

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

Twenty-eighth meeting of the Animals Committee  
Tel Aviv (Israel), 30 August-3 September 2015

Interpretation and implementation of the Convention

Species trade and conservation

Standard nomenclature [Resolution Conf. 12.11 (Rev. CoP16)]

REPORT OF THE SPECIALIST ON ZOOLOGICAL NOMENCLATURE

1. This document has been prepared by the specialist on zoological nomenclature of the Animals Committee. The Secretariat provided information that was included in sections 4, 5 and 13.<sup>1</sup>

Nomenclatural tasks referred to the Animals Committee at the 16th meeting of the Conference of the Parties (CoP16, Bangkok, 2013)

2. *Hippocampus* taxonomy

At the 27th meeting of the Animals Committee (AC27, Veracruz, April 2014), the Seahorse, Pipefish & Stickleback Specialist Group of the Species Survival Commission of the International Union for Conservation of Nature (IUCN/SSC) raised concerns with regard to the validity of the taxonomic changes to the genus *Hippocampus* proposed by Australia (see document [AC27 Doc. 25.1](#)), and the possibility of identification of the taxa concerned. Therefore, the Animals Committee (AC) recommended that the Chair of this Specialist Group provide Australia with the detailed background information of these concerns, and that these be considered by Australia, which was asked to come back on this issue at the 28th meeting of the Committee (AC28) if necessary.

In the period between AC27 and AC28, a discussion by email between Australia, the Chair of the Specialist Group and the nomenclature specialist took place. Having considered the arguments provided by the IUCN/SSC Specialist Group (Annex 1), Australia suggested to change its request as follows:

- In summary, Australia withdraws *H. bleekeri* and *H. elongatus* from its request where it concurs with the conclusions of IUCN, and notes that this is supported by the literature. However, Australia retains six of the species in its request and provides additional support as evidence from the literature (see Annex 2). Additionally, it points out that these species are accepted as valid ones by the online Catalog of Fishes and the Australian Faunal Directory. Unfortunately, a response by the IUCN/SSC Seahorse, Pipefish & Stickleback Specialist Group to Australia's considerations outlined in Annex 2 has been received extremely late and could only be added as Annex 10 to this document.

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<sup>1</sup> 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.

- As the nomenclature specialist had further pointed out the need that taxa listed under CITES should be identifiable at species-level, the Australian Scientific Authority confirmed that the species are distinguishable by morphological characters of the diagnostic key published by KUITER 2001<sup>2</sup> and that there is in addition a photographic publication containing images of the species.<sup>3</sup>

3. Coral nomenclature references [Decision 15.64 a)] and identification of CITES-listed corals in trade [(Decision 15.64 b)]

Decision 15.64 a), adopted at CoP15, requires the AC to *"identify existing coral reference materials that could be adopted as standard nomenclatural references for CITES-listed corals"*. As it had not been possible to identify references serving this purpose between CoP15 and CoP16, a coral species list provided by the World Conservation Monitoring Centre (WCMC) was adopted at CoP16 as an interim solution, leaving the final task still open.

Decision 15.64 b) requires the AC to *"update its list of coral taxa for which identification to genus level is acceptable, but which should be identified to species level where feasible, and to provide the updated list to the Secretariat for dissemination"*.

At AC27, the Committee agreed that the representative of Asia (Mr. Soemorumekso) and the nomenclature specialist should work intersessionally on the tasks directed to the Committee in Decision 15.64.

Several coral specialist were approached regarding Decision 15.64 a), and responses have been received from Stephen D. CAIRNS (National Museum of Natural History, Washington D.C), Bert HOEKSEMA (Naturalis Biodiversity Center, Leiden) and Svein A. FOSSA (Ornamental Fish International - OFI). According to their comments, the online-database WoRMS (<http://www.marinespecies.org/>) represents at the moment the best source of information on the taxonomy of corals. A time-specific version of the corals in this database would certainly be the best option for a new nomenclature reference for CITES-listed corals.

Some additional publications were mentioned that may be an option for regional nomenclature references:

- For the shallow Indo-West Pacific: VERON's trilogy "Corals of the World" (2000)
- For the shallow Atlantic water: "Reef Coral Identification: Florida, Caribbean, Bahamas" by HUMANN (1992, 3rd ed. 2006)
- For deep-water corals (genus level): "An illustrated key to genera and subgenera of the Recent azooxanthellate Scleractinia, with an attached glossary" by CAIRNS & KITAHARA (2012), ZooKeys 227: 1-47.

No progress has been made with regard to Decision 15.64 b). As the interim nomenclature reference is not in line with the current coral taxonomy as reflected in WoRMS, the specialists seem to be very uncomfortable with the list in Notification [No. 2013/035](#).

#### Other nomenclatural issues

4. Layout of nomenclatural references in Resolution Conf. 12.11 (Rev. CP16) [document [AC27 Doc. 25.1 Annex 2](#)]

At AC27, the Committee recommended to the Secretariat to use the proposed new format of the list of nomenclature standard references for animal species in the Annex of Resolution Conf. 12.11 (Rev. CoP16), which would not change substance, but facilitate the use of this list.

The Secretariat looked into this matter, and agrees that the proposed lay-out, whereby taxonomic groups would be more clearly distinguished, would make the list of standard references in the Annex to Resolution Conf. 12.11 (Rev. CoP16) more user-friendly. This needs to be done consistently and carefully. The Secretariat believes that a number of additional editorial and presentational changes to the Annex, which it has pointed out before, could also be considered on this occasion. The Secretariat is however not convinced that it has clear authority to alter the presentation of a Resolution: it is mandated to propose the

<sup>2</sup> KUITER, R.H. (2001): *Revision of the Australian Seahorses of the Genus Hippocampus (Syngnathiformes: Syngnathidae) with the Description of Nine New Species.* -- *Records of the Australian Museum* (2001) Vol. 53:293-340. ISSN 0067-1975

<sup>3</sup> KUITER, R.H. (2009): *Seahorses and their relatives.* 333 pp. Seaford/Australia (Aquatic Photographics).

correction of "non-substantive errors or minor editorial faults" in Resolutions to the Standing Committee for its consideration, but what is being proposed is not relating to errors or faults.

If the Animals Committee agrees, the Secretariat would be prepared to collaborate with the nomenclature specialist to review the lay-out, presentation and content of the Annex to Resolution Conf. 12.11 (Rev. CoP16) for consideration at CoP17.

5. Nomenclature references for species suggested for inclusion in the CITES Appendices not covered by the nomenclature references listed in Resolution Conf. 12.11 (Rev. CoP16).

At AC27, the unfortunate situation had been discussed that - with new species suggested for inclusion in the CITES Appendices - it often happens that the respective taxa are not covered by the references listed in Resolution Conf. 12.11 (Rev. CoP16) (see e.g. new shark species included in Appendix II at CoP16).

The Committee recommended that this problem be addressed by requesting the CITES Secretariat to approach the copyright holders for the databases currently serving as source for the downloaded checklists of amphibians, fish and spider species, and to request for a time-specific version of those databases. These can then be used as nomenclatural standard reference for these taxon groups in case of CITES discussions of taxa not currently listed in the Appendices, for example in the case of new listing proposals.

The Secretariat has contacted the copyright owners of the relevant databases and has, at the time of writing (June 2015), received two replies. In the case of the World Spider Catalog (<http://wsc.nmbe.ch>), a biannually generated archive version would be available for use as a time-specific version. For the Amphibians of the World database (<http://research.amnh.org/vz/herpetology/amphibia/>), there is currently no such version available. The Secretariat will continue to reach out to the relevant copyright holders and, upon request, provide an oral update on this matter at the Animals Committee meeting.

6. Nomenclature reference for the mammal genus *Ovis*

When adopting the 3rd edition of WILSON & REEDER (Mammal species of the world, publ. 2005) as general nomenclature reference for mammal species, *Ovis vignei* was exempted from this reference because it was difficult to align the species, which is split-listed in the Appendices, with the new taxonomy outlined in the 3rd edition. The taxonomy of *Ovis vignei* therefore remains based on the 2nd edition of 1993. The CMS Convention, which lists many Asian sheep species in its appendices, has adopted the 3rd edition for the genus *Ovis*. There is need to reconsider this issue to ensure taxonomic harmonization.

The nomenclature specialist has tried to trace down the history of the different nomenclature references for this genus, in combination with information from the original CITES listing proposals. The result is presented in Annex 3. It shows the possibility to adopt the 3rd edition of WILSON & REEDER for the genus *Ovis* because all CITES-listed taxa or populations of this genus can be linked between both editions. The change from the 2nd to the 3rd edition of WILSON & REEDER as nomenclature reference for the whole genus *Ovis* would bring the nomenclature reference for the genus in line with the one adopted by CMS.

7. General nomenclature reference for bird genera and species

The current general nomenclature reference for bird species is:

- DICKINSON, E.C. (ed.) (2003): The Howard and Moore Complete Checklist of the Birds of the World. Revised and enlarged 3rd Edition. 1039 pp. London (Christopher Helm).

in combination with

- DICKINSON, E.C. (2005): Corrigenda 4 (02.06.2005) to Howard & Moore Edition 3 (2003). [http://www.naturalis.nl/sites/naturalis.en/contents/i000764/corrigenda%204\\_final.pdf](http://www.naturalis.nl/sites/naturalis.en/contents/i000764/corrigenda%204_final.pdf) (available on the CITES website).

Since the last CoP, a fourth addition of this checklist has been published, with volume 1 (2013) covering the Non-Passerines, and volume 2 (2014) covering the Passerines.

In 2014, another checklist for Non-passerines has been published by Lynx and Birdlife International: BBW and BirdLife International: Illustrated Checklist of the Birds of the World, volume 1, Non-passerines. This

checklist has been adopted by CMS as nomenclature reference for non-passerines bird species at the last CMS CoP in 2014.

The EU Commission kindly commissioned WCMC to compile a comparison of the generic and species taxonomies in these references (see Annex 4) to assist the Committee in considering whether a change of the current general nomenclature reference to one or more of the references mentioned above may be appropriate or not.

8. *Poicephalus robustus*

In document [AC27 Doc. 25.2](#), South Africa requested the Committee to consider split-listing of the *Poicephalus robustus-suahelicus-fuscicollis* complex, which so far were considered as three subspecies of one species. It was suggested to follow the results of genetic research and split this group into *Poicephalus robustus* (without separate subspecies) and *Poicephalus fuscicollis* (with the subspecies *P. f. fuscicollis* and *P. f. suahelicus*).

The Committee recommended at AC27 that South Africa (i) provides identification guidelines to distinguish the two taxa native to South Africa (currently regarded as *P. robustus robustus* and *P. robustus suahelicus*) and (ii) suggests a peer-reviewed publication as nomenclature standard reference for the validity of *Poicephalus robustus robustus* as a species of its own, and placing *Poicephalus robustus suahelicus* and *P. r. fuscicollis* as subspecies into the new species *P. fuscicollis*.

With regard to this recommendation, South Africa has provided the nomenclature specialist with the following information on 1 June 2015:

- a) An Identification Guide has been developed (see Annex 5).
- b) As nomenclature references, the following publication has been suggested: COETZER, W.G., DOWNS, C. T., PERRIN, M.R. & WILLOWS-MUNRO, S. (in press 2015): Molecular systematics of the Cape Parrot (*Poicephalus robustus*): implications for taxonomy and conservation. This article has already been accepted for publication in PLOS ONE and is currently being revised in accordance with reviewers' comments.

9. Taxonomic Checklist for all Chamaeleonidae species and the genus *Phelsuma*

The nomenclature standard references for chameleon species and species of the genus *Phelsuma* increased significantly (with regard to chameleons alone, there are currently 32 single nomenclature standard references), and it has become difficult to keep track of them. Therefore, the German Scientific Authority commissioned Frank GLAW to compile a taxonomic checklist for all species of the family Chamaeleonidae as well as the genus *Phelsuma*.

These checklists have been published in volume 2 of Vertebrate Zoology early in 2014 (see [http://www.senckenberg.de/files/content/forschung/publikationen/vertebratezoology/vz65-2/01\\_vertrebrate\\_zoology\\_65-2\\_glaw\\_167-246.pdf](http://www.senckenberg.de/files/content/forschung/publikationen/vertebratezoology/vz65-2/01_vertrebrate_zoology_65-2_glaw_167-246.pdf) and [http://www.senckenberg.de/files/content/forschung/publikationen/vertebratezoology/vz65-2/02\\_vertrebrate\\_zoology\\_65-2\\_glaw-roesler\\_247-283.pdf](http://www.senckenberg.de/files/content/forschung/publikationen/vertebratezoology/vz65-2/02_vertrebrate_zoology_65-2_glaw-roesler_247-283.pdf))

Similar to the main nomenclature reference for Testudines, "Chelonians of the world", the new checklists include all species and subspecies, list the most important synonyms, and show the distribution of the species concerned. It is suggested to recommend these publications as new nomenclature references for the family of Chamaeleonidae and the CITES listed genus *Phelsuma*. Nomenclatural changes resulting from an adoption of these publications as nomenclatural references are provided in Annex 6.

10. Taxonomic checklist of Amphibian Species listed by CITES and EC Regulation 338/97 implementing CITES in the European Union

A new checklist (see Annex 7) has been compiled by the nomenclature specialist, based on species accounts downloaded from FROST, D.R. (2015): "Amphibian Species of the World, on online Reference" V. 6.0 [as of May 2015]. The new checklist is suggested to replace the one that is currently in place for CITES. It only results in two taxonomic changes, which are shown in Annex 9.

11. Taxonomic checklist of Fish species (except the genus *Hippocampus*) covered by CITES and EC Regulation 338/97 implementing CITES in the European Union

A new checklist (see Annex 8) has been compiled by the nomenclature specialist, based on species accounts downloaded from ESCHMEYER, W.N. & FRICKE, R. (eds): "Catalog of Fishes, electronic version" (updated 3 February 2015), and it is suggested that it replaces the one currently adopted by CITES. The recommendations of the Committee as outlined in document [AC27 WG6 Doc. 1](#) - p.3 (referring to document [AC27 Doc. 25.1](#), Paragraph 12) have been taken into account in this checklist.

12. Other identified nomenclature changes in mammal, reptile, amphibian, and invertebrate species

The EU Commission kindly commissioned WCMC to identify recent changes with regard to the nomenclature of mammals, reptile species (other than chameleons and *Phelsuma* species), amphibian, and invertebrate species covered by CITES and the EU Regulation implementing CITES within the member states of the European Union. The report is presented in Annex 9.

The respective changes referring to NIELSEN & al. (2011) for the nomenclature of the New Zealand gecko genera *Naultinus* and *Hoplodactylus* have already been discussed at AC27, and the Committee has already recommended the adoption of this publication as nomenclature reference for these genera (see document [AC27 WG 6 Doc.1](#) - p.2). The Committee has also already recommended the adoption of STANLEY & al. (2011) in combination with GREENBAUM & al. (2012) as new nomenclature reference for the whole family of Cordylidae, replacing the current checklist for the genus *Cordylus* of 2006.

The current nomenclature reference for the snake species *Daboia russelii* (Viperidae), which has been listed on Appendix III by India, is the publication of MCDIARMID, R.W., CAMPBELL, J.A. & TOURÉ, T.A. (1999). According to this reference, *Daboia russelii* includes the subspecies *siamensis*. It has been pointed out that according to a publication by THORPE, POOK & MALHOTRA (2007),<sup>4</sup> the taxonomy has changed. Adopting this change under CITES would result in a split-listing, with *Daboia russelii* (Shaw & Nodder, 1797) only including the subspecies *russelii*, *pulchella* and *nordicus* and the species *Daboia siamensis* (Smith, 1917) including the subspecies *siamensis*, *limitis*, *sublimitis* and *formosensis*.

13. Harmonization of nomenclature with other biodiversity-related multilateral environmental agreements (MEAs)

The Secretariat, in close collaboration with the nomenclature expert, continues its efforts to ensure harmonization of nomenclature with other MEAs. This is for example reflected in the CMS-CITES Joint Work Programme 2015-2020. Joint activities in the area of "Harmonization of species-specific information" relate to updating the species-specific information for species listed in the respective Appendices, and relevant databases of the two Conventions and aligning nomenclature in the Appendices to ensure compatibility. The envisaged joint activities are to: (i) Harmonize and link databases containing species-specific information (such as taxonomy, nomenclature, species common names, range states, conservation and legal status), taking into account the respective requirements of the two Conventions; and (ii) Pursue efforts to harmonize the nomenclature in the Appendices of the two Conventions with the long-term aim of complete alignment across all taxa. Current actions in this regard include the proposed alignments for references for non-passerine bird species, and for the genus *Ovis*, as reflected above.

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<sup>4</sup> Thorpe, R.S., Pook, C.E. & Malhotra, A. (2007): Phylogeography of the Russell's viper (*Daboia russelii*) complex in relation to variation in the colour patterns and symptoms of envenoming. *Herpetological Journal*, 17: 209-218.