerned, and coordinates NAP implementation by ensuring that relevant government departments, NGOs, and individuals move ahead in implementing the activities laid out in the plan. Coordinators are unlikely to be lion ‘experts’, and thus they will benefit from targeted training to give them the required skills and knowledge. Regular meetings, to allow reporting on progress in implementing the NAP, are essential to maintain momentum over the 5–10-year cycle of NAPs.

7.4. Wildlife poisoning in general, and the poisoning of lions in particular, is a rapidly emerging threat across Africa, with serious ecological and human impacts. The impacts of a poisoning incident can be far reaching, not only involving the targeted species but also other mammalian and avian scavengers that eat either the poison or succumb to secondary poisoning through eating other poisoned animals. The African Wildlife Poisoning Database has been formally maintained since 2017, although records date back to 1961. Although the intentional killing of wildlife by means of poisoning is very difficult to prevent, the impact of individual poisoning events in terms of the losses of wildlife can be reduced through rapid response and immediate action to prevent further losses and contamination of the environment. At the same time as securing and stabilising a poisoning site, it is essential to collect appropriate evidence for possible prosecution. The EWT-Vultures for Africa Programme, in partnership with The Hawk Conservancy Trust, offer poisoning intervention training to rangers, law enforcement officials and other interested parties across Southern and East Africa. Since 2015 training has been provided to 1,500 people in nine countries across the lion’s range in Africa.

7.5. Law enforcement and intelligence training span a broad spectrum of different skills and disciplines. The planning and delivery of site-based law enforcement and intelligence training should form part of a broader strategic plan for protected area management. Any plan for the delivery of law enforcement and intelligence training therefore should include plans to train patrol managers and planners, analysts, community engagers, technicians as well as the rangers themselves. In a first step, a training needs analysis should (TNA) take place. What is subsequently taught will always link back to the findings from the TNA. Sites will always have their own specific sets of training requirements based on what is happening in their sites and the threats and challenges faced. It is important to consider that training forms part of an ongoing cycle to allow people reach their potential, and time must be allowed for selection, basic and continuation training.

8. Public awareness is all about communication, which needs to be tailored to the defined target audience. The 7 steps of an effective communications program are described in a [Quick guide on communication, education and public aware-ness programmes for protected area practitioners](#) by the Convention on Biological Diversity and Rare. We present some examples of technical awareness publications (usually aimed at practitioners or managers), educational publications for children or adults, and general public awareness publications.

9.1. There is significant difficulty in compiling and consequently interpreting lion numbers; the 2016 Red List Assessment, for example, did not use total lion numbers for the assessment but rather inferred a decline based on time trend analysis of census data from selected reference areas (Chapter 2). [CITES Decision 17.241](#) and [CMS Decision 12.67](#) contain amongst others the demand to the respective Secretariat to “support the development of relevant databases by African Lion Range States”. Using the idea of the African Elephant Database, and as a collaborative effort between government, researchers and NGOs, we aim to establish the African Lion Database with the long-term intention of expanding it to include e.g. the other focal species of the ACI. The vision is to establish a database as an instrument for lion conservation and management by facilitating the sharing of information between stakeholders. In order for the ALD to be successful, it requires support from all lion Range States as well as over-seeing parties.

9.2. [CITES Decision 17.241 j](#) and [CMS Decision 12.67 a, item ix](#) called for the creation of a web portal for the posting and sharing of information and voluntary guidance on the making of NDFs, and information regarding conservation and management of African lions, respectively. The [Lion Web Portal](#) is now online and is meant to be a dynamic and growing web page. The needs of the end users (lion Range State wildlife managers and policy makers) should guide the information that is added to the web portal, which will be not only targeted to their needs, but also continuously supplemented through their own materials and products as they become available.

9.3. Networking can serve the exchange of information on activities, the exchange of experience and/or data, sharing of resources, and/or the development of common rules, standards etc. We have compiled a few examples of networks in a very broad sense, where the co-operation has been more or less formalised.

10.1. The conservation of wide-ranging species like lion depends on international cooperation, even though implementation will ultimately have to be tailored to national policy and legislative environments. This can be managed through the development of regional strategies. The African Carnivores Initiative under CITES and CMS provides an important international frame-work to guide cooperation of range states in the cause of lion conservation. However, it is crucial that sufficient financial and human resources are put in place, either within CITES or CMS, or through a separate international institution or programme, to support range states in moving forward with implementing their conservation programmes. There are now already multiple transboundary conservation initiatives encompassing lion range with varying degrees of formal cooperation between neighbouring countries, from relatively informal joint management agreements to government-to-government treaties.

10.2. Funders can be broadly categorised between multi-lateral donor agencies (e.g. GEF, World Bank, UNDP, UNEP, EU), bi-lateral donor agencies (e.g. France, Germany, Norway, UK, USA), NGOs and zoos (e.g. African Wildlife Foundation, Lion Recovery Fund), and foundations and philanthropists (e.g. Band, Oak, Segré, Wild Cat, Wyss Foundations). The [CITES Notification to the Parties No. 2018/042](#) compiled examples of funding opportunities relevant to lion conservation. There already exist a vast number of conservation projects undertaken by not-for profit organisations in Africa, the majority working in East and Southern Africa. Although extremely varied, they can be categorised between projects tackling the illegal wildlife trade, facilitating coexistence between people and wildlife, and others (e.g. veterinary support, support for the training of rangers and other wildlife authority staff). We present a non-exhaustive list of examples of NGOs working on activities relevant to lion conservation in Africa.

TENTATIVE BUDGET AND SOURCE OF FUNDING
FOR THE IMPLEMENTATION OF DRAFT DECISIONS

According to Resolution Conf. 4.6 (Rev. CoP16) on *Submission of draft resolutions, draft decisions and other documents for meetings of the Conference of the Parties*, the Conference of the Parties decided that any draft resolutions or decisions submitted for consideration at a meeting of the Conference of the Parties that have budgetary and workload implications for the Secretariat or permanent committees must contain or be accompanied by a budget for the work involved and an indication of the source of funding.

The table below has been prepared by the Secretariat, and proposes a tentative budget for the implementation of Decisions proposed for adoption at CoP18 on African lions (*Panthera leo*).

The Secretariat notes that the Joint CITES-CMS African Carnivores Initiative (ACI) may offer opportunities to pool resources and funding that can assist with the implementation of the draft decisions on African lions. A Junior Professional Officer (JPO) is expected to join the CMS Secretariat in 2019 to support the implementation of CMS [Decisions 12.55 to 12.60](#) on the *Joint CMS-CITES African Carnivores Initiative* and of the draft CITES Decisions on the *Joint CITES-CMS African Carnivores Initiative*, should these be adopted (see document CoP18 Doc.96). This JPO could potentially assist with fundraising for the implementation of some of the activities included in the table below.

Decision	Activity	Cost implications (USD)
18.AA	<p>Subject to external funding, the Secretariat shall, in collaboration with African lion range States, the Convention on Migratory Species (CMS) and the International Union for Conservation of Nature (IUCN) and, as appropriate, taking into consideration the joint CITES-CMS African Carnivores Initiative and the <i>Guidelines for the Conservation of Lions in Africa</i>:</p> <p>a) support the implementation of activities in joint African lion conservation plans and strategies that relate to trade in African lion specimens and the implementation of CITES and, as needed, the review of such plans and strategies;</p> <p>b) jointly with CMS undertake a comparative study of African lion population trends and conservation and management practices, such as lion hunting, within and between countries, including the role, if any, of international trade;</p> <p>c) support capacity building in African lion conservation and management, including, where appropriate, in the making of non-detriment findings by range States and the implementation of Resolution Conf. 17.9 on <i>Trade in hunting trophies of species listed in Appendix I or II</i>;</p> <p>d) assist in maintaining a joint CITES-CMS webportal on African lions, that also allows for the posting and sharing of information and guidance on the conservation and management of African lions;</p>	<p>Support to the implementation of activities under Decision 18.AA: 50,000-70,000 USD [could also help implement paragraph c)]</p> <p>Large technical study: 50,000-100,000 USD</p> <p>Medium sized regional workshop: 50,000-70,000 USD</p> <p>Technical guidance study: 30,000-50,000 USD</p> <p>This activity is expected to be supported by the Junior Professional Officer joining the CMS Secretariat.</p>
18.BB	<p>The Secretariat shall, subject to external resources:</p> <p>a) establish and convene, in consultation with the Standing Committee, a CITES big cats task force (Task Force),</p>	<p>Large international meeting: 150,000-200,000 USD for</p>

	<p>focusing on big cat species from Africa, Asia and Latin America, and consisting of representatives from Parties most affected by the illegal trade in big cats, the International Consortium on Combating Wildlife Crime partner organizations, other Parties and organizations, as appropriate, and experts who the Secretariat determines may contribute to the Task Force;</p> <p>b) Provide support to the Task Force allowing it, <i>inter alia</i>, to: (i) discuss enforcement and implementation issues related to the illegal trade in specimens of big cats; (ii) as deemed appropriate, exchange intelligence and other information on the illegal trade in big cats; and (iii) develop strategies and make recommendations to improve international cooperation regarding the enforcement of CITES concerning illegal trade in specimens of big cats; and</p>	<p>participants, organization and Secretariat staff travel</p> <p>Technical studies in support of Task force: 20,000-40,000 USD</p>
18.CC	<p>The Secretariat shall, subject to external resources:</p> <p>a) conduct further research and analysis on the legal and illegal trade in lions and other big cats to better understand trends, linkages between trade in the different species of big cats, and the commodities in trade which contain, or claim to contain, specimens of these;</p> <p>c) develop guidance materials for the identification of lion and other big cat specimens in trade in consultation with relevant experts;</p> <p>d) develop and support, in consultation with relevant experts, the use of appropriate forensic-type techniques for identifying lions and other big cat species in trade;</p>	<p>Large technical study: 80,000-130,000 USD</p> <p>Small technical study: 20,000-40,000 USD</p> <p>Small technical study: 20,000-30,000 USD</p> <p><u>Total estimate:</u> 420,000-730,000 USD</p>