

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



Thirtieth meeting of the Animals Committee
Geneva (Switzerland), 16-21 July 2018

Species specific matters

Maintenance of the Appendices

REPORT OF THE SPECIALIST
ON ZOOLOGICAL NOMENCLATURE

1. This document has been submitted by the specialist on zoological nomenclature of the Animals Committee. The Secretariat provided information that was included in sections 3, 4 and 5.*

Nomenclatural tasks referred to the Animals Committee at the 17th meeting of the Conference of the Parties (CoP17, Johannesburg, 2016)

African Lion (*Panthera leo*) [Decision 17.313]

2. The recent nomenclature situation of the Lion was described in Document AC 29 Doc. 35, paragraphs 2-5. At the 29th meeting of the Animals Committee, the Nomenclature working group recommended consideration of the adoption of a new nomenclatural standard reference for *Panthera leo* at the 18th meeting of the Conference of the Parties (CoP18, Colombo, 2019), being the IUCN Cat Specialist Group taxonomy, which reduces the subspecies of *Panthera leo* to the nominal subspecies *P. leo leo* inhabiting Central and Western Africa as well as India, and *P. leo melanochaita* occurring in Eastern and Southern Africa. [Reference: Kitchener A. C., Breitenmoser-Würsten Ch., Eizirik E., Gentry A., Werdelin L., Wilting A., Yamaguchi N., Abramov A. V., Christiansen P., Driscoll C., Duckworth J. W., Johnson W., Luo S.-J., Meijaard E., O'Donoghue P., Sanderson J., Seymour K., Bruford M., Groves C., Hoffmann M., Nowell K., Timmons Z. & Tobe S. 2017. *A revised taxonomy of the Felidae*. The final report of the Cat Classification Task Force of the IUCN/SSC Cat Specialist Group. Cat News Special Issue 11, 80 pp.]

Identification of CITES-listed corals in trade [Decisions 17.306-17.308]

3. To facilitate the implementation of Decisions 17.306 to 17.308, the Secretariat published in April 2018 Notification to the Parties No. 2018/037 on Nomenclature of CITES-listed corals, reminding Parties to submit information on how well the nomenclature of the WoRMS database corresponds to the nomenclature they use nationally. At the time of writing of this document (May 2018), 6 responses from Parties (Australia, China, the Netherlands, New Zealand, United Kingdom of Great Britain and Northern Ireland, and United States of America) had been received. The responses are contained in Annex 1 to this document, and can be summarized as follows:

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

- Australia has identified an approximately 15% rate of inconsistency in accepted scientific names between the nomenclature currently contained in their national database and WoRMS, and approximately 10% inconsistency in nominated authorities.
- China has reports 89.6% consistency with its national database.
- The Netherlands note incorrect identifications at the genus level.
- New Zealand confirmed that the nomenclature used in WoRMS matches the one it uses nationally.
- The United Kingdom notes that it does not host a national nomenclature database but uses the standard nomenclature checklist compiled by UNEP-WCMC in 2012 and employed in Species+. It further notes discrepancies between that checklist and WoRMS.
- The United States note that they adhere to the nomenclatural guidance adopted by the CITES Conference of the Parties, but that WoRMS is the most complete and authoritative source for taxonomic names of marine species. They further provide useful observations regarding the use of both WoRMS and Corals of the World in different regions.

Use of time-specific versions of online databases as standard nomenclature references [Decisions 17.309-17.310]

4. The Secretariat has contacted the copyright owners of the six online databases that might serve as standard nomenclature references, including the four mentioned in Decision 17.309 (marked with an asterisk* below), to explore the possible use of time-specific versions for CITES services. At the time of writing (May 2018), it had received the following responses:
 - Corals of the World: The online database is not yet live, but is being developed on a 'versioned' basis, meaning that all published versions of the database will be archived and accessible from the website itself.
 - Catalog of Fishes*: The solution proposed by the database holders is to use the monthly updated Catalog of Fishes. They would also be willing to provide CITES with printouts of the updates.
 - FishBase*: FishBase provides its names to WoRMS and to the Catalog of Life. The Catalogue of Life produces annual updates on CD which can provide the "time-based" versioning that are required for CITES purposes
 - Amphibian Species of the World*: The database holders suggested to explore the use of historically archived versions of the database through the archive.org web portal.
 - World Spider Catalog: Archived versions are generated twice a year and can be found on its archive website, covering the period from 2000 until today.

The Secretariat will follow up with WoRMS*, the remaining copyright holder from whom we have not received a response, and upon request provide an oral update on this matter at the Animals Committee meeting.

Bird Family and Order names [Decisions 17.311-17.312]

5. The Secretariat will provide an oral update on the implementation of Decisions 17.311 to 17.312 at this meeting.

Other nomenclatural issues outstanding or emerging after CoP17

Scientific names of wild animal species and their domesticated relatives

- 6 It was brought to the attention of the Nomenclature Specialist (Fauna) that the International Commission on Zoological Nomenclature (ICZN), in its Opinion 2027 (2003: case 3010), ruled that a scientific name remains nomenclaturally valid if it was first used for a wild animal species that is closely related to a domesticated animal species (that was described and scientifically named earlier). Consequently, wild sheep may correctly be referred to as *Ovis orientalis* if considered different from their domesticated relative at the species rank (i.e., *Ovis aries*, the domestic sheep), wild water buffalo may be named *Bubalus arnee* as distinct from the

domestic water buffalo *Bubalus bubalus*, et cetera. Species boundaries between domesticated species and their wild relatives remain debated by the taxonomic community, but using different species names for domesticated and wild specimens would appear to reduce the potential for confusion about permit requirements for specimens originating from domesticated species.

7. The current Nomenclatural Standard Reference for mammals (Wilson & Reeder 2005) treats the wild relatives as subspecies under the species name based on the domesticated form, thus requiring CITES permits to be issued using the particular subspecies name for the wild population, and requiring complex annotations in the Appendices that domestic forms are excluded from the Appendices. At present, discrepancies exist between how such species are included in the Appendices, in the majority of views held by taxonomists working on specific groups, and in the Nomenclatural Standard Reference for mammals (Wilson & Reeder 2005) in the cases of *Equus africanus* / *Equus asinus* (Wild Ass / Donkey), *Bos frontalis* / *Bos gaurus* (Gaur / Mithan), *Bos grunniens* / *Bos mutus* (Yak), *Bubalus bubalus* / *Bubalus arnee* (Water Buffalo), *Capra hircus* / *Capra aegagrus* (Goat) and *Ovis aries* / *Ovis orientalis* (Sheep / Urial). Further deliberation is needed on the most appropriate way forward to minimize the inclusion in the Appendices of scientific names based on domesticated forms, ideally by identifying an appropriate nomenclatural standard reference that consistently differentiates these taxa at species rank.

Wild sheep, genus *Ovis*

8. The nomenclatural situation of sheep after the adoption of Wilson and Reeder (2005) as standard reference for the genus *Ovis* at CoP17 was summarized in Document AC29 Doc. 35, paragraphs 11-14. As noted in paragraphs 6-7, above, the effects of ICZN Opinion 2027 further complicate the understanding of wild sheep nomenclature. The Nomenclature Specialist wishes to thank in particular the Scientific Authorities of the People's Republic of China and the Islamic Republic of Iran, as well as the IUCN/SSC Caprinae Specialist Group, for their contributions to the on-going deliberations on *Ovis* taxonomy. On balance, the Nomenclature Specialist had to conclude that at present, there does not appear to exist a single comprehensive taxonomic revision of the genus *Ovis* that could be adopted as a nomenclatural standard reference to put this topic to rest in CITES. Moreover, any findings of the Periodic Review of the *Ovis ammon* and *Ovis aries* species complexes may have bearing on the issue. Should the Parties wish to adopt a new nomenclatural standard reference for the genus *Ovis* before the results of the Periodic Review process become available, the *Ovis* section of the Handbook of Mammals volume 2 (Valdez and Weinberg, in Wilson & Mittermeier, Eds., 2011; ISBN 978-84-96553-77-4) may be a suitable candidate for adoption at CoP18 (see Annex 1, page 2, of document AC29 Doc. 35, with the correction that *Ovis aries ophion* sensu Wilson & Reeder 2005 is treated as a synonym of *Ovis gmelini*).

Appendix III and nomenclature

9. Progress in the scientific understanding of animal taxonomy, and the associated nomenclatural changes, applies to species listed in CITES Appendix III just as much as to species listed in Appendix I or II. A clear and agreed process exists to deal with the effects of taxonomic changes, and subsequent nomenclatural changes in CITES when new Standard References are adopted for species included in Appendices I and II. However, as species in Appendix III are listed by a particular Party, and different documentation requirements are in place for specimens originating from the Party that included the species in Appendix III compared to specimens originating from other range State Parties, there are corresponding differences in the effects of nomenclatural changes for the regulation of specimens from the listing Party compared to specimens from elsewhere. These differences were described in the discussions of the Working Group on Appendix III, and are reported in document AC30 Doc. 31.

Identified nomenclature changes in mammal, bird, reptile, amphibian, fish and invertebrate species listed in the CITES Appendices

10. UNEP-WCMC prepared a report on: *Animal taxonomy and nomenclature: New species and other proposed taxonomic and nomenclatural changes relating to CITES animal species*, which is presented in Annex 2. The Nomenclature Specialist is deeply grateful to the European Commission and the CITES Secretariat for providing funding for this work, and to the staff at UNEP-WCMC for conducting the work and preparing this report.
11. Due to the short time period between receiving some of the documentation and the document submission deadline for AC30, it was not possible to prepare an accompanying tabulation of the changes that would result to the Appendices and the Checklist of CITES Species / Species+ database, or include a list of suggested nomenclatural standard references for adoption at CoP18, and their implications for the Appendices and Checklist.

12. One additional taxonomic-nomenclatural change to be considered is the case of the scorpion *Pandinus camerounensis* Lourenço, 2014 (Arthropoda: Arachnida: Scorpiones: Scorpionidae), which was described as a new species from the *Pandinus imperator* (Koch, 1841) species complex by Lourenço (2014), based on morphological data. While the Lourenço (2014) article was adopted as a standard reference for *Pandinus roeseli* (Simon, 1872), the description of *P. camerounensis* appears to have been overlooked. [Reference: Lourenço, W.R. (2014): Further considerations on the identity and distribution of *Pandinus imperator* (C. L. Koch, 1841) and description of a new species from Cameroon (Scorpiones: Scorpionidae). - Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg, 17(192): 139-151.]

Recommendations for the work of the Nomenclature Working Group at AC30

13. It is suggested that the Animals Committee re-establish its Nomenclature Working Group at the present meeting to address the following issues:
- consider progress on the identification of CITES-listed corals in trade and possible ways to proceed on implementing Decisions 17.306-17.308, taking into account the responses in Annex 1;
 - consider progress on the use of time-specific versions of online databases and possible ways to proceed on implementing Decisions 17.309-17.310;
 - consider progress on bird family and order names and possible ways to proceed on implementing Decisions 17.311-17.312;
 - take account of the issues described in paragraphs 2 and 6-8, and formulate appropriate ways forward;
 - develop recommendations for adoption or rejection of the nomenclatural changes referenced in this document in paragraph 10-12, and listed in Annex 2; and
 - consider any topics that may be referred to it in relation to Appendix III and the listing of higher taxa in the Appendices.

Recommendation

14. The Animals Committee is invited to consider the present document and the information and recommendations that it contains, and to agree to the actions outlined in paragraph 13 above.