

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



Thirty-first meeting of the Animals Committee
Geneva (Switzerland), 13-17 July 2020

Species specific matters

Maintenance of the Appendices

REPORT OF THE SPECIALIST ON ZOOLOGICAL NOMENCLATURE

1. This document has been prepared by the specialist on zoological nomenclature of the Animals Committee* with assistance and contributions from the Secretariat.

Nomenclatural tasks referred to the Animals Committee at the 18th meeting of the Conference of the Parties (CoP18, Geneva, August 2019)

Decision 17.312 (Rev. CoP18) on Nomenclature (Bird family and order names)

2. As described in document CoP18 Doc. 99, paragraphs 34-42, a report was prepared to compare and contrast the adopted standard nomenclatural references for birds, being the 3rd edition of The Howard & Moore complete checklist of the birds of the world, plus additional standard references, with a) the 4th edition of The Howard & Moore complete checklist of the birds of the world, as well as b) the non-passerine and passerine volume of the HBW [Handbook of Birds of the World] and BirdLife International illustrated checklist of the birds of the world. This report was made available as Annex 5 of document CoP18 Doc. 99.
3. As it was not possible for the Animals Committee to consider and discuss this report and make a recommendation to CoP18, the Parties renewed the Decision and tasked the Animals Committee to come to a decision on updating bird nomenclature:

17.312 (Rev. CoP18) Directed to the Animals Committee

- a) *evaluate the results of the analysis [of the implications of adopting a new standard nomenclature reference for birds at the family and order level]; and*
 - b) *develop a recommendation for decision at the 19th meeting of the Conference of the Parties.*
4. Considering the number and complexity of the nomenclatural changes that would result from the adoption of either proposed checklist as standard nomenclature reference, as well as the likely necessity to retain some of the adopted standard references for particular species, and possibly the inclusion of additional standard references, a detailed evaluation by the Committee is necessary that will likely not be possible in the limited time available for a working group meeting in the course of a regular meeting of the Animals Committee. Therefore, the establishment of an inter-sessional working group on nomenclature is proposed

* *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.*

to consider the findings of the report presented in Annex 5 of document CoP18 Doc. 99 and develop a recommendation for decision at the 19th meeting of the Conference of the Parties.

Decisions 18.309 and 18.310 on the Use of time-specific versions of online-databases as standard nomenclature references

5. At the last Animals Committee (AC30, Geneva, 2018), the Secretariat reported in document AC30 Doc. 32 that it had contacted the copyright holders of the six online databases indicated in Decision 17.309. In document AC30 Doc. 32, the Secretariat further informed that it would follow up with WoRMS, as the only remaining copyright holder from whom no response had been received, and provide an oral update on these consultations during AC30. Accordingly, the Secretariat provided an oral update explaining that a time-specific version of the WoRMS database was available, and that a Memorandum of Understanding between the CITES Secretariat and WoRMS would need to be concluded for accessing a time-stamped version of the database.
6. Based on the update provided by the Secretariat, the Animals Committee, at AC30, recommended that Decisions 17.309 and 17.310 be renewed for the next intersessional period (see AC30 Com.3 (Rev. by Sec.)). Accordingly, at its 18th meeting (CoP18, Geneva, 2019), the Conference of the Parties adopted two Decisions on the *Use of time-specific versions of online-databases as standard nomenclature references*, as follows:

18.309 Directed to the Secretariat

- a) *continue to engage copyright-holders of relevant online-databases that might serve as standard nomenclature references and explore the possible use of time-specific versions for CITES services; for example, relevant databases include but are not limited to WoRMS, Fish Base, ESCHMEYER & FRICKE's Catalog of Fishes, Amphibian Species of the World, and Corals of the World as standard references;*
- b) *report the results of its consultations to the Animals Committee.*

18.310 Directed to the Animals Committee

- a) *evaluate the results of the Secretariat's consultation;*
- b) *develop recommendations on the use of time-specific online-databases as standard nomenclature references for decision by the Conference of the Parties at its 19th meeting.*

7. The Secretariat has since continued to engage relevant copyright holders, specifically *Corals of the World*, to enquire whether a time-stamped version of their database is now accessible and if it could be made available to the Secretariat. The Secretariat has yet to receive responses to these consultations, and will report to the Animals Committee orally should this change. Having consulted the above-named copyright-holders and sought responses since 2018, the Secretariat seeks guidance from the Animals Committee as to what further steps it could envisage, if any, to implement Decision 18.309.

Decision 18.312 on Nomenclature and identification of corals

18.312 Directed to the Animals Committee

- a) *consider the report of the Secretariat and proceed towards recommending for adoption of a standard nomenclature reference for CITES-listed corals;*
- b) *update its list of coral taxa for which identification to genus level is acceptable, but which should be identified to species level where feasible, once a new standard nomenclature reference for CITES-listed coral species has been identified and provide the updated list to the Secretariat for dissemination; and*
- c) *report with recommendations to the 19th meeting of the Conference of the Parties.*

8. The Secretariat will give an oral report at the 31st Meeting of the Animals Committee.

Decision 18.313 (Appendix III) and Decision 18.315 (Pangolins)

9. Decision 18.315 on the listing of Pangolins (*Manis* spp) in the Appendices was directed to the Animals Committee, while Decision 18.313 on Appendix III was directed to both the Animals and Plants Committees. These topics are treated in separate documents.

Ongoing activities under Resolution Conf. 12.11 on Standard Nomenclature

Supplementary Standard Nomenclature References for species included in the Appendices at CoP18

10. With the adoption of proposals at CoP18, several species and genera were added to the CITES Appendices which are not covered by the standard nomenclature references as currently adopted [see Annex of Resolution Conf. 12.11 (Rev. CoP18)]. These cases are tabulated below, with a recommendation for the adoption of a supplementary standard reference, four of which are attached as Annexes 1 to 4. It must be emphasised that in many cases, the information extracted covers more species than are listed in the CITES Appendices; this is to properly 'frame' the listed species in the context of the overall genus, and contrast listed species with non-listed species.

Taxon	Proposed Nomenclatural Standard Reference
Reptilia: Sauria: Agamidae: <i>Ceratophora</i>	Taxonomic Checklist of the Species of the Genus <i>Ceratophora</i> . Species information extracted from UETZ, P., FREED, P., & HÖSEK, J. (eds.) 2020. The Reptile Database, version of 2 May 2020, accessed 5 May 2020. See Annex 1
Reptilia: Sauria: Agamidae: <i>Cophotis</i>	Taxonomic Checklist of the Species of the Genus <i>Cophotis</i> . Species information extracted from UETZ, P., FREED, P., & HÖSEK, J. (eds.) 2020. The Reptile Database, version of 2 May 2020, accessed 5 May 2020. See Annex 1
Reptilia: Sauria: Agamidae: <i>Lyriocephalus</i>	Taxonomic Checklist of the Species of the Genus <i>Lyriocephalus</i> . Species information extracted from UETZ, P., FREED, P., & HÖSEK, J. (eds.) 2020. The Reptile Database, version of 2 May 2020, accessed 5 May 2020. See Annex 1
Reptilia: Sauria: Eublepharidae: <i>Goniurosaurus</i>	Taxonomic Checklist of the Species of the Genus <i>Goniurosaurus</i> . Species information extracted from UETZ, P., FREED, P., & HÖSEK, J. (eds.) 2020. The Reptile Database, version of 2 May 2020, accessed 5 May 2020. See Annex 1
Reptilia: Sauria: Gekkonidae: <i>Gekko gekko</i>	Taxonomic summary of the Species <i>Gekko gekko</i> , including <i>Gekko reevesii</i> . Species information extracted from UETZ, P., FREED, P., & HÖSEK, J. (eds.) 2020. The Reptile Database, version of 2 May 2020, accessed 5 May 2020. See Annex 1
Reptilia: Sauria: Gekkonidae: <i>Gonatodes daudini</i>	Powell, R., & R.W. Henderson. 2005. A new species of <i>Gonatodes</i> (Squamata: Gekkonidae) from the West Indies. <i>Carib. J. Sci.</i> 41 (4): 709-715.
Reptilia: Sauria: Gekkonidae: <i>Paroedura androyensis</i>	Taxonomic summary of the Species <i>Paroedura androyensis</i> . Species information extracted from UETZ, P., FREED, P., & HÖSEK, J. (eds.) 2020. The Reptile Database, version of 2 May 2020, accessed 5 May 2020. See Annex 1
Reptilia: Sauria: Iguanidae: <i>Ctenosaura</i>	Iguana Taxonomy Working Group. 2016. A checklist of the iguanas of the world (Iguanidae; Iguaninae). Pp. 4–46 In <i>Iguanas: Biology, Systematics, and Conservation</i> . Iverson, J.B., T.D. Grant, C.R. Knapp, and S.A. Pasachnik (Eds.). <i>Herpetological Conservation and Biology</i> 11(Monograph 6). Available at http://www.herpconbio.org/Volume_11/Monograph_6/2-Iguana_Taxonomy_Working_Group_2016.pdf
Reptilia: Serpentes: Viperidae: <i>Pseudocerastes</i>	Taxonomic Checklist of the Species of the Genus <i>Pseudocerastes</i> . Species information extracted from UETZ, P., FREED, P., & HÖSEK, J. (eds.) 2020. The Reptile Database, version of 2 May 2020, accessed 5 May 2020. See Annex 1
Amphibia: Caudata: Salamandridae: <i>Echinotriton</i>	Species information extracted from FROST, D.R. (ed.). 2020. <i>Amphibian Species of the World: an online Reference</i> , Version 6.1. doi.org/10.5531/db.vz.0001 Accessed 5 May 2020. See Annex 2.

Amphibia: Caudata: Salamandridae: <i>Paramesotriton</i>	Species information extracted from FROST, D.R. (ed.). 2020. Amphibian Species of the World: an online Reference, Version 6.1. doi.org/10.5531/db.vz.0001 Accessed 5 May 2020. See Annex 2.
Amphibia: Caudata: Salamandridae: <i>Tylostotriton</i>	Species information extracted from FROST, D.R. (ed.). 2020. Amphibian Species of the World: an online Reference, Version 6.1. doi.org/10.5531/db.vz.0001 Accessed 5 May 2020. See Annex 2.
Elasmobranchii: Lamniformes: Lamnidae: <i>Isurus</i>	Species information extracted from Eschmeyer, W.N., R. Fricke, and R. van der Laan (eds.). 2020. Catalog Of Fishes: Genera, Species, References. Online version of 4 May 2020, accessed 5 May 2020. See Annex 3.
Elasmobranchii: Rhinopristiformes: Glaucostegidae: <i>Glaucostegus</i>	Species information extracted from Eschmeyer, W.N., R. Fricke, and R. van der Laan (eds.). 2020. Catalog Of Fishes: Genera, Species, References. Online version of 4 May 2020, accessed 5 May 2020. See Annex 3.
Elasmobranchii: Rhinopristiformes: Glaucostegidae: Rhinidae	Species information extracted from Eschmeyer, W.N., R. Fricke, and R. van der Laan (eds.). 2020. Catalog Of Fishes: Genera, Species, References. Online version of 4 May 2020, accessed 5 May 2020. See Annex 3.
Arthropoda: Arachnida: Araneae: Theraphosidae: <i>Poecilotheria</i>	Species information extracted from World Spider Catalog (2020). Version 21.0. Natural History Museum Bern, online; accessed on 5 May 2020. doi: 10.24436/2. See Annex 4.

Miscellaneous nomenclatural updates for species and higher taxa listed in the Appendices

11. Taxonomic research on CITES-listed and other species continues at an increasingly rapid pace in the biological community, and the nomenclatural effects of this research are extensive. Many of these changes were listed Annex 6 of CoP18 Doc. 99, but had not been considered in sufficient depth to enable adoption by the Conference of the Parties at its 18th meeting. Since the submission of Annex 6 in December 2018, additional taxonomic proposals were published that warrant consideration for CITES purposes. Annex 5 to the present document presents a combination of the cases included in the CoP18 Annex as well as more recent cases for consideration. The task ahead is to review these proposed nomenclatural changes and produce lists of A) nomenclatural changes recommended for adoption by CITES at CoP19, B) nomenclatural changes proposed in the scientific literature but rejected for CITES purposes, and C) nomenclatural changes proposed in the scientific literature to be evaluated further at a later date.
12. Particular consideration must be given to the case of *Phyllomedusa lemur*, which has been proposed to be transferred to the genus *Agalychnis*. While the genus *Agalychnis* is included in Appendix II, the species *Phyllomedusa lemur* is not included in CITES Appendix II. The standard reference for the genus *Agalychnis*, adopted at CoP17 (see CoP17 Doc. 81.1, paragraph 12) excludes lemur as a member, but the widespread adoption in scientific, hobbyist and trade communities of its transfer from *Phyllomedusa* into *Agalychnis* has created implementation challenges, and consideration must be given to clarifying this case, possibly through an annotated updated version of the standard reference for the genus *Agalychnis*, or an annotation in the Appendices.

Higher taxonomy of Lizards

13. The current nomenclature standard for the delimitation of families of lizards (Sauria) dates from 1998. Since then, several groups (subfamilies) have been elevated to family rank, including the Sphaerodactylidae out of the Gekkonidae, as well as similar family elevations having occurred among the snakes (Serpentes). Moreover, the primary division of Sauria and Serpentes is no longer generally recognized, with these groups now combined with the Amphisbaenida in the order Squamata. An updated higher classification for reptiles warrants consideration in the coming time.

First Workshop on the Governance of Taxonomic Lists

14. The specialist on zoological nomenclature of the Animals Committee participated by invitation in the First Workshop on the Governance of Taxonomic Lists, held at Charles Darwin University in Darwin, Australia, 10 to 12 February 2020, under the auspices of the International Union of Biological Sciences. This workshop was intended to be an initial step towards the creation and governance of a broadly-accepted global checklist

of all biodiversity, with appropriate governance of the list, agreed processes for acceptance and updating of component checklists, and standardization and archival protocols to enable the adoption and use of this list, or sections thereof, by taxonomists, conservationists, governments and multilateral environmental agreements (MEAs) such as CITES and the Convention on the Conservation of Migratory Species of Wild Animals (CMS; also represented at the workshop). This will be a consultative process that is expected to take a number of years to take shape. The anticipated standardised global checklist of species is likely to be highly useful for the implementation of CITES, and would facilitate harmonisation in species names across MEAs. The organizers of the workshop and process are to be commended for seeking to understand and incorporate, from the beginning, the particular needs of MEAs for checklists.

Alternate Member for Nomenclature on the Animals Committee

15. With the adoption at CoP18 of Resolution Conf. 18.2 on the Establishment of Committees, Annex 2 on the Terms of Reference of the Animals and Plants Committees, a position of Alternate Member to the specialist on zoological nomenclature has been created under paragraph 6. The Secretariat and Parties may wish to give consideration to nominating candidates for this position following the process outlined in paragraph 12 of Annex 2 of Res. Conf. 18.2.

Acknowledgments

16. Finally, the specialist on zoological nomenclature of the Animals Committee wishes to thank all colleagues at the CITES Secretariat, the Animals and Plants Committees, Parties, Organizations and Academia who have provided information, advice and discussion of nomenclatural matters.

Recommendations

The Animals Committee is invited to consider the present document, and establish an inter-sessional Working Group on Nomenclature to prepare documents and recommendations for AC32 for the following topics:

- a) review the findings of the report presented in Annex 5 of document CoP18 Doc. 99 on Bird Nomenclature (paragraphs 2-4 of this document);
- b) provide guidance to the Secretariat as to what further actions it could undertake to implement Decision 18.309 regarding time-specific versions of online databases, having considered the results of consultations to date (para 5-7)
- c) review the information to be provided concerning nomenclature and identification of corals (paragraph 8);
- d) review the proposed standard references for species newly included in the Appendices (paragraph 10 and Annexes 1-4 of this document);
- e) review and supplement the list of proposed updates to nomenclature of species listed in the Appendices, noted in paragraphs 11-12 and Annex 5 of this document);
- f) consider options to update the higher taxonomy of lizards and snakes (paragraph 13);
- g) if necessary, further consider the documents submitted separately with regard to Decision 18.313 (Appendix III) and Decision 18.315 (Pangolins) as noted in paragraph 9.