CONVENTION SUR LE COMMERCE INTERNATIONAL DES ESPÈCES
DE FAUNE ET DE FLORE SAUVAGES MENACÉES D'EXTINCTION
_____

Trentième session du Comité pour les animaux
Genève (Suisse), 16 – 21 juillet 2018

Questions stratégiques

Avis de commerce non préjudiciable

RÉSULTATS DE L' 'ATELIER INTERNATIONAL DE SPÉCIALISTES DES AVIS DE COMMERCE NON
PRÉJUDICIABLE POUR LES TROPHÉES DE CHASSE
DE CERTAINES ESPÈCES AFRICAINES INSCRITES
AUX ANNEXES I ET II DE LA CITES'
(SÉVILLE, 26-29 AVRIL 2018)

1. Le présent document a été soumis par l'Union européenne (UE) et élaboré en consultation avec les États membres[*].

Historique

2. Les autorités scientifiques CITES des pays d'exportation et d'importation sont continuellement sollicitées pour déterminer si telle ou telle exportation nuira à la survie d'une espèce (en d'autre termes, pour émettre des avis de commerce non préjudiciable ou ACNP) et pour définir les données et les paramètres pertinents à cet effet. Par ailleurs, si les principaux pays d'importation appliquent des règles plus strictes que celles de la CITES (c'est-à-dire des mesures nationales plus strictes), ces règles ne se fondent pas nécessairement sur les mêmes critères et, partant, ne conduisent pas toujours aux mêmes résultats lorsqu'il s'agit de formuler des opinions scientifiques. Cette absence d'homogénéité et de critères communs en matière d'application de la CITES concernant les trophées de chasse entre pays d'importation et pays d'exportation n'est pas du meilleur intérêt d'une industrie qui, si elle est bien gérée, peut apporter d'importantes incitations à la conservation en Afrique.

3. Conformément à la résolution Conf. 16.7 (Rev. CoP17) sur les ACNP, qui recommande "que les autorités scientifiques prennent en compte les concepts et les principes directeurs non contraignants ci-après pour déterminer si le commerce serait préjudiciable à la survie d'une espèce", les Parties doivent prendre des mesures coordonnées pour produire des évaluations plus rigoureuses et plus avisées sur le plan scientifique. La résolution 17.9 sur le commerce des trophées de chasse souligne, elle aussi, l'importance d'adopter une approche coordonnée, en particulier dans son paragraphe 6 qui recommande que les Parties "maintiennent un dialogue étroit […], au besoin, et que ces pays partagent leurs informations, sur demande, concernant les avis des autorités scientifiques". Enfin, la résolution Conf. 10.3, Désignation et rôle des autorités scientifiques, encourage les Parties, le Secrétariat et les organisations non gouvernementales intéressées à organiser et appuyer des ateliers et des séminaires conçus expressément pour améliorer la mise en œuvre de la CITES par les autorités scientifiques.

_____

[*] *Les appellations géographiques employées dans ce document n'impliquent de la part du Secrétariat CITES (ou du Programme des Nations Unies pour l'environnement) aucune prise de position quant au statut juridique des pays, territoires ou zones, ni quant à leurs frontières ou limites. La responsabilité du contenu du document incombe exclusivement à son auteur.*

4. Dans les cercles de la CITES, différentes discussions se sont déroulées depuis dix ans concernant les ACNP pour les trophées de chasse. Le sujet a, par exemple, été abordé à l'atelier de Cancun sur les ACNP, en 2008.

Plus récemment, en marge de la 29e session du Comité pour les animaux (AC29, juillet 2017, Genève), L'autorité scientifique de l'Espagne a ouvert la discussion sur la possibilité d'élaborer des orientations pour promouvoir des pratiques de meilleure gestion de la chasse pour certaines espèces inscrites aux annexes CITES, notamment sur les mérites éventuels de l'émission d'ACNP au niveau local. Compte tenu de l'intérêt des participants pour ce sujet, et pour que la discussion soit plus inclusive et plus détaillée, il a été suggéré que l'Espagne coordonne un atelier technique sur les ACNP pour les trophées de chasse.

5. Dans ce contexte, l'autorité scientifique de l'Espagne a organisé, en avril, l''atelier de Séville' en vue de promouvoir une collaboration étroite entre les autorités scientifiques des pays d'exportation et d'importation en matière de formulation d'avis de commerce non préjudiciable (ACNP) CITES pour les trophées de chasse de certaines espèces africaines (points 2c, 3, 4, 6 et 7 de la résolution Conf. 17.9). L'atelier était divisé en séances plénières et quatre groupes de travail spécifiques: lion d'Afrique; léopard; éléphants et rhinocéros; et avantages pour la conservation et avantages sociaux.

Les objectifs spécifiques de l'atelier étaient les suivants:

– Rédaction d'orientations sur les meilleures pratiques de gestion de la chasse

– Élaboration d'un modèle commun et unifié d'ACNP pour des espèces africaines ciblées, convenu conjointement par les pays d'exportation et les pays d'importation

La grande nouveauté de l'atelier est que pour la première fois, les autorités des Parties à la CITES qui sont des pays d'exportation (pays africains) et d'importation (États-Unis d'Amérique et Union européenne), ainsi que les représentants de la communauté scientifique, le secteur de la chasse et les organisations de la société civile ont pu se faire entendre dans un riche débat et échange d'opinions et de connaissances spécialisées.

Pour l'organisation de l'atelier, l'autorité scientifique de l'Espagne a pu compter sur la participation et la collaboration de la Commission européenne, du PNUE-WCMC et du Secrétariat CITES, parmi d'autres Parties et organisations du secteur public et du secteur privé.

Conclusions

6. Les conclusions générales de l'atelier approuvées en séance plénière sont présentées ci-dessous. Les conclusions des groupes de travail sont jointes en annexe.

1) Tous les participants ont considéré que l'atelier a été un exercice très utile. Plusieurs participants ont estimé qu'il s'agissait-là de la meilleure initiative récente en faveur de progrès constructifs sur le sujet. Globalement, les participants ont eu le sentiment que l'atelier était un succès selon plusieurs perspectives:

   a) un consensus a été trouvé sur plusieurs variables scientifiques pouvant étayer et guider (plutôt que prescrire) les avis de commerce non préjudiciable et la gestion durable des trophées d'espèces clés;

   b) l'atelier a mis en évidence les variables pouvant être souhaitables mais plus difficiles à appliquer ainsi que celles qui n'ont pas été considérées comme généralement pertinentes;

   c) il a fourni une plateforme unique pour les échanges de vues et d'expérience entre les pays d'exportation et d'importation, les opérateurs, les scientifiques et les représentants de la société civile présents, encourageant le dialogue et une plus grande appréciation des différents points de vue;

   d) il a culminé par une marche à suivre convenue pour profiter de ce succès dans le contexte d'une stratégie à plus long terme.

2) Les participants à l'atelier ont soutenu la soumission des résultats à la prochaine session du Comité pour les animaux (AC30). Il a été suggéré que l'idéal serait de présenter le document en anglais,

français et espagnol. Il a également été suggéré de préciser l'identité des organismes représentés à l'atelier et d'indiquer que les résultats constituent des opinions consensuelles. Enfin, il a été suggéré que les résultats soient directement partagés avec les États des aires de répartition.

3) Les orientations initiales, issues de l'atelier devraient être mises à l'essai sur le terrain et les États de l'aire de répartition intéressés sont encouragés à se faire connaître. Il s'agirait d'un exercice scientifique, de renforcement des capacités et de partage de l'information.

4) L'Espagne a proposé, et cette proposition a été accueillie avec satisfaction, qu'un deuxième atelier soit organisé en Afrique, dans un pays et à des dates à déterminer (probablement après la CoP18 de la CITES), afin de présenter les résultats des essais sur le terrain et d'encourager la participation d'autres États africains des aires de répartition.

5) Plusieurs suggestions ont été faites concernant le prochain atelier, comme suit:

   a) reconnaissant que l'Afrique est un continent divers, avec d'importantes différences régionales, il serait souhaitable de renforcer la participation des pays francophones;

   b) les participants des organisations de la société civile ont estimé qu'il serait souhaitable de renforcer la représentation des ONG;

   c) il serait utile de distribuer des documents d'information aux participants bien avant l'atelier.

Mesures proposées à l'adresse du Comité pour les animaux

a) Inviter le Comité pour les animaux à prendre note des résultats de l'atelier (conclusions générales – ci-dessus – et conclusions spécifiques des groupes de travail, ci-joint).

b) Inviter les États des aires de répartition à exprimer leur intérêt à collaborer avec l'Espagne pour mettre à l'essai sur le terrain les résultats de l'atelier, dans le cadre d'un exercice scientifique, de renforcement des capacités et de partage de l'information, en vue d'élaborer et d'affiner les lignes directrices sur les ACNP, pratiques et fondées sur des éléments de preuve, pour les espèces ciblées.

c) Informer sur un projet de deuxième atelier sur le sujet qui serait organisé par un pays africain.

d) Inviter le Comité pour les animaux à examiner la pertinence des résultats de l'atelier, dans le contexte de la résolution Conf. 16.7 (Rev. CoP17) et de la décision 16.53 sur les ACNP, de la résolution Conf. 17.9 sur le commerce des trophées de chasse, de la résolution Conf. 10.14 (Rev. CoP16) et des décisions 17.114 à 17.117 sur les léopards, de la résolution Conf. 13.5 (Rev. CoP14) sur le rhinocéros noir, des décisions 17.241 à 17.245 sur les lions d'Afrique, de la résolution Conf. 16.6 (Rev. CoP17) et des décisions 17.36 à 17.40 sur les moyens d'existence.

International expert workshop on NDFs for hunting trophies of certain African species

26-29 April 2018, Seville, Spain

Workshop report

Contents

I. Background

Trophy hunting of some African species, such as elephant, leopard, lion or white and black rhinoceros, among others, is subject to much public attention globally. A fundamental requirement of CITES is that an export permit should only be issued where the Scientific Authority from the exporting country (and also from some key importing countries[1] under their stricter domestic measures[2]) has determined the trade **is not detrimental to the survival of the species (i.e. to make a 'non-detriment finding' or NDF).** An NDF should be a scientific-based assessment, in which the Scientific Authority takes into consideration a wide range of information and parameters.

CITES non-detriment findings are not necessarily based on the same sources of information or criteria, hence not always leading to the same results when formulating science-based opinions. A lack of consistency in the making of CITES non-detriment findings with regard to hunting trophies between, and amongst, importing and exporting countries, is not in the best interest of conservation or an industry that, if well managed, can generate powerful conservation incentives in Africa.

In line with Resolution Conf. 16.7 (Rev. CoP17) on NDFs, which recommends that "*scientific authorities take into account concepts and non-binding guiding principles in considering whether trade would be detrimental to the survival of a species*", Parties need to take coordinated steps to move towards more robust and scientifically-sound evaluations. The importance of a coordinated approach is also highlighted in Resolution Conf. 17.9 on trade in hunting trophies, particularly paragraphs 6, which recommends that Parties "*maintain a close dialogue as necessary, and that these countries share information, upon request, regarding the finding of the Scientific Authorities*". Furthermore, Resolution Conf. 10.3 on *Designation and role of the Scientific Authorities*, encourages Parties, the Secretariat and interested non-governmental organizations to develop and support workshops and seminars designed specifically to improve the implementation of CITES by Scientific Authorities.

In addition, a number of Resolutions and Decisions relate to the establishment of quotas for hunting trophies from certain African trophy species, including black rhino (Resolution Conf. 13.5 (Rev. CoP14)) and leopard (Resolution Conf. 10.14 (Rev. CoP16) and Decisions 17.114 to 17.117), and to the management of the African lion (e.g. Decisions 17241 to 17.245). Livelihood considerations (e.g. Resolution Conf. 16.6 (Rev. CoP17) and Decisions 17.36 to 17.40), as well as Decision 16.53 on NDFs are also relevant in this context.

The workshop results are relevant in the context of the abovementioned resolutions and decisions.

Various discussions have taken place within the CITES arena over the last decade regarding NDFs for hunting trophies. For example, the topic was touched upon at the Cancun workshop on NDFs in 2008[3] and in the same line the CITES Secretariat has developed NDF guidance for a few Central Asian species

---

[1] The EU (Spain and Germany in particular), together with the US, are the world's largest importers of hunting trophies, and their particular rules drive the hunting sector of these species around the world.

[2] Under Article IV, paragraph 1(a) of the Convention, Parties have the right to adopt "stricter domestic measures".

[3] See for example the case studies on NDFs for lion, brown bear and leopard [See: http://www.conabio.gob.mx/institucion/cooperacion_internacional/TallerNDF/wg5.htm]

that are principally trophy-hunted[4]. There is also a relatively large body of scientific and grey literature on the subject, from best practice guidance[5] to species-specific studies[6].

More recently, in the margins of the 29th meeting of the CITES Animals Committee (AC29, July 2017, Geneva), the Spanish Scientific Authority initiated an informal discussion on the potential to develop guidance to promote best management hunting practices for certain CITES-listed species, including the possible merits of NDF making at the level of hunting concessions. In view of the interest in the subject of those present, and to ensure a more inclusive and detailed discussion, it was suggested that Spain coordinate a technical workshop on NDFs for hunting trophies. The Seville workshop built upon and evolved from those discussions.

For the development of the workshop, the Spanish Scientific Authority benefited from the inputs and collaboration of the European Commission, UNEP-WCMC and the CITES Secretariat, amongst other Parties and public and private organisations.

II. Objectives

The Workshop's main goal was to contribute to the implementation of recommendations in CITES Resolution Conf. 17.9 *Trade in hunting trophies of species listed in Appendix I or II.* In particular, it aimed to foster close collaboration between Scientific Authorities from both exporting and importing countries in relation to the formulation of CITES Non-Detriment Findings (NDFs) for hunting trophies of certain African species (points 2c, 3, 4, 6 and 7 of Resolution Conf. 17.9).

Specific objectives included:

- To share, analyse and summarise different approaches followed by Scientific Authorities in exporting and importing countries in Africa, the European Union and the United States of America, in relation to the making of NDFs for hunting trophies of target African species[7].
- To draft guidance on best hunting management practices and NDF making for the target African species.
- To present draft guidance and workshop results, as appropriate, to the members of the Animals Committee for their consideration at AC30 (July 2018), in relation to, *inter alia*, Resolutions Conf. 17.9 and 16.7 (Rev. CoP17), and Decisions 17.242 (African lions), 17.115 (Leopards) and 16.53 (NDFs).

---

[4] *https://cites.unia.es/cites/file.php/1/files/cb-framework-ndf-trophies.pdf*

[5] *E.g. CIC's best practice guidance (http://www.fao.org/3/a-aj114e.pdf), UNEP-WCMC's reports (e.g. http://ec.europa.eu/environment/cites/pdf/reports/SRG%2065_7%20Hunting%20trophies%20report_2.pdf) or IUCN's EU policy brief (https://www.iucn.org/downloads/iucn_informingdecisionsontrophyhuntingv1.pdf).*

[6] *E.g. https://www.nature.com/articles/nature02395, http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0035209, http://www.tandfonline.com/doi/abs/10.1080/13880290590913705.*

[7] *African elephant (*Loxodonta africana)*, cheetah (*Acinonyx jubatus)*, leopard (*Panthera pardus)*, black rhinoceros (*Diceros bicornis)*, southern white rhinoceros (*Cerathoterium simum simum)*, hippopotamus (*Hippopotamus amphibius)* and lion (*Panthera leo).*

III. General conclusions

Specific Working Group conclusions for the specific taxa are included in the next section. The overall workshop conclusions are presented below:

1. All participants considered that the workshop was a very useful exercise. Various participants regarded it as the best effort in recent times towards constructive dialogue on the subject. In particular, there was a general sense that the workshop was a success from a number of perspectives:
    a. Most participants agreed on several scientific variables that can inform and guide (rather than prescribe) non-detriment findings and the sustainable management of key trophy species.
    b. It highlighted variables that may be desirable but more challenging to implement, as well as variables that were not considered to be generally relevant.
    c. It provided a unique platform to exchange views and experiences between exporting and importing countries, operators, scientists and civil society representatives present, promoting dialogue and a greater appreciation for the different viewpoints.
    d. It culminated in an agreed way forward to build on this success as part of a longer-term strategy.
2. Workshop participants supported the submission of the results to the upcoming Animals Committee (AC30).
3. The initial guidance that has come out of the workshop should be tested on the ground, and interested range States were encouraged to put themselves forward. Such an exercise would be a scientific, capacity building and information sharing endeavour.
4. Spain proposed, and the workshop welcomed, that a second workshop will be organised in Africa, in a country and date to be determined (likely after CITES CoP18), in order to present the findings of on-the ground testing and to encourage participation by additional African range States.
5. A number of specific suggestions for the next workshop were made, as follows:
    a. Recognising that Africa is a diverse continent, with important regional differences, it would be desirable to have greater representation from francophone countries.
    b. Participants from civil society organisations felt that additional NGO representation would be desirable. Involving additional scientists was also recommended.
    c. It would be helpful to make background documentation available to participants well ahead of the workshop for review and input.

IV. Workshop dynamics

The workshop begun with a plenary session consisting of a formal opening co-chaired by Spain, Tanzania, the United States of America, the European Commission and the CITES Secretariat, followed by invited expert lectures by international conservation professionals and by practitioners from various African countries. On the second day, the specific objectives and dynamics of the discussions were outlined and four working groups were formed to deal in detail with aspects relating to i) African lion, ii) leopard, iii) elephant and rhinos, and iv) conservation and social benefits. Working Groups were coordinated to ensure a consistent approach and to help identify areas of consensus as well as elements needing further work. Working Group discussions continued into the third day, following which each Working Group reported back to plenary. At the end of the third day, overall conclusions were presented and discussed and a way forward was agreed upon. The workshop closed with a field trip to Doñana National Park on the fourth day, where participants had the opportunity to unveil a plaque at Marismillas Palace in memory of those who gave their lives for the conservation of biodiversity.

The Working Groups´ main purpose was to facilitate dialogue between relevant stakeholder groups affected by the implementation of CITES Resolution Conf. 17.9 *Trade in hunting trophies of species listed in Appendix I or II* and in particular, aspects related to CITES Non-Detriment Findings (NDFs) for hunting trophies of certain African species as outlined in points 2c, 3, 4, 6 and 7 of Resolution Conf. 17.*9*, as well as additional Resolutions and Decisions outlined in the background section.

Prior to the workshop, the CITES Scientific Authority of Spain, in collaboration with the University of Oviedo, undertook an in-depth review of the published scientific literature to identify recommendations regarding the management and harvest of the focus species. These recommendations were extracted and synthesised. A group of 274 experts and stakeholders (including relevant academics, hunting associations and professional outfitters, CITES authorities, inter-governmental organisations and non-governmental organisations) were consulted through an anonymous questionnaire to capture their expert opinion regarding the relevance and applicability of the different recommendations identified. The results were analysed to determine the level of consensus (overall and within different stakeholder groups) with regard to each of the variables considered. On the basis of this analysis, preliminary proposals based on the available scientific evidence and the survey of expert opinion were presented to the workshop for discussion by Working Groups.

The Working Groups (elephant and rhino, lion, leopard and socio-economic benefits and conservation) were provided with all of the above background information in advance of the workshop and invited to identify additional relevant information. They were tasked with:

- Reviewing the variables proposed, evaluating their usefulness, applicability and relative importance, as well as proposing and discussing additional well-grounded variables as necessary and reaching evidence-based decisions.
- Fostering constructive dialogue between different stakeholder groups.
- Identifying systemic challenges in the process of undertaking NDFs by both exporting and importing countries and making specific practical recommendations to address challenges.
- Making recommendations on the development of best hunting management practices and NDFs for the target species.

The Working Group on socio-economic benefits and conservation was also tasked with taking a more holistic view regarding additional variables of relevance to guide NDFs, with a focus on socio-economic benefits and conservation incentives considerations.

All Working Group participants were invited to make contributions based on their experience and not on the policy positions of the various organisations they represent, and to follow the Chatham House rule. Working Groups were also asked to report back to Plenary.

A diagram of the background information and structure of Working Group arrangements is presented below.
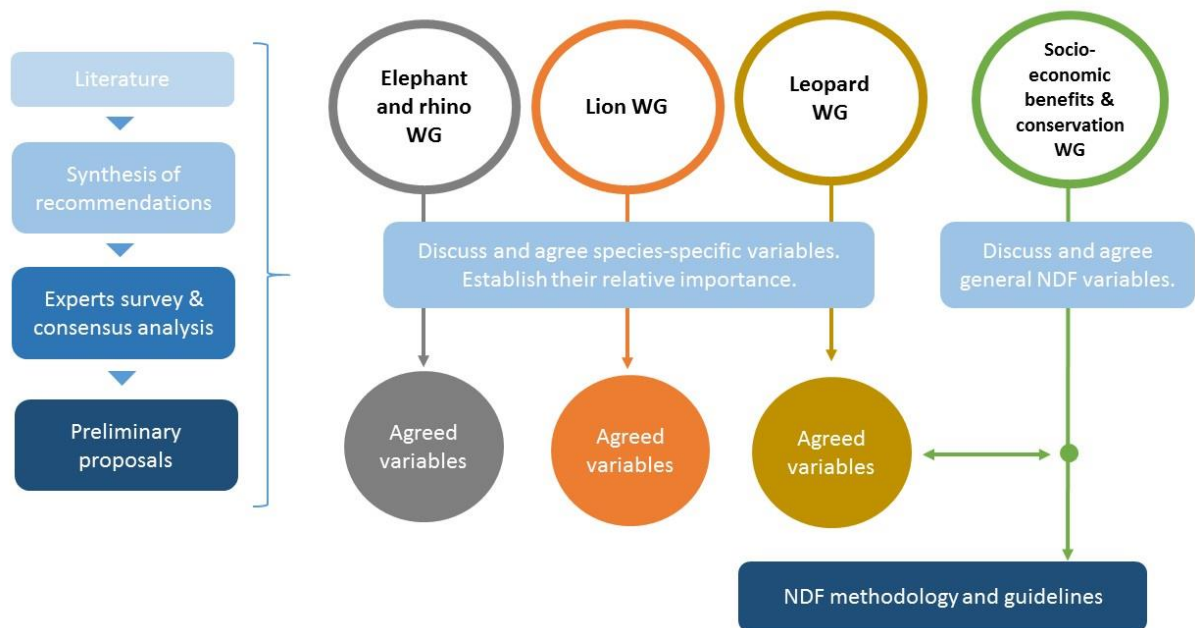
V. Working group conclusions

Contextual information on the Working Groups, as well as their mandates are outlined in the Workshop dynamics section. Working Group participants are identified in the list of participants. Specific findings by each of the Working Groups are presented below. While the Working Group conclusions presented below reflect an attempt to get maximum consensus, it should be noted that not all participants agreed with every conclusion. Although participants were able to provide comments on a draft version of this document, it is recognised that further discussion will be beneficial.

Elephant and rhinos Working Group

Context for discussions

The Working Group identified the following key contextual issues and systemic challenges that are critically important for discussions on improving NDFs:

- Many of the range States for elephant and rhino are developing countries with significant socio-economic challenges and conservation programs that have to compete (often unsuccessfully) for budget allocations with developmental programs.

- Elephant and rhino populations require extensive wildlife areas and private sector and communities make a substantial contribution to the conservation of wild populations and their associated habitat. The latter is however dependent on the premise that conservation as a land use, must pay for itself.

- Exporting countries vary in their level of capacity to manage elephant and rhino populations, as well as their capacity to generate the necessary scientific data required for developing NDF's. The latter however does not negate the fact that there are large areas where very successful conservation management programs are taking place, often in partnerships between private sector and communities.

- Decisions on additional variables to be included as part of the formal NDF process should consider the likely success/practicality of imposing those variables at an operational level and in implementing trade controls. Furthermore, it may require additional capacity while exporting countries are already constraint.

- The type and level of information required for NDF's by Scientific Authorities, and information required by Management Authorities for "enhancement findings" differ (the latter includes social and economic information) and further vary depending on importing country, the perception of threats and status of populations.

Summary of discussions

Process challenges in developing and evaluating NDF's

- There is a perception by exporting countries that importing countries do not understand the operational challenges they face; the unintended consequences of stricter domestic measures; and the positive conservation work exporting countries are doing on the ground in often very challenging circumstances and that the latter is not receiving the necessary recognition in the development of NDF's by importing countries.

- There is a "gap" between the expectations of exporting countries after completion of NDF's and the additional requirements for informed decisions on NDF's by importing countries. Exporting countries have a perception that even if they follow the requirements for development of NDF's, it is still not sufficient for importing countries.

- There is a feeling of mistrust between the role players.

- Importing countries require sound scientific data to make informed decisions and to fulfil CITES requirements, but this is often lacking from exporting countries.

- There is a need for improved dialogue and understanding (through on the ground engagements) of relevant issues between exporting and importing countries and collaboration in generating the appropriate data for informed decision-making.

- It should not be a "you" and "us" situation, but we should work together to improve conservation and responsible utilisation of threatened species without detrimentally impacting existing positive efforts and the benefits to local communities ("When I need food, don't ask more questions").

Proposed variables for Elephant

Specimen hunted was male

- Some range states do not allow trophy hunting of females e.g. South Africa, where it is not argued based on populations numbers, but rather their biology and social structure. Females all form part of a herd with strong social structure. Other range states do allow hunting of females e.g. Zambia and Zimbabwe. In some cases tusk less females are allowed to be shot from healthy populations and skins are exported under the national quota.

Specimen hunted was an age > 35 years old

- Based on the questionnaire, academia is sceptical on using this variable. No reasons were provided.

- From a practical perspective, it was argued that it is not that easy to determine the age of an elephant in the field. Elephant from different areas in their range also differ in body and tusk size and length for a specific age.

- Much of the scientific data generated on age of elephants is generated post-mortem.

- It is much easier to judge tusk size and weight in the field.

- Where data was generated to scientifically correlate tusk size with age for a specific geographical area, it may be possible to develop area specific guidelines for tusk weight and size as an indicator for age. Such a study has been done in South Africa (in the process of being submitted for publication).

- Additionally, it may be considered to develop and incentive based system where animals hunted below a certain age are penalised, those in the next category falls within an "acceptable" range, while those hunted that are very old e.g. >50 years, may be incentivised.

- Another possibility that is currently under consideration in parts of South Africa is to allow hunting of males from a younger age category e.g. 30-40 y, but only those with smaller tusk sizes. Similarly, smaller tuskers within a specific range can be allowed for the age group 40-50y. This would make provision for the conservation of genetics for larger tuskers till the age of 50.

Local communities where the individual was hunted receive direct social benefits from the hunting concession/area

- There is a wide variety of benefits to communities that differ quite substantially from country to country.

- The structure for beneficiation is in some cases imbedded in legislation and in others cases in negotiated contractual agreements. There is no one size fit all.

- In some cases, there are no local rural communities and populations occur on private land.

- This variable is already used by the USA in enhancement findings.

An Anti-Poaching Unit operating where the individual was hunted

- Different approaches are used by different importing and exporting countries in considering poaching in NDF findings. The USA for example follow a more holistically approach at a national level while some importing countries have considered this at a smaller geographical scale.

- The mere existence of an anti-poaching unit does not reflect on its impact on anti-poaching.

- In the presentations made during the workshop, it has been demonstrated that hunting activities for example in some concession areas in various exporting countries, do significantly contribute to reduction of poaching activities.

- Even if anti-poaching measures in a specific area is successful, but poaching in adjacent areas is rife, it may still have an impact on population viability and how the poaching threat is viewed by importing countries.

Specimen hunted was a solitary individual hunted

- Bulls aggregate from time to time but then may venture off as individuals. This is too specific and will be very difficult to enforce in the field.

- Is this based on biological arguments or is this venturing into the field of hunting ethics?

Specimen was in must

- Bulls aggregate from time to time but then may venture off as individuals. This is too specific and will be very difficult to enforce in the field.

- Is this based on biological arguments or is this venturing into the field of hunting ethics?

Specimen hunted was a conflict individual (e.g., those individuals showing confirmed recurrent damages on crops)

- Part of the national quota in some countries is allocated to "conflict" individuals as part of an ecosystems approach and where there is a clear management plan for an area.

- Hunting so called "problem individuals" is open to abuse, especially where there is limited capacity to monitor all "problem" incidents. Examples have been discussed for some areas.

- If structured and monitored properly as part of an ecosystems approach, funds generated through these hunts have been demonstrated to benefit conservation.

- One option is to establish a specific "conflict" fund into which funds from these hunts get deposited to be used for conservation. Similarly, a specific annual quota based on data on incidents from the previous year, can be allocated as part of an ecosystem approach. Both these options are less susceptible to abuse.

Proposed variables for Rhino

Specimen hunted was male

- There were discussions on whether or not different management systems, e.g. those by government and those by private sector should be treated differently. With the limited time available, the discussions were not exhaustive.

An Anti-Poaching Unit operating where the individual was hunted

- Different approaches are used by different importing and exporting countries in considering poaching in NDF findings. The USA for example follow a more holistical approach at a national level while some importing countries have considered this at a smaller geographical scale.

- The mere existence of an anti-poaching unit does not reflect on its impact on anti-poaching.

- In the presentations made during the workshop, it has been demonstrated that hunting activities in for example some concession areas in various exporting countries, do significantly contribute to reduction of poaching activities.

- Even if anti-poaching measures in a specific area is successful, but poaching in adjacent areas is rife, it may still have an impact on population viability and how the poaching threat is viewed by importing countries.

Local communities where the individual was hunted receive direct social benefits from the hunting concession/area

- There is a wide variety of benefits to communities that differ quite substantially from country to country.

- The structure for beneficiation is in some cases imbedded in legislation and in others cases in negotiated contractual agreements. There is no one size fit all.

- In some cases, there are no local rural communities and populations occur on private land.

- This variable is already used by the USA in enhancement findings.

The specimen hunted belonged to ≤ 1% of the national population

- This may result in conflict with resolutions already taken at CITES, Res Conf 9.14 and in-country plans for the rhino's.

- The status for national populations in different range states may vary considerably and for very threatened populations even 1 % may be too much.

Specimen hunted was a conflict individual

- Especially in the case of rhino, "conflict" may also include conflict between older males and younger bulls and not only situations with human-wildlife-conflict.

- Similar arguments to that for elephant were raised.

Specimen hunted was older than 7 years

- Especially in the case of rhino, "conflict" may also include conflict between older males and younger bulls and not only situations with human-wildlife-conflict.

Conclusions and recommendations

Process challenges in developing and evaluating NDF's

In line with Resolution Conf. 17.9 on trade in hunting trophies, particularly paragraphs 6, which recommends that Parties "maintain a close dialogue as necessary, and that these countries share information, the following recommendations are made:

1 Improve the communication, understanding of "realities" and trust between exporting and importing countries. This can be done in the following ways:
   - Mechanisms to improve the scientific capacity of exporting countries should be developed.

   - A specific scientific focal point should be identified and capacitated to coordinate the development of NDF's. The latter will assist in building the relationship between individuals responsible for the NDF process in both exporting and importing countries.

   - Site-visits by importing countries to exporting countries should be arranged to improve understanding of species situation as well as management and administrative context. It is suggested that importing countries should collaborate in arranging these visits and maybe the three top importing countries should arrange joint visits. Similarly, exporting countries should ensure that government and major operators /areas that would apply for export permits, form part of the team that engage with importing countries on ground level to improve their understanding of issues and to show-case their conservation contributions.

   - The hunting sector and relevant role players in the exporting countries should develop partnerships, including conservation NGO's. This may improve mutual understanding of issues and reduce public pressure on politicians for stricter domestic measures.

   - Information exchange between exporting and importing countries should be an ongoing process as new reports are developed, e.g. management plans for species by exporting countries.

   - Collaboratively develop mechanisms to improve conservation and reduce corruption – the latter is however a daunting task and may be very difficult and outside the scope of this process.

2 Capacity building in support of the NDF process.
   - This can be done in the following ways:

   - Importing countries can assist with resources to appoint individuals in priority countries to assist with coordination in developing NDF's.

   - Consideration should be given to having more permanent representation by importing countries in certain regions in the range states to improve understanding of local realities and to provide ongoing support and capacity building in generating the required data and the development of NDF's. It may however be more feasible to do that for shorter periods based on specific requirements for specific countries e.g. assist with the NDF development for a specific species for a specific country.

   - Exporting countries should consider using the NDF criteria and process to inform actions for continuous improvement of delivery on existing programs and strategies.

- Before making decisions on NDF's by importing countries, there should where possible, be a concerted effort to engage with and if needed, support exporting countries to address the requirements for additional information.

- Available information should be optimized to facilitate easy access to relevant reports, publications and data by both parties. WCMC should be requested to expand the existing data platform to improve capacity, especially for exporting countries. It is however critical that the system should be easily digestible for exporting countries that may have limited capacity to "wade" through a lot of information that are not well organised in a manner that specifically support the NDF process.

- Capacity building should extent to develop long term capacity for data collection and monitoring of species, but also the capacity of exporting countries to address needs in "enhancement findings" and not just NDF's.

- The CITES Secretariat should be requested to assist with a prioritised training/capacity building program on NDF's, supported by the development of a guideline document on development of NDF's and reports for enhancement findings to guide exporting countries. Additionally, the development of a "Best hunting management practice guideline" could also receive attention. Great care should however be taken in ensuring it is develop as a decision support tool and not a tick box approach that disregarded the different realities in different countries and ecosystems.

- Existing funding programs by the USA and the EU should have specific allocations in support of the NDF process.

- The development of a "Needs Assessment" for exporting countries can assist in directing resources to priority countries and issues.

Proposed variables for Elephant

Specimen hunted was male

- Despite current differences in range states, it was agreed by the Working Group that it would be good practice when:

    o   quotas are driven by biological considerations, and

    o   the focus for trophy hunting for international export of trophies is males, except under special conditions.

Specimen hunted was an age > 35 years old

- There was agreement that age as a variable may be important and valuable for various reasons, but more work is needed to develop best practice guidelines that are practical and that could be implemented in various ecosystems.

Local communities where the individual was hunted receive direct social benefits from the hunting concession/area

- This is a valuable variable, but not as part of an NDF. Provision should be made for flexibility on the ground, but it can contribute to conservation from hunting, developing benefits to communities and addressing animal wildlife conflict sentiments. It is recommended to be included in a best hunting management practice guideline document.

An Anti-Poaching Unit operating where the individual was hunted
- There is general agreement that parties recommend anti-poaching efforts to be important in areas that require them, but more work needs to be done in developing and refining the variable.

- The mere existence of an anti-poaching unit does not reflect on its impact on anti-poaching.

- There should be demonstrable beneficial outputs and mechanisms to substantiate /quantify this would be required, taking into consideration that areas have different levels of threat and different approaches to anti-poaching.

- Incentivising hunting areas/concessions with demonstrable anti- poaching operations through operational assistance can be valuable in conserving viable populations.

Specimen hunted was a solitary individual hunted
- The principle of using variables that venture into the field of hunting ethics that may differ for different groups needs further discussion.

- This variable is not supported by the Working Group.

Specimen was in must
- The principle of using variables that venture into the field of hunting ethics that may differ for different groups needs further discussion.

- This variable is not supported by the Working Group.

Specimen hunted was a conflict individual (e.g., those individuals showing confirmed recurrent damages on crops)
- In principle, it was agreed that this variable may be useful in the context of an existing management plan within an ecosystems approach for an area where funding can be applied for conservation.

- Attention should be given to ensuring that it is not susceptible to abuse and that there is a clear definition of what the criteria for a "conflict" animal are.

Proposed variables for Rhino

Specimen hunted was male
- It was agreed that senescent[7] males and females can be hunted.

An Anti-Poaching Unit operating where the individual was hunted
- There is general agreement that parties recommend anti-poaching efforts to be important in areas that require them, but more work needs to be done in developing and refining the variable.

- There should be demonstrable beneficial outputs and mechanisms to substantiate /quantify this would be required, taking into consideration that areas have different levels of threat and different approaches to anti-poaching.

- Incentivising hunting areas/concessions with demonstrable anti- poaching operations through operational assistance can be valuable in conserving viable populations.

Local communities where the individual was hunted receive direct social benefits from the hunting concession/area

- This is a valuable variable, but not as part of an NDF. Provision should be made for flexibility on the ground, but it can contribute to conservation from hunting, developing benefits to communities and addressing animal wildlife conflict sentiments. It is recommended to be included in a best hunting management practice guideline document.

- Community must be defined for various areas and production systems.

The specimen hunted belonged to ≤ 1% of the national population

- There was agreement not to use this as a variable.

Specimen hunted was a conflict individual

- In principle, it was agreed that this variable may be useful in the context of an existing management plan within an ecosystems approach for an area where funding can be applied for conservation.

- Attention should be given to ensuring that it is not susceptible to abuse and that there is a clear definition of what the criteria for a "conflict" animal are.

Specimen hunted was older than 7 years

- Better referred to senescence[8] for females.

- For males, it was agreed that males older than 7 years can be a practical variable.

General comments on the proposed variables for both elephant and rhino

- In line with Resolution Conf. 16.7 (Rev. CoP17) on NDFs, which recommends that scientific authorities take into account concepts and non-binding guiding principles in considering whether trade would be detrimental to the survival of a species", it was agreed that some of the proposed variables may be valuable in moving towards more robust and scientifically-sound evaluations.

- It is however recommended that these variables do not form part of the formal NDF requirements as stricter measures could negatively affect existing conservation benefits generated through hunting.

- It should rather form part of a non-prescriptive guideline document in support of well-informed and purposeful NDF's by both importing and exporting countries.

- Further work with a broader stakeholder group is needed to refine variables to ensure that it is scientifically sound but also practical enough to be applied in the field.

---

[8] *Note: Senescent animal only refers to an old or ageing animal and does not* per se *means post-reproductive. The reason why the term senescent was used instead of a specific age, was because biotic and environmental stressors affect the reproductive physiology of rhinoceros and although the average age that rhinos become reproductively can be 7, it can differs for different populations under different stressors.*

Lion Working Group

Summary of discussions

Discussion within the Working Group was informed by the in-depth review of relevant published scientific literature and questionnaire results prepared by the University of Oviedo, (https://www.dropbox.com/sh/ojve8xwz53sl7ik/AAAVGJO3heDR9lc5CaD8xVwma/Lion%20WG?dl=0), as well as the wide range of expertise and backgrounds of the participants within the group.

There was general agreement within the Working Group that well-managed and sustainable trophy hunting can:

- **be a conservation tool for lions**.
- **provide livelihood opportunities for rural communities**.
- **provide incentives for habitat conservation**.
- **generate profits that can be invested for conservation purposes**.

Proposed variables for lions

Minimum Age restriction ≥5 years

A lengthy discussion within the group ensued regarding whether trophy hunting should target individuals of a minimum age; *though the basis of the discussion was not that there should be a minimum age, but what that minimum age should be*. Consistent with the survey results, there was some disagreement within the group around what that minimum age should be. It was noted that several of the main lion hunting range states (e.g. Zimbabwe, Tanzania, Zambia and Mozambique) already implement minimum age requirements (of ≥5-6 years) for the harvest of lion trophies (with a variety of penalties imposed if underage trophies are taken, including having the subsequent season's quota reduced). The trend in these countries has been to increase the minimum age requirement over time, allowing the hunters time to adjust. As a guideline for exporting countries that do not currently consider a minimum age requirement but that aim to implement regulations to ensure sustainability of their trophy hunting industry, **it was agreed that ≥5 years should be regarded as the minimum age of offtake**, which targets males surplus to breeding, and tends towards ensuring that harvesting of the population is compensatory to mortality, not additive. (whilst some individuals within the group preferred a more precautionary threshold of >6 - 7 years). However, it was recognised **that accurately estimating the age of a lion isn't always practical** in every situation when hunting, although it was generally agreed that this is a skill that can be learned over time. Photographic records over time could be used to help recognise individuals and ensure age restrictions are complied with. This exercise further encourages data collection on hunted populations that may be additionally used with regard to making NDFs. Lion trophies may be reliably aged post-mortem at source by a panel of experts (often consisting of representatives of each of the wildlife authority, professional hunters, and scientific researchers), and this information can be further used to assess, at the individual and population level, as well as the average trend over time, the impact of regulated hunting on a population.

Specimen hunted was male

With respect to limiting the gender to harvest, there was **general agreement that trophy hunting should target male lions**. However, it was suggested that the 'male-only' rule might not apply to some range States with intensively managed areas where the demographic structure is well known, and where the population is subject to intensive management (i.e. culling and/or contraception) and females may be hunted to achieve local conservation goals; though there was some dissent noted for this.

Exclusion of pride members

In principle, it was agreed **that trophy hunting should exclude pride members** as this is not a desirable demographic for trophy harvest; however, post-mortem assessment of this status is difficult, and thus this criterion may be impractical for assessment of Non-Detriment after the hunt.

Area/density thresholds

With regard to the proposal that the number of trophies taken per unit area should not exceed a given threshold, there was initially no consensus. Lion density (and carrying capacity) varies throughout the species' range, and the application of a fixed quota per unit area across the board could undermine the potential for trophy hunting to give value to lions. It was noted that the funds generated from lion trophy harvest are important for reinvestment in local conservation initiatives (anti-poaching, community projects, ecological rehabilitation etc.); and this could be severely impacted where only a fraction of what could be sustainably harvested is actually permitted. However, in principle, **it was agreed** *that where there is no robust information on population status or density*, **then harvest should be limited to a maximum of 1 lion per 2000 km²**; and encourage efforts to obtain reliable population estimates, trends and threats, based on robust and on-going scientific surveys, from which sustainable offtake levels in subsequent seasons can be calculated. There was some disagreement as to whether the standard should be one lion per 2000 km² compared to one lion per 1000 km², and it was noted that some of these variables (e.g. an age restriction vs an area/density restriction) were meant to be incorporated individually, and not necessarily in combination.

Percentage of adult male population

With regard to the percentage of the adult male population that harvest should not exceed, there was no agreement within the working group as to what the appropriate level should be. Although this recommendation may appear logical, it was **considered impractical to apply over the majority of the lion range** in Africa. It was pointed out that to be able to restrict offtake to a certain percentage of the adult males, highly detailed population data should be available, which is not the case in most range States. As this restriction may only be considered relevant where detailed data exists, it is not a practically helpful recommendation in guiding the assessment of Non-Detriment on data deficient populations. *Given that both minimum age and rate of offtake restrictions may be safely and practically applied (either individually or in combination) to populations of unknown status, these criteria are therefore preferable*.

Regular 'rest periods'

With respect to introducing regular hunting moratoria (i.e. frequently not harvesting a particular population for a set period of time of a season or longer), irrespective of population status and trends, was considered by the group to be **neither practical nor facilitate consistent contribution to conservation**. If the lion population trend is stable or increasing in the hunting area, then arbitrary moratoria at regular intervals is unlikely to significantly benefit the local conservation status of the species, and could potentially just disrupt the sustained conservation benefits from regular investment of funds generated by lion trophy harvest. Where the population trend is decreasing, and trophy harvest may be considered additive to this, then those particular instances could be addressed with more specific moratoria to tackle the individual situation (*though it was noted that trophy hunting ranks low amongst the range of threats to lion population survival, and the funds it generates can be effectively used to tackle the top ranking threats*).

Target Problem Animals

Whilst including problem animals within the hunting quota is a good concept, with regard to seasonality, the timeliness, and often urgent nature of the problem, it can present practical implementation problems to remove the problem animal and **may not be in the best interests of the local communities**. There was also the risk that if hunting problem animals led to direct benefits to the communities (i.e. in terms of meat or money) that it may have the unintentional consequence of increasing the reported incidents of human-wildlife conflict. Where possible, it would be ideal to remove a problem lion as a trophy hunted individual – but the immediate safety of the community, their livestock, and livelihoods, must remain the priority; even if in many circumstances this results in the quick dispatch of a problem animal with no immediately direct financial gain for the community or conservation.

Use of baits

Restricting **trophy hunting of lion to the use of baits was not supported by the working group as a parameter to be considered within an NDF**. In theory, restricting the method of harvest allows for an effort per unit offtake to be measured and used as an indirect index of population status, and whilst this is advantageous in certain elusive species that are difficult to survey, this is not necessarily the case with lion.

Additional points that were also discussed included:

i. The **concession where the hunt was conducted on has an anti-poaching unit** – there was general agreement that this is a sound recommendation with regard to reducing additive mortality – though may not necessarily be required to achieve non-detriment, and the value given to the local wildlife through trade may subsequently encourage/facilitate this.

ii. The **local communities in or around the concession benefit from the hunt** – there was general agreement, and no objection to this concept. Though it was noted that '*community benefits*' is a rather broad term that should probably be formally defined.

iii. The **specimen hunted belonged to a national quota for the species** – there was general agreement that this should be implemented.

The Working Group recognized that there exists a range of various different management goals and strategies throughout the lion's range in Africa, and, suggested, that extant lion populations may be generally placed into one of two categories: *i*. those for which robust population data exist; and *ii*. those that are data deficient (the majority):

    i. Those lion populations for which robust density and/or demographic exist are better placed to be scientifically managed and self-regulated, *and the onus would be on the local management and Scientific Authorities to set quotas, based on the area conservation goals, and to provide evidence that these are not detrimental to the survival of the population*.

    ii. For the lion populations that are data deficient a far more cautious approach to harvest must be adopted, only *allowing offtake in those areas where it can be demonstrated that it forms an integral part of a species management plan with tangible conservation benefits for the species,* and until such time as the data is sufficient to allow for increasing the quota where this can be scientifically justified.

The Non-Detriment Finding recommendations were therefore considered at two different scales of population status: *known* and *unknown*; where populations with robust data may have greater flexibility in how they are managed, and where a more cautionary approach should be applied to

populations of unknown size and demographic structure. The latter encouraging investment in efforts to research previously unstudied populations, so that the local stakeholders might be able to realise more value from their wildlife resource, and consequently to incentivize reinvestment in its conservation.

It was noted during discussion that certain range States would welcome advice on (national or site-specific) lion conservation and management strategies, and how to implement them, and for which was largely the motivation behind the Workshop.

However, it was pointed out that gathering the scientific evidence to underpin a NDF may be prohibitively expensive in certain cases, and therefore, as far as possible, the Working Group participants strove to define guiding principles that were both ecologically relevant to the species' conservation as well as practical for the people on the ground to implement.

It was also noted that communication between the exporting range States and importing countries remains a challenge, and therefore this is an area that needs attention, as conservation is not only a field based activity, but largely an exercise in cooperation and the realisation of common goals. It was also noted that some range States are already making robust Non-Detriment Findings, and their current practices may be taken into consideration (noting that some of these countries did not participate in the Workshop).

Wildlife is a resource, and as such, the Group considered, in broad terms, the potential consequences of stakeholders *not* being able to harvest the species in question. It was recognised that wildlife tends to be better protected where it has tangible value. Hunting bans signify a failure of conservation and policy (as pointed out during the opening Workshop presentations), but they also effectively remove the economic value of a species from the stakeholder; even possibly leading to negative values and increased human-wildlife conflict, and which already exists over a significant proportion of the species' range. Conversely, trophy harvest may offset the costs of livestock loss to the community and encourage both tolerance of the species and reinvestment in its local conservation. Trophy-hunting (legal and regulated) is a tool with which to provide tangible value to wildlife existing outside of protected areas; whereas poaching (illegal and unregulated harvest) is a significant problem for conservation. Hunting bans may lead to an abandonment of wildlife areas where no alternative ecotourism option is available, and this often results in unchecked poaching and a collapse of the local wildlife. With respect to lion, many countries have self-imposed a minimum age criteria (of 5-6 years and older), which targets males surplus to breeding, and tends towards ensuring that harvesting of the population is compensatory to mortality, not additive.

Managed areas are better protected than those with no formal stakeholder investment, such as operators running dedicated anti-poaching units, hiring of local staff, and community engagement. Additionally, many wildlife areas are buffer zones and shields to protected areas, and in Africa there exists more land conserved and managed for trophy hunting than in all of the continent's national parks combined. Regulated and responsible trophy hunting of wild lion may therefore be considered a component of, and beneficial to, conservation of both the species and the holistic ecosystems in which they exist.

Recommendations

Conclusions and recommendations on specific variables are contained in the discussion above. More generally, the Working Group agreed that specific 'rules' cannot be uniformly applied across the lion range due to variation in populations, habitats, threats, land use, and management and government systems. However, it was also agreed, *that where there is limited information on population status or*

density to support an NDF, then a precautionary approach of allowing 1 lion per 2000 km^{-2} would be prudent (together with sex and age-based restrictions where appropriate). This would enable limited harvest whilst encouraging efforts to obtain reliable population estimates, trends and threats, based on robust and on-going surveys, from which sustainable offtake levels in subsequent seasons can be calculated, and quotas raised if justified. *It was noted that limiting offtake to 1 lion per 2000 km^2 is not necessary where an age-based restriction is implemented, as age restrictions are self-limiting*.

There was general consensus with regard to the guiding principles contained in Resolution Conf. 16.7 that the NDF for lion should include:

i.   Information relating to the distribution, status and trends of populations based on national conservation plans, where applicable, and which inform harvest

ii.   A review of the sustainability of harvest levels, taking into account all sources of mortality that affect the conservation status of the species, including, where possible, illegal killing.

As a broad principle, the Working Group agreed that **trophy hunting of lions should be part of a species management plan**, be **sustainable**, **adaptive** and **produce tangible conservation benefits** for the species and local people.

Therefore, it is recommended that when formulating a Non-Detriment Finding, Scientific Authorities should consider the following key variables with regard to lion trophy export:

i.   Lion trophy hunting is sustainably managed, with respect to:
   a.   a transparent regulatory framework relating to the harvesting of the species
   b.   an effective enforcement mechanism with adequate deterrents and penalties for non-compliance
   c.   a monitoring system designed to effectively monitor population trends and status
   d.   an adaptive management system through which harvest levels can be adjusted according to the needs of the specific population and based on results of the monitoring program

ii.   The hunting practice does not undermine the conservation of lion

iii.   The hunting activity provides benefit to local communities

The making of an NDF is a risk assessment. The precautionary measures and the amount of monitoring and research required should be proportionate to the 'risk' that the export of a specimen will be 'detrimental' to the species in the range State concerned. In the cases where lions are rare, little known, and not subject to specific management or conservation actions or panning, the making a robust NDF by the Scientific Authority in the country concerned will be challenging.

Leopard Working Group

The group first reviewed what is known about leopard population status, and how it relates to sustainability of trophy hunting and the NDF process.

At the outset, the group decided that the NDF process should be considered at a national scale. Some of the considered variables may not be relevant to, or easily assessed at, the scale of hunting areas. However, it was highlighted that careful judgement and/or recognition must be given to areas within a specific country where leopard populations are healthy.

In terms of undertaking NDF (and basically any management decisions), one of the areas of consensus was that current estimates of leopard population size at national, regional, or range-wide scales are unrealistic. Given the elusive nature of the species and its wide-ranging biology, estimates at such scales will have such wide confidence intervals as to be meaningless from a management perspective. Accordingly, the consensus was that range states rather adopt an adaptive management framework, basing management decisions (including those on the sustainability of trophy hunting) on reliable estimates of population trend. To operate or to execute this type of approach, range states will need to develop robust management frameworks to assess how leopard populations are changing over time, at a scale relevant to management. The group discussed various ways of doing this: South Africa's approach was used as one example of "best practice"; they use a combination of intensive monitoring (systematic camera trap surveys are undertaken each year at 20 strategic sites across the country, generating robust annual estimates of leopard population density using spatial capture-recapture sampling) and extensive monitoring (relative abundance indices, generated using occupancy estimation, catch-per-unit effort and changes in harvest composition). While these relative abundance indices are generally less accurate and precise, they can be collected rapidly at a landscape scale. Nevertheless, it is critical that they be validated with finer, more robust measures of population trend. The group recognized that it was key that rigorous monitoring be urgently and properly seated within the NDF process, and that the status of leopard populations be the main yardstick for determining the sustainability of trade.

There was also consensus on the need to develop species management plans at a national level, based and aligned with ecological management principles; some range states have these already, others don't. The need for external support in providing capacity to undertake these tasks was underlined: both to be able to establish or allow the monitoring frameworks as well as to develop these management plans is going to require some financial and capacity support to the range states.

One of the approaches proposed to ensure sustainable trophy hunting of leopards is a standard quota per unit area (e.g. 1–3 leopards/1000 km^2). The group agreed that it would be largely inappropriate to adopt such an approach in all areas that leopards are hunted given how leopard densities can vary, often dramatically, sometimes across very small spatial scales. Notwithstanding this finding, it was recognized that leopard hunting effort is often clumped – creating leopard population sinks that can impact a disproportionately large area – and that attempts must be made to distribute hunting effort more evenly across the species' distribution (within those range states that allow leopard hunting).

The group also spent a great deal of time discussing other types of biological safeguards that may ensure the sustainability of hunting. This is particularly important given the acknowledgment that we cannot rely on robust leopard population data to inform policy decisions.

One such safeguard discussed was implementing a minimum age threshold for hunting leopards. Specifically, research has shown that limiting hunting to male leopards seven years or older would greatly reduce the detrimental impacts of harvest. Although the group conceded that hunting older

male leopards should be encouraged, no consensus was found on adopting a specific age threshold. Although no contrary evidence was provided, there were concerns raised about the robustness of the research with regards to the seven-year threshold (based on dewlap size as a reliable indicator of males ≥7 years), as well as the practicality of adopting this in the field. Although this is likely the only sound biological safeguard that can be put in place to reduce the detrimental impacts of hunting leopards (in the absence of robust population data), the group could not agree on its necessity.

There was acknowledgment that it would be useful to link the removal of damage causing animals with trophy hunting, but the practical feasibility of this is challenging and could lead to abuse. Accordingly, it was felt that it should not be included in the general leopard NDF except when making a specific NDF for a specific individual that was reliably identified as such a problem animal.

The group also discussed at length how there is a great deal of information available on the ground with regards to leopards that currently is not being used in the decision-making processes and how it should be highly recommended to look for particular type of platforms and how information from operators on the ground, managers on the ground, can be collected and essentially put into an accessible format so that it can be used to inform the NDF processes.

There were also discussions around the fact that the information which is provided in the NDFs needs to be defensible, because not only are the range states responsible to the welfare of these animals and to their constituencies, so are the importing countries. So any NDF decision to be taken need to be defensible and supported by a strong rationale. The sustainability of trophy hunting needs to be considered in the scope of other threats facing the species. As our management increases for a particular species we need to be aware of the extent to which threats such as the demand for skins from ceremonial ware is having on local leopard populations. And in developing hunting models, the impacts of these other threats need to be considered, because best hunting management practices may be followed, but they may not be able to stop leopard population declines or allow leopard population recovery, due to other existing threats. These additional threats need to be considered in making NDFs for leopards per Resolution Conf. 16.7.

It was acknowledged by the group, overall, that among the species discussed at this Workshop, although a CITES Appendix I species, leopards have received the least attention up till now. This is likely to change; as information regarding the status becomes available. Already we've see changes in the various management practices and leopard population status, and as always, when information emerges there is going to be increasing attention on that particular species.

Conclusions and recommendations

A summary of conclusions and recommendations is provided in the box below.

Consensus:
- NDFs considered at a national – not hunting area – scale
- Reliable estimates of population size unattainable at a national scale
- Adaptive management informed by estimates of population trend
- Need to develop robust monitoring frameworks to reliably assess population trends at a national scale – combination of intensive & extensive monitoring*
- Need to develop national management plans*
- Standard quota of 1–3 leopards/1000 km^2 is inappropriate
- Encouraged older males be hunted

No consensus:
- Biological safeguards – minimum 7-yr threshold
- Linking damage-causing-animal control & hunting

*Range-states must submit reports to CITES Secretariat by 17 May

Socio-economic benefits and conservation Working Group

Context

The context of this working group had already been partly established by the documents previously circulated by the workshop convener, the CITES Scientific Authority of Spain, as well as the presentations made on the first day. Two salient points were evident:

1. Several importing countries (e.g. within the EU, the USA) apply 'stricter domestic measures' for hunting trophies from certain African species. Several African countries have expressed concern that applying such measures has adversely impacted well-managed sport hunting operations, causing collateral damage to both conservation and the welfare of local communities (people).
2. Importing countries such as Spain recognise the conservation and socio-economic value of well-managed sport hunting and are seeking more effective ways to distinguish between different trophy sources from within African countries. They seek techniques such as refinements to the NDF process to allow them to better discern between effective and detrimental practices within country borders.

The working group context was then further refined during the course of discussions, with several additional points raised. These are summarized below.

The group identified the need for improved overall knowledge and guidance (especially with respect to incentives and benefits) between exporting and importing countries. There was also an expressed desire from certain countries to focus on local levels at a higher resolution than just the country level, again, particularly with respect to incentives and benefits. But at the same time there was also a desire to streamline processes and not get bogged down on the details of every individual assessment. So the group had to consider how to balance those needs.

The group started by recognizing that when dealing with these decisions, we are dealing with complex adaptive social-ecological systems. And when making decisions about trade measures we must consider feedback loops and path dependence in these systems, which respond to certain interventions, and that sometimes these interventions might have potential unintended consequences that must be considered carefully before implementing changes. There is also a need for counterfactual thinking: we must beware of simplistic implementation of the precautionary principle and also consider that what might superficially appear precautionary might actually lead to a perverse incentive and a worse result. As a tangible example, trophy hunting income may support entire local communities, local government structures and critical anti-poaching activities, such that a ban or restriction could cause a huge shock to a system at a local level, with very serious consequences for communities, local benefits and conservation.

Within this context, some broader concerns were raised about the negative impacts of inadequate communication and knowledge transfer between exporting and importing countries.

The group also noted that there were potential NDF shortcomings with respect to dynamic and scale effects. Sometimes in the logic of these NDFs there is a cause-and-effect chain that is not seriously considered. Also, some things that impact at a certain scale may have impacts at other scales too. The group also highlighted that there is significant institutional variability between countries. Because of this it is very difficult to generalize on specific socio-economic benefits. This became apparent in the group discussions.

Summary of discussions

General discussions

The first session was opened with some introductory contextual remarks (as indicated in the previous section). The absence of government representatives from certain African countries was noted, but it was suggested that, despite these missing official voices, the discussion remained very important.

In addition to the background workshop materials made available to the group ahead of the meeting, reference was made to the Addis Ababa Principles and Guidelines for sustainable use as adopted by CITES in Resolution Conf. 13.2 (Rev. COP14), a copy of which was circulated to all working group members.

The group was presented with a detailed account of the conditions and constraints faced by operators on the ground in Mozambique, while highlighting the critical role operators can play in supporting all aspects of the local community and economy, including education and primary health care.

It was noted that reports discussing the macro-economic contributions of hunting to African economies, such as those published by the Australian consultancy group Economists at Large, missed the vital conservation and socio-economic contributions that hunting operations deliver at more local levels. These local effects are most often what ultimately determines the success or failure of conservation.

Reference was made to Practical Principle 10 in Annex 1 of CITES Res. Conf. 13.2 (Rev. CoP14) on the Addis Ababa Principles and Guidelines, which indicates that policies should take into account current and potential values derived from use of biodiversity and the market forces affecting such use.

It was stressed that not all concession managers had the ability to make socio-economic contributions to communities, although many of them may still simply contribute to species conservation. The importance of considering scale and time frames in evaluations was further stressed. In some countries, concessions are still starting out and need to be evaluated differently from those that are long-established. Some kind of standardized certification system that could accommodate the relevant distinctions, but uphold adequate performance standards across all scales, was argued for.

Angola's position was described, noting that after banning hunting in 2004, the country's wildlife was still in a state of recovery. However, the government was keen to investigate best practice to open up sport hunting in a responsible way and had already recognized the critical need to involve communities in conservation.

The group agreed that engaging with communities in Africa was essential, but noted that many operators failed to do this appropriately. It was also highlighted that Africa was comprised of highly diverse situations and communities – even within countries such as Tanzania there are great differences between north and south.

It was stated that CITES should not hinder sustainable use. It was further suggested that the NDF process should ideally take account of vital sources of financial income generated by natural resources (such as sport hunted species).

Participants reemphasized that the experiences of operators were largely unknown to the rest of the world. There is a serious need to improve knowledge of the vital role of conservation incentives and benefits provided by hunting, which help to stem the tide of land conversion in Africa, and for these stories to reach the CITES community to assist with their understanding of the situation.

The group was reminded that the objective of CITES is to prevent trade from becoming a threat to conservation and that the NDF is the available instrument for this. NDFs must use the best available biological and trade information, including population studies. Although countries of export are responsible for making NDFs, some importing countries (such as the United States for Appendix I species or EU Member States under their stricter domestic measures) must do this too.

There are some concerns about how much of the money spent on hunting in Africa is actually reaching local communities. This is not an easy thing for CITES scientific authorities to evaluate.

A general point was raised about whether the current dominant species-based and nationally-focused approach is always appropriate or whether other area-based approaches should also be considered. In this respect, the main element in the discussion concerned how to account for site specificity without creating excessive bureaucracy in the process, recognizing that many (in fact most) countries have limited capacity to deal with this level of detail. The group discussed the potential of certification, but agreed that this was currently beyond its remit.

The group then turned to examining the 27 proposed variables in the input document. The second part of this section summarizes the output of those group discussions in relation to some of the specific variables.

Discussions on specific NDF variables

In addition to analysing the specific variables, the group also considered whether current NDF approaches are assessing the correct variables and if the weightings that are implicitly assigned to variables are appropriate. Noting the high number of essentially biological criteria relative to only two or three socio-economic criteria, the group observed that socio-economic criteria might actually be critical in certain cases. In such cases the unequal weighting might be problematic for the overall assessment methodology.

In relation to the summary list of 27 NDF variables provided for consideration, the group conducted a comprehensive assessment of socio-economic impacts that might be missing or otherwise inappropriately incorporated. The group followed the numbering system provided, concluding the following:

The *national distribution, abundance and population trend* questions *5-7* may in some cases ignore local context. Aggregation of a country without careful consideration of internal weightings may lead to inappropriate overall scorings. Therefore, one or two very critical areas within a country might get lost in the national aggregation.

Also among the national status variables, the question related to variable *9* asks: *what is the major threat facing the species and how significant is the problem of illegal offtake?* The group stressed that such questions need to be considered in context. E.g., if a major threat is severe human-wildlife conflict, managed trophy hunting may actually provide an ideal solution for such cases.

For variable *10* on *illegal off-take or illegal trade*, again we need to consider whether managed trophy hunting operations are already playing critical anti-poaching role, without which the situation could be worse. This is an example of the counterfactual thinking that we need to apply when making these assessments.

With respect to the variables that relate to *control of harvest*, number *15* considers what percentage of harvesting occurs in state-controlled protected areas. The group noted that in some countries, for example in South Africa, most harvest actually takes place on private land: these areas are not state-

controlled but this has not been detrimental to rare and endangered species, which have thrived under private management and protection in South Africa.

With respect to variable *16* the question is: *What percentage of the legal national harvest occurs outside Protected Areas, in areas with strong local control over resource use?* Here the group observed that the question of strong local control might be difficult to judge in some cases because there may be instances of contested land ownership or contested land use, which is a feature in quite a few African contexts.

Turning to *confidence in harvest monitoring*, one comment was made from the group that the variable *19* categories that appear in that question may be too demanding for some countries: they call for certain quantitative variables that perhaps should be simplified in certain cases.

For variables *18 and 20*, which both refer to *budgetary factors*, and ask if they allow for effective implementation, the group noted that these budgetary factors may actually depend on income from trophy hunting. In other words, the relevant budgets may be impacted by the decision to be made, so there is a circular feedback / counterfactual issue here.

Assessing the variables relating to incentives, number *21* considers utilization compared to other threats and asks: *what is the effect of the harvest when taken together with the major threat that has been identified for this species?* Here the group made the point that sometimes we need to consider trade-offs and the potential impact of a decision. A classic example here would be rhino hunting. Both black and white rhinos are severely threatened by poaching for their horn, yet managed trophy hunting places a very critical role in their protection. The significant income from a very small number of black rhino hunts has brought very powerful conservation and socio-economic benefits within the countries where they are practiced. Similarly, trophy hunting of white rhino plays quite a critical role in the whole South African system. Therefore when evaluating a trophy hunting decision against the fact that there is this high illegal trade from poaching, we must consider that the trophy hunting is in fact potentially playing a very substantial mitigatory effect against poaching.

Variables *22* and *23* relate to incentives for species and habitat conservation and ask: *At the national level, how much conservation benefit to this species accrues from harvesting and how much habitat conservation benefit is derived from harvesting?* The group concluded that these two factors may be critical and depending on the specific location, species, and situation, it may not be appropriate for these variables to have such a low weighting in the overall assessment. There are certainly instances in which these are the most critical variables. Also, species and habitat conservation are frequently linked, so there is an interplay between these two factors. Furthermore, we need to take account of the indirect links of socio-economic benefits to conservation and the unintended consequences of trade restrictions. Finally, the group wanted to reemphasize a point that has already been made: consideration of these factors must be aligned with CITES Res. Conf. 17.9 and not treated as additional hurdles. The need for demonstrable conservation benefits, i.e. positive benefits, is only stipulated for Appendix I species.

Concerning the question related to variable *24* about the *percentage of the species' natural range or population legally excluded from harvest*, the group questioned whether this question is relevant at a country scale. In some instances relatively small areas might provide particularly high socio-economic benefits that may have a widespread impact well beyond those designated spaces.

Variable *25* considers *whether budgetary and other factors give confidence in the effectiveness of measures taken to afford strict protection*. Repeating an earlier point, the group noted that budgets for strict protection may be impacted by the decision to be made.

The question relating to variable *26* (regulation of harvest effort) asks *how effective are any restrictions on harvesting (such as age or size, season or equipment) for preventing overuse?* The remark was made that this may be difficult sometimes for the importing countries to assess.

Finally, the group considered the question related to variable *27*: *Is it contemplated in any instrument (action plan, normative provision) or any other mechanism (local actions, projects, fees) that a percentage of the economic benefits obtained by the extraction revert in favor of the local community?* The group had a few comments to make about this criterion. This variable differs from the conservation incentive issues raised in 22 and 23 as it relates to social benefits that may be unrelated to conservation impacts. In other words, this variable constitutes a kind of bonus. However, some exporting countries may consider these benefits as essential, for political or socio-political reasons. The group also noted that variable 27 refers to specific economic or financial, monetary benefits accruing to communities. But the point was raised that there are other social benefits that might be significant, as indicated by the many examples referred to in the Appendix of the Nagoya Protocol, for example. Finally a group member did raise the question: should we add words 'impacted by wildlife' at end of this question, just to bring it into sharper focus?

The general point was made that exporting countries should provide guidance to importing countries on how socio-economic benefits and incentives are evaluated and why these are considered important. Some of the importing countries thought that assessing this level of socio-economic benefit was beyond the remit of sharply focused scientific authorities that would generally favour more biological criteria.

Conclusions and recommendations

After agreeing that they were not in a position to be prescriptive, but only provide guidance, the working group essentially reached consensus in all points mentioned above.

There was consensus that, with the caveats previously discussed for specific variables, the variables and categories considered constituted a relevant and useful guide for NDF making. In addition, the group also considered a semi-quantitative approach to undertaking NDFs, based on South Africa´s approach, where species vulnerability and the robustness of the management system are plotted against two axis to help determine the level of risk. The group considered that such methodologies should be tested elsewhere to determine their usefulness and be further refined as needed.

The group recommended that a forum or platform be created to make information, including operators´ experiences, about the benefits of well-managed trophy hunting (and unintended consequences of trade restrictions) more widely known. The group thought that the NDF process does account for socio-economic factors, but the way in which these are accounted for may be inadequate, particularly in certain instances. As examples, the group has highlighted the weightings issue and the potential embedded (hidden) counterfactual and systems dynamics issues that are not easily reflected by the process.

The group also recommended that, before imposing stricter domestic measures, importing countries should consult with exporting countries. Rather than imposing immediate penalties, (e.g. restricting trade or preventing imports), importing countries could be encouraged to assess whether they can provide support to the exporting countries to improve the identified shortcomings. The group strongly encouraged importing countries to work more closely with exporting countries to overcome those hurdles. Finally, the group appealed to exporting countries to provide more guidance to importing countries on the relevance and the nature of the socio-economic variables, to highlight and clarify why they are so important to those countries and the conservation of these focal species.

VI. Agenda

Schedule

26th April	
9.00-10:00	Reception and registration of attendees.
10:00-11:00	Welcome and workshop opening by the national, regional and local authorities.
	Workshop inauguration: Representatives of the scientific authorities of African countries, USA, EU Commission and a representative of the CITES Secretariat.
11.00 -11.30	Coffee break
11.30-12.30	Keynote speech. By Prof. Jon Hutton (Director, Luc Hoffmann Institute)
12.30-13.30	Conservation and management of hunting species in Africa. A perspective from Tanzania. By Dr. Denis Ikanda (Director of Research, Kingupira Centre, Tanzania Wildlife Research Institute - TAWIRI)
13.30-15.00	Lunch
15.00-17:00	Presentation of examples of best management practices in hunting areas of Tanzania, Namibia, Zimbabwe, Mozambique and Zambia, and the role of professional hunters in conservation: ▪ Michel Mantheakis ▪ Danene van der Westhuyzen ▪ Myles McCallum
17.00 - 17.30	Coffee break
17:30 -18:30	Best management practices presentations (continued): ▪ Mark Haldane ▪ Vernon Booth
27th April	
8.30-9.00	Presentation of the results of a scientific literature review and expert consultation in relation to best hunting practices for the target species. By José Vicente López-Bao (University of Oviedo, Spain).
9.00-9.30	Presentation of Workshop dynamics. By Pablo Sinovas (UNEP-WCMC).
9.30 - 11.00	Establishment of working groups and presentation of preliminary information packages by respective chairs.
	Beginning of the working group Sessions: ▪ Lion WG. Chaired by Byron Du Preez (University of Oxford, UK). ▪ Leopard WG. Chaired by Guy A. Balme (Panthera, USA). ▪ Elephant and rhino WG. Chaired by Chaired by Lizanne Nel (Hunters and Game Conservation Association, South Africa). ▪ Conservation and socio-economic benefits WG. Chaired by Michael ´t Sas-Rolfes (University of Oxford, UK).
11.00 - 11.30	Coffee break
11.30 - 13.30	Working group Sessions
13.30 -15.00	Lunch
15.00 -17.00	Working Group Sessions
17.00 - 17.30	Coffee break
17:30 -18.30	Working Group Sessions
28th April	
9.00 - 11.00	Presentation of Working Group results and proposals, by the chairs
11.00 - 11.30	Coffee break
11.30 - 13.30	Discussion of Working Group results
13.30-15.00	Lunch
15.00 -17.00	Preparation of workshop conclusions
17.00 - 17.30	Coffee break
17.30 -18.30	Preparation of workshop conclusions
29th April:	
	Guided tour to Doñana National Park (Optional)

List of invited:

- CITES Scientific Authorities of exporting African countries: South Africa, Mozambique, Tanzania, Zambia, Zimbabwe, Namibia, Angola, Uganda, Botswana, Ethiopia, Central African Republic and Cameroon.
- CITES scientific authorities of countries importing hunting trophies from Africa: USA and EU.
- Chair of the CITES Animals Committee and CITES Secretariat.
- IGOs, NGOs, professionals and scientific community, including:
  - Convention on the Conservation of Migratory Species of Wild Animals (CMS).
  - UN Environment - World Conservation Monitoring Centre (UNEP-WCMC).
  - International Union for Conservation of Nature (IUCN).
  - African Operators' and Professional Hunters' Associations of Africa (OPHAA).
  - Safari Club International (SCI).
  - The International Council for Game and Wildlife Conservation (CIC).
  - International Professional Hunters Association (IPHA).
  - African Professional Hunters Association (APHA).
  - Tanzania Hunting Operators Association (TAHOA).
  - The European Federation of Associations for Hunting & Conservation (FACE).
  - Artemisan Foundation (Spain).
  - Campfire Association (Zimbabwe).
  - Community Wildlife Management Areas - Consortium (CWMAC) (Tanzania).
  - Species Survival Network (SSN).
  - Center for Biological Diversity.
  - Pro Wildlife.
  - Humane Society International.
  - Endangered Wildlife Trust (EWT).
  - Wildlife Conservation Society (WCS).
  - World Wildlife Fund (WWF).
  - Conservation Force.
  - Experts of scientific relevance.

VII. List of participants

Lion Working Group

COUNTRY	FULL NAME	INSTITUTION	EMAIL
CAMEROON	Liliane Léonie Nadia Nhiomog	Cameroon CITES	nhiomoglina@yahoo.fr
GERMANY	Yelizaveta Protas	Convention on the Conservation of Migratory Species of Wild Animals (CMS)	yelizaveta.protas@cms.int
SOUTH AFRICA	Mark Leslie Johnsen Haldane	Game Hunters Africa	markgha@sai.co.za
SPAIN	Alberto Navarro	University of Oviedo	navarroalb@gmail.com
SPAIN	José Vicente López-Bao	University of Oviedo	jv.lopezbao@gmail.com
SPAIN	Sofía Losada	TRAGSATEC	sofialosada@gmail.com
SWITZERLAND	Thomas De Meulenaer	CITES Secretariat	tom.de-meulenaer@cites.org
SWITZERLAND	Urs Breitenmoser	CIC. International Council For Game And Wildlife Conservation.	Urs.Breitenmoser@vetsuisse.unibe.ch
TANZANIA	Dennis Ikanda	Tanzania Wildlife Research Institute (TAWIRI)	deni@africamail.com
UNITED KINGDOM	Alison Littlewood	JNCC (UK CITES fauna SA)	Alison.littlewood@jncc.gov.uk
USA	Joseph Goergen	Safari Club International Foundation	jgoergen@safariclub.org
USA	Manon Dene	Humane Society International	mdene@hsi.org
USA	Regina Lennox	Conservation Force	regina.lennox@conservationforce.org
ZIMBABWE	Byron Du Preez	Ivan Carter Wildlife Conservation Alliance	byron.d.dupreez@gmail.com

Elephant and Rhino Working Group

COUNTRY	FULL NAME	INSTITUTION	EMAIL
BELGIUM	Johan Svalby	Safari Club International	johan.svalby@jagareforbundet.se
BOTSWANA	Amo Obusitswe Barungwi	Botswana CITES	oakeitsile@gov.bw
EUROPEAN UNION	Dagmar Zikova	European Commission DG Environment CITES	Dagmar.ZIKOVA@ec.europa.eu

COUNTRY	FULL NAME	INSTITUTION	EMAIL
SOUTH AFRICA	André Botha	Endangered Wildlife Trust	andreb@ewt.org.za
SOUTH AFRICA	Lizanne Nel	SA Hunters and Game Conservation Association	lizanne@sahunt.co.za
SPAIN	Luis Mariano González	Ministry of Agriculture and Fish, Food and the Environment	LMGonzalez@mapama.es
SPAIN	Rubén Moreno-Opo	Ministry of Agriculture and Fish, Food and the Environment	rmorenoopo@mapama.es
SWITZERLAND	Miguel Estade	Safari Club International (SCI)	estade.miguel@bluewin.ch
USA	Eleanora Babij	U.S. Fish and Wildlife Service CITES	Eleanora_babij@fws.gov
USA	Tanya Sanerib	Center for Biological Diversity	tsanerib@biologicaldiversity.org
ZAMBIA	Chuma Simukonda	Zambia CITES	chumasimukonda@gmail.com
ZIMBABWE	Myles McCallum	Charlton McCallum Safaris	hunting@cmsafaris.com

Leopard Working Group

COUNTRY	FULL NAME	INSTITUTION	EMAIL
BELGIUM	Ludwig Willnegger	The European Federation of Associations for Hunting & Conservation	Ludwig.willnegger@face.eu
GERMANY	Daniela Freyer	Pro Wildlife	daniela.freyer@prowildlife.de
GERMANY	Mona van Schingen	Germany CITES	Mona.van.Schingen@bfn.de
ITALY	Marco Pani	Conservation Force	pani.marco@gmail.com
NAMIBIA	Danene van der Westhuyzen	Namibia Professional Hunting Association and Organization of PH Associations of Africa	president@napha.com.na
SOUTH AFRICA	Christoffel Jacobus Joubert	Game Reserve Manager	dustjoubert@gmail.com
SPAIN	Diana Pérez-Aranda	Ministry of Agriculture and Fish, Food and the Environment	dperezaranda@mapama.es
SPAIN	Iñigo Fajardo	Junta de Andalucía	inigo.fajardo@juntadeandalucia.es
SPAIN	Jaime Muñoz	TRAGSATEC	at_sgmn2@mapama.es
SPAIN	Luis Sánchez	Independent consultant	luiskunama@gmail.com
TANZANIA	Elisante O. Leguma	Tanzania Wildlife Management Authority (TAWA)	elisanteo@gmail.com
UGANDA	Adonia K. Bintoora	Uganda CITES	adonia.bintoora@ugandawildlife.org

COUNTRY	FULL NAME	INSTITUTION	EMAIL
USA	Guy Balme	Panthera	gbalme@panthera.org
USA	Rosemarie Gnam	U.S. Fish and Wildlife Service. CITES	Rosemarie_Gnam@fws.gov
ZAMBIA	Vernon Booth	Independent wildlife management consultant	vernonrbooth@gmail.com

Conservation and socioeconomic benefits Working Group

COUNTRY	FULL NAME	INSTITUTION	EMAIL
ANGOLA	Albertina Nzuzi Matias	Angola CITES	wetekalandi@gmail.com
EUROPEAN UNION	Enrico Pironio	European Commission	
GERMANY	Dietrich Jelden	CIC. International Council For Game and Wildlife Conservation.	dietrich.jelden@gmx.de
MÉXICO	María Elena Sánchez	Species Survival Network (SSN)	teyeliz@gmail.com
MOZAMBIQUE	Joaquim Vaz	Marromeu Safaris	jvaz@marromeusafaris.com
NORWAY	Maria Asmyhr	Norway CITES	Maria.asmyhr@vkm.no
SPAIN	Albert Roura	TRAGSATEC	trappingpost@gmail.com
SPAIN	Bárbara Soto-Largo	Ministry of Agriculture and Fish, Food and the Environment	bsotolargo@mapama.es
SPAIN	Elisa Cacharro	TRAGSATEC	ecacharr@tragsa.es
SPAIN	Francisco García	Ministry of Agriculture and Fish, Food and the Environment	fgdominguez@mapama.es
SPAIN	Carlos Sánchez	Fundación Artemisan	investigacion@fundacionartemisan.com
SWEDEN	Peter Örn	Swedish EPA (SE SA)	Peter.orn@naturvardsverket.se
SWITZERLAND	Jon Hutton	Luc Hoffmann Institute	jhutton@wwfint.org
TANZANIA	Michel Mantheakis	Tanzania Hunting Operators Association (TAHOA)	michel@mm-safaris.com
TANZANIA	Sylvester Mselle	Community Wildlife Management Areas - Consortium (CWMAC)	lomayans@gmail.com
UNITED KINGDOM	Michael 't Sas-Rolfes	School of Geography and the Environment. University of Oxford	Tsas.rolfes@gmail.com
UNITED KINGDOM	Pablo Sinovas	UN Environment World Conservation Monitoring Centre	pablo.sinovas@unep-wcmc.org
ZIMBABWE	Charles Jonga	Zimbabwe. CAMPFIRE Association	cjonga@campfirezimbabwe.org

VIII. Relevant materials

Dropbox link to the preparatory documentation and presentations of the plenary session:

https://www.dropbox.com/sh/ojve8xwz53sl7ik/AADGpt80_E1hhBENOwV2K7DGa?dl=0

Participants attending the workshop

Plaque at Marismillas Palace in memory of those who gave their lives for the conservation of biodiversity