

**Taxonomic
updates
for CITES-listed
species in
the orders
Carnivora, Cetacea
and Artiodactyla
and the class
Elasmobranchii**



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Citation: European Commission and UNEP-WCMC. 2023. Taxonomic updates for CITES-listed species in the orders Carnivora, Cetacea and Artiodactyla and the class Elasmobranchii. UNEP-WCMC, Cambridge.

Prepared for: The European Commission, Directorate General Environment, Directorate F - Global Sustainable Development, Unit F3 - Multilateral Environmental Cooperation, Brussels, Belgium.

Published: April 2023

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Cover photo: *Budorcas taxicolor* AkuAku/Adobe Stock



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Overview

This Annex provides an update on potential taxonomic and nomenclature changes relating to CITES-listed species in the orders Carnivora, Cetacea and Artiodactyla and the Class Elasmobranchii. For each group, the currently recognised species names were compared against recent key references as detailed below. The potential changes for consideration by the Animals Committee are outlined in AC32 Doc. 46 Annex 2a (Excel), with a separate tab for each of the three taxonomic groups considered.

As well as summarising recent taxonomic and nomenclature changes, Annex 2a also includes the IUCN Red List status (March 2023) and an indication of the potential change to the CITES Appendices if the relevant new reference was adopted.

Recognition of many of these changes would not require a change to the CITES Appendices (but see notes below for *Cervus* spp.), as the species in question are listed under higher taxon listings; though in most cases the Checklist of CITES Species would need updating.

A number of changes relate to species included in Appendix III. There are ongoing CITES discussions on how changes to the taxonomy and nomenclature of Appendix III species are handled (see CITES [Decisions 18.313 \(Rev. CoP19\) & 18.314 \(Rev. CoP19\)](#) on *Nomenclature of Appendix-III listings*), and this is noted where relevant in Annex 2a.

The following symbols and abbreviations are used in Annex 2a

The symbol '<' is used to indicate species lumps, i.e. taxa currently recognised as separate, but that have been grouped together under another name in the associated reference.

The symbol '>' is used to indicate species splits, i.e. cases where a currently recognised taxon has been split into various taxa in the associated reference.

The symbol '→' is used to indicate higher level taxonomy changes.

The symbol '=' is used to indicate taxonomic or nomenclatural changes that do not involve a change in the scope of the taxon in question.

Orders Cetacea and Artiodactyla

In 2020, a new *Illustrated Checklist of the Mammals of the World* was published (Burgin *et al.*, 2020), which includes a review of the status of all mammal species, with many taxonomic and nomenclature revisions noted. Burgin *et al.* (2020) group the Cetacea and Artiodactyla together into the Order Cetartiodactyla and so these are considered together here.

Wilson and Reeder (2005) is the main CITES standard reference for nomenclature of the Artiodactyla and Cetacea, with different references used for *Ovis* spp., *Lama guanicoe* and for 12 species of Cetacea (CITES Resolution 12.11 (Rev CoP19)).

An output from the [Species+](#) database was generated for CITES-listed species in the orders Cetacea and Artiodactyla. This list was compared against the taxonomy and nomenclature recognised in Burgin *et al.* (2020).

The differences identified relate to 11 families and include a family name change for five species and various species lumps, splits, and name changes.

A number of issues were identified that may need additional consideration by the Animals Committee.

Four species of *Babyrousa* are listed in CITES Appendix I, but Burgin *et al.* (2020) only recognise three, noting that further research on taxonomy is needed. As some authors consider the subspecies *B. bolabatuensis* to be extinct, additional review by the Animals Committee is needed to determine the best course of action for this taxon.

For *Saiga* spp., Burgin *et al.* (2020) along with other authors, no longer consider the taxon *Saiga borealis* (Appendix II) to be valid. Further consideration is likely to be needed on whether CITES should consider *Saiga* as two species: *Saiga tatarica* (currently Appendix II) and *S. mongolica* (allocating *borealis* to *mongolica*) or one species, *Saiga tatarica* with two subspecies *S. t. tatarica* and *S. t. mongolica*.

The current CITES listing for *Cervus elephus* has a three-way Appendix split of subspecies, with *C. elephus hanglu* included in Appendix I, *C. elephus bactrianus* in Appendix II and *C. elephus barbarus* in Appendix III (Algeria and Tunisia). Whilst one suggested change to elevate *C. e. hanglu* to the full species *Cervus hanglu* is straightforward, another proposed taxonomic change through adoption of Burgin *et al.* (2020) would mean that the current taxon *C. elephus bactrianus* (Appendix II) is elevated to [proposed] *C. hanglu* (Appendix I), which would also need to be accompanied by a proposal to amend the Appendices if accepted.

The intersessional period between AC32 and AC33 will provide an opportunity for further review of these cases and potentially others in Annex 2a. An anticipated intersessional working group on nomenclature could assist with providing a suggested way forward.

Order Carnivora

Wilson and Reeder (2005) is the main CITES standard reference for nomenclature of the Carnivora, except for Felidae spp. and *Aonyx cinereus* (CITES Resolution 12.11 (Rev CoP19)).

An output from the [Species+](#) database was generated for CITES-listed species listed in the order Carnivora. This was compared against the taxonomy and nomenclature recognised in Burgin *et al.* (2020).

The changes identified relate to nine families and include a family name change for two species and various species lumps, splits, and generic/species name changes.

Cartilaginous Fish

The current CITES nomenclature standard references for fishes include the 2015, 2017 and 2019 versions of Eschmeyer's Catalog of Fishes (Eschmeyer & Fricke 2015; Eschmeyer *et al.*, 2017, 2019), with other references also used for Rhinobatidae spp. and for three species of *Mobula*.

An output from the [Species+](#) database was generated for CITES-listed species listed in the Class Elasmobranchii. The current species names recognised by CITES were compared against those recognised in the most recent version of Eschmeyer's Catalog of Fishes (Fricke *et al.*, 2023). In addition, a search of the online database Zoological Record was undertaken covering entries from 2018-2023 at either the order, class or species level.

Changes identified through Zoological Records were all included in Fricke *et al.* (2023). They include changes for taxa in seven families, including a number of newly described species.

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