

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

LISTING OF PANGOLINS IN THE APPENDICES

1. This document has been prepared by the specialist on zoological nomenclature of the Animals Committee\* with assistance from the Secretariat.
2. At the 18th meeting of the Conference of the Parties, curiosities of the current listing of Pangolins (Mammalia: Pholidota: Manidae: *Manis* spp.) were brought to the attention of the Meeting. Resulting from the suite of different Proposals adopted at CoP17, the Appendices at present list each of the recognized eight pangolin species by name in Appendix I, while the previous genus listing *Manis* spp. remains in Appendix II (even though no living pangolin species exists that is not explicitly listed in Appendix I.

Consequently, the Conference of the Parties formulated Decision 18.315 as follows:

**18.315 Directed to the Animals Committee**

*The Animals Committee shall examine the taxonomy and nomenclature of pangolins (Manidae spp.) and will propose a way forward to clarify a listing of pangolins on the Appendices.*

3. As noted in Summary Record CoP18 Com. II Rec. 12 (Rev.1), page 2, the Secretariat and Nomenclature Specialist (AC) concurred that changing the way that Pangolins are listed in the CITES Appendices to a manner that reflects biological reality, and consistency with Res Conf. 9.24 (Rev. CoP17) on *Criteria for Amendment of Appendices I and II*, requires the preparation and submission of a formal Proposal for CoP19.
4. The Nomenclature Specialist therefore prepared a draft Proposal, attached to this document as an Annex.
5. The Nomenclature Specialist requests the Animals Committee to review the Annex to this document and to engage with the Depositary Government to seek input from Parties and pertinent Observer organizations, and prepare a final version of this Proposal for submission for consideration at the 19th meeting of the Conference of the Parties.

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\* *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.*

Original language: English

CoP19 Prop. XX

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
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Nineteenth meeting of the Conference of the Parties  
venue and date

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Replace the current listing of all 8 individually named species of *Manis* in Appendix I with the higher order listing of Order PHOLIDOTA (Pangolins), and delete *Manis* spp. from Appendix II.

B. Proponent

Party name\*

C. Supporting statement

1. Taxonomy

Taxonomy and nomenclature in this proposal follow the adopted nomenclatural standard, Wilson and Reeder 2005, for Class Mammals, order Pholidota [Pangolins].

1.1 Class: Mammalia

1.2 Order: Pholidota

The Order Pholidota at present is understood to contain a single family with the following 8 living species in a single genus:

1.3 Family: Manidae - Pangolins

1.4 Genus, species or subspecies, including author and year:

*Manis crassicaudata* Geoffroy, 1803  
*Manis culionensis* (de Elera, 1915)  
*Manis gigantea* Illiger, 1815  
*Manis javanica* Desmarest, 1822  
*Manis pentadactyla* Linnaeus, 1758  
*Manis temminckii* Smuts, 1832  
*Manis tetradactyla* Linnaeus, 1766  
*Manis tricuspis* Rafinesque, 1821

Indian Pangolin  
Philippine Pangolin  
Giant Pangolin  
Sunda Pangolin  
Chinese Pangolin  
Ground Pangolin  
Long-tailed Pangolin  
Tree Pangolin

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The listing of the entire Order PHOLIDOTA in Appendix I will result in the automatic inclusion of any living pangolin species that might be discovered in the future in Appendix I. Any new species recognition resulting from a division of any of the named species above into multiple species would be automatically included in Appendix I under the provisions of Res. Conf. 12.11 (Rev. Conf. 18).

1.5 Scientific synonyms: See Wilson and Reeder, 2005: pages 530-531.

1.6 Common names: English:  
French:  
Spanish:

1.7 Code numbers:

1.8 Exclusions: While the higher-taxa Order PHOLIDOTA and Family Manidae include a number of extinct fossil taxa (see Gaudin et al. 2006, 2009), these extinct taxa are not deemed to be included in the CITES Appendices or otherwise subject to CITES provisions.

## 2. Overview

From the early days of CITES (effective 1 July 1975), the pangolin species *Manis crassicaudata*, *M. javanica*, and *M. pentadactyla* were included in Appendix II, while *Manis temminckii* was included in Appendix I.

*Manis gigantea*, *M. tetradactyla* and *M. tricuspis* were listed in Appendix III (Ghana) since 26 February 1976, and were included in Appendix II effective 16 February 1995 (CoP. 9 Prop. 07)

*Manis temminckii* was transferred from Appendix I to App. II effective 16 February 1995 (CoP 9 Prop. 08).

Resulting from the above inclusions and transfers, all Pangolin species recognized in 1995 were included in Appendix II, and were listed as Manidae spp. in the Appendices.

*Manis culionensis* was previously considered a synonym of *Manis javanica*, but was recognized as a separate species by Feiler (1998), a recognition that was widely followed by mammalogists; with the adoption of Wilson and Reeder (2005) as nomenclatural standard reference for mammals, their recognition of *culionensis* as a valid species meant that it was included by name in the Checklist of CITES Species while being part of the *Manis* spp. genus listing in Appendix II.

At CoP17, a suite of proposals resulted in the transfer of *Manis crassicaudata* (CoP17 Prop. 08 and Prop. 09), *Manis culionensis* (CoP17 Prop. 10), *Manis javanicus* and *M. pentadactyla* (CoP17 Prop. 11) and *Manis gigantea*, *M. temminckii*, *M. tetradactyla* and *M. tricuspis* (CoP19 Prop. 12) from Appendix II to Appendix I.

The effect of the individual CoP17 proposals was to move one or more species from Appendix II to App. I, collectively transferring ALL included species; however, none of the proposals had the overarching effect to propose placement of the entire genus *Manis* spp in Appendix I. The literal effect was to list each Pangolin species by name in Appendix I, while leaving the genus listing *Manis* spp. behind in Appendix II; a genus listing where each of its contained species has been transferred to Appendix I, leaving the genus listing an empty shell with no biological content. This is an impractical and potentially confusing listing in the Appendices.

The practical approach is to list the entire higher-taxon grouping of Pangolins in Appendix I, and delete its listing in Appendix II. The exact changes proposed are presented in Annex 1 to this document.

While paragraph 4 of Res. Conf. 12.11 (Rev. CoP18) resolves that the CITES Secretariat has a mandate to make orthographic corrections to the Appendices, any conversion of a set of species names into a higher taxon listing in Appendix I, and the corresponding deletion of the higher taxon listing from Appendix II, is not a simple orthographic change and requires a proposal for consideration by the Conference of the Parties.

Traditionally, all Pangolin species were considered to belong in the single genus *Manis* (Wilson & Reeder 2005, the adopted nomenclature for CITES purposes; Gaubert, 2011). In recent years, however, taxonomic research on Pangolins has recommended the recognition of multiple genera for Pangolins, specifically: Retention of the Asian species *crassicaudata*, *culionensis*, *javanica* and *pentadactyla* in the genus *Manis*,

placement of the African terrestrial species *gigantea* and *temminckii* in the genus *Smutsia*, and the African arboreal species *tricuspis* and *tetractyla* in the genus *Phataginus* (Gaubert et al., 2018). All species are retained in the single Family Manidae, being the only living family in the Order Pholidota.

A higher-taxon listing of the species in Appendix I will preclude any future need to change the names of these individual species in the Appendices if this new genus taxonomy is adopted by CITES at some future date.

Annex 3 of Res. Conf. 9.24 (Rev. CoP.17), section Higher Taxa, states that “If all species of a higher taxon are included in Appendix I or II, they should be included under the name of the higher taxon.” In the case of Pangolins after CoP17, all known living species of the order Pholidota are included in Appendix I, and the highest taxon name that can be listed in Appendix I would be at the Order level, as PHOLIDOTA spp. The precedent for Order-level listings in the Appendices exists with CETACEA spp., ACIPENSERIFORMES spp. as well as several Orders of the Class Anthozoa (Corals and Sea Anemones).

The listing of the entire Order PHOLIDOTA in Appendix I will result in the automatic inclusion in Appendix I of any living pangolin species that might be discovered in the future. This is a precautionary approach because any Pangolin species that would be newly discovered would logically be rare and restricted if it has not been discovered by biodiversity surveys to date. This is different from any new species recognition resulting from a division of any of the known species into multiple species, as might happen for the Tree Pangolin (Gaubert et al., 2018); under the provisions of Res. Conf. 12.11 (Rev. Conf. 18) such ‘split-out’ species from listed species would be automatically included in the Appendix where the original species is placed, i.e. Appendix I.

Annex 3 of Res. Conf. 9.24 (Rev. CoP.17), section Higher Taxa, states that “When preparing a proposal to include a higher taxon in the Appendices, Parties are encouraged to note any extinct species in the higher taxon and to clarify whether these are included or excluded from the proposed listing.” For the purposes of this proposal, any of the fossil species placed in the genera *Cryptomanis*, *Eomanis*, *Euromanis*, *Eurotamandua*, *Necromanis* or *Patriomanis* by Gaudin et al. (2009), as well as fossil specimens named *Manis hungarica* Kormos 1934, *M. lydekkeri* Dubois 1908 and *M. palaeojavanica* Dubois 1907, are excluded from this proposal and any CITES provisions.

## 10. Consultations

A draft of this proposal was made available for review and feedback as part of the documentation submitted for the 31<sup>st</sup> meeting of the Animals Committee.

## 11. Additional remarks

## 12. References

- Feiler A. 1998. Das Philippinen-Schuppentier, *Manis culionensis* ELERA, 1915, eine fast vergessene Art (Mammalia: Pholidota: Manidae). Zoologische Abhandlungen - Staatliches Museum für Tierkunde Dresden. 50:161–164.
- Gaubert, P. 2011. Order Pholidota, Family Manidae (Pangolins). Pp. 82-103 in: Wilson, D.E., & Mittermeier, R.A., eds. *Handbook of the Mammals of the World*, Vol.2 Hoofed Mammals. Lynx Ediciones, Barcelona. ISBN 978-84-96553-77-4.
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- Gaudin, T.J., R.J. Emry & B. Pogue. 2006. A new genus and species of pangolin (Mammalia, Pholidota) from the late Eocene of Inner Mongolia, China. *J Vertebrate Paleontology* 26:146–159.
- Gaudin, T.J., R.J. Emry & J.R. Wible. 2009. The Phylogeny of Living and Extinct Pangolins (Mammalia, Pholidota) and Associated Taxa: A Morphology Based Analysis. *J Mammal Evol.* 16: 235–305. DOI 10.1007/s10914-009-9119-9.
- Wilson, D.E., & D.M. Reeder (eds.) 2005. *Mammal Species of the World. A Taxonomic and Geographic Reference*. Third edition, Vol. 1-2, xxxv + 2142 pp. Baltimore (John Hopkins University Press).

Table 1A. Listing of Pangolins in the CITES Appendices at present:

	I	Appendices II	III
PHOLIDOTA			
Manidae Pangolins			
	<i>Manis crassicaudata</i> <i>Manis culionensis</i> <i>Manis gigantea</i> <i>Manis javanica</i> <i>Manis pentadactyla</i> <i>Manis temminckii</i> <i>Manis tetradactyla</i> <i>Manis tricuspis</i>	<i>Manis spp.</i> (Except the species included in Appendix I)	

Table 1B. Listing of Pangolins in the CITES Appendices following adoption of this proposal:

	I	Appendices II	III
PHOLIDOTA Pangolins			
	PHOLIDOTA spp.		