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REVIEW OF THE CONSERVATION STATUS OF CMS APPENDIX I-LISTED TAXA

(Submitted by the Secretariat)

Summary:

This document has been prepared by the UNEP- World Conservation Monitoring Centre for the CMS Secretariat. It summarizes the results of a rapid assessment of the conservation status of Appendix I-listed taxa and identifies a selection of taxa that may be good candidates for further review in the form of case-studies.

Review of the conservation status of CMS Appendix I-listed taxa

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Introduction

According to the CMS Convention text Article III.2, *“a migratory species may be listed in Appendix I provided that reliable evidence, including the best scientific evidence available, indicates that the species is endangered”*. Resolution 5.3 interprets ‘endangered’ as meaning *“facing a very high risk of extinction in the wild in the near future”*. A preliminary review of the conservation status of CMS-listed species produced for the 13th meeting of the Conference of the Parties to CMS ([UNEP/CMS/COP13/Doc.24/Rev.1](#)) found *“a significant number of species are assessed as belonging to a category that, based on the current guidelines on the assessment of listing proposals as contained in Resolution 11.33 (Rev.COP12)¹, would in principle not qualify them for listing”*. A number of likely contributing factors for this were identified, including changes in the listing criteria, improved information on conservation status for species and genuine improvements in conservation status. In addition, it was noted that the scope of IUCN assessments does not always fully align to the CMS listing (for example, assessment is at the global level while listing is at the subspecies or population level). On this basis, CMS Parties determined that possible conclusions should not be oversimplified, and that further work was required.

At COP13 (Gandhinagar, 2020), the CMS Parties adopted [Decision 13.24](#), which directed the Secretariat to undertake a number of activities relevant to assessing the conservation status of migratory species. Paragraph b), in part, calls on the Secretariat to *“initiate an in-depth review of the conservation status of individual CMS-listed species, starting with those species listed in Appendix I classified in the categories of lowest threat of extinction in the IUCN Red List of Threatened Species and whose conservation status has improved since first listed, [...] with a view to determining inter alia: (i) differences in the conservation status of individual populations or management units; (ii) the importance of the protection provided by the listing on Appendix I for the conservation of the species and its individual populations.”*

As a first step towards the implementation of this decision, the CMS Secretariat engaged the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) to assess the conservation status of CMS Appendix I-listed taxa² and help determine which individual CMS-listed taxa may be good candidates for an in-depth review as described in Decision 13.24. This report summarises the results of this assessment and identifies a selection of taxa that may be good candidates for further review in the form of case-studies³, with a focus on taxa *“classified in the categories of lowest threat of extinction in the IUCN Red List of Threatened Species”*. For those selected for further review, the additional aspects included within Decision 13.24 (*differences in conservation status across populations and the importance of Appendix I protection*) are considered as part of the case studies (see Next Steps).

¹ Revised at COP13 in [Resolution 13.7](#).

² Referring to Appendix I listed species, or subspecies / subpopulations where listing is at that level.

³ Using the template agreed at the 5th Meeting of the Sessional Committee of the Scientific Council (ScC-SC5) ([UNEP/CMS/ScS-SC5/Doc.5/Annex 2](#)).

Overview of conservation status

Of the 180 taxa listed in Appendix I, 96 (53%) were assessed by IUCN in the three highest threat categories of the IUCN Red List⁴: Extinct in the Wild (one species, *Oryx dammah* (Scimitar-Horned Oryx)), Critically Endangered (43), and Endangered (52). Sixty-eight taxa (38%) were assessed as Vulnerable (52) or Near Threatened (16), and 16 (9%) were categorised by IUCN as Least Concern (including one species (*Podocnemis expansa* (South American River Turtle)) categorised as Lower Risk/conservation dependent⁵) (Figure 1; Table A.1 in Annex A).

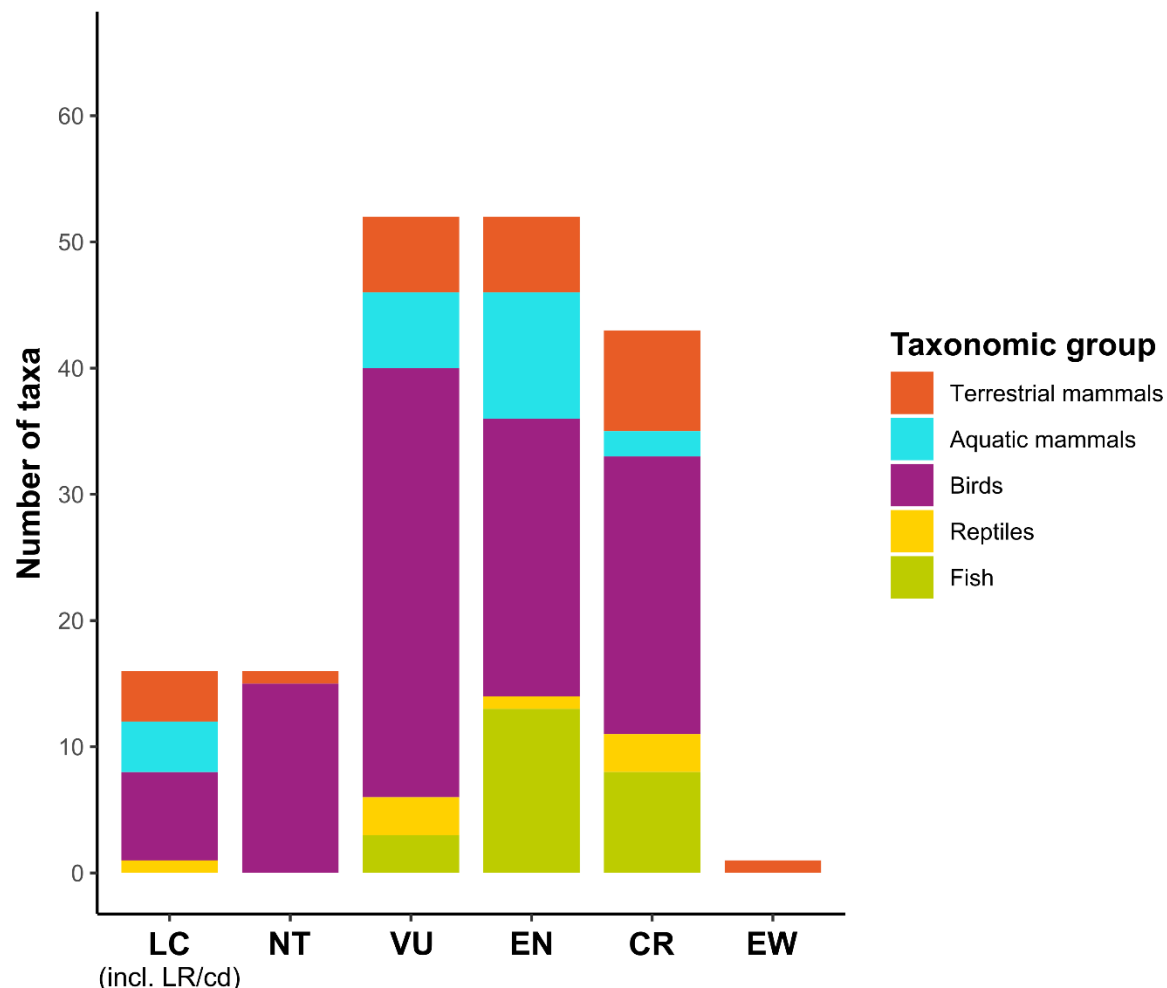


Figure 1. The number of CMS Appendix I taxa (terrestrial mammals = 26, aquatic mammals = 22, birds = 100, reptiles = 8, fish = 24) assessed in the IUCN Red List as Least Concern (LC) including Lower Risk/conservation dependent (Lr/cd), Near Threatened (NT), Vulnerable (VU), Endangered (EN), Critically Endangered (CR) and Extinct in the Wild (EW), within each taxonomic group.

While the majority of the listings are at the species level and cover the full global distribution, there are nine subspecies listings and 15 subpopulation-level listings. For subspecies and subpopulation level listings, the corresponding subspecies, subpopulation or regional IUCN Red List assessments, where available,

⁴ Version 2022-2

⁵ Last assessed by the IUCN in 1996 using the 1994 (ver. 2.3) IUCN Red List Categories and Criteria.

were used instead of the species global assessment⁶. Where these were not available, the species global-level assessments were used. To provide further insights on the latter, National Red List assessments and descriptions of the status of relevant populations from global assessments are provided in Table A.1 in Annex A. These indicated that while the status of some listed populations appeared to be similar to their species global status (or the information available did not indicate otherwise), there were six species or subspecies - *Acinonyx jubatus* (Cheetah, VU), *Cervus elaphus barbarus* (Barbary deer, LC), *Trichechus manatus* (American Manatee, VU), *Tursiops truncatus ponticus* (Black Sea Bottlenose Dolphin, LC), *Calidris canutus rufa* (Red Knot, NT) and *Podocnemis expansa* (South American River Turtle, LR/cd) with listed populations that appeared more threatened than the species' global status indicated.

Taxa assessed as Least Concern and Lower Risk/conservation dependent (n=16)

The 16 taxa (9%) categorised as Least Concern or Lower Risk/conservation dependent comprised four terrestrial mammals, four aquatic mammals, seven birds and one reptile; there were no Appendix I-listed fish species assessed as Least Concern (Table 1).

Table 1. CMS Appendix I listed species assessed as Least Concern in the IUCN Red List. *National, regional or subpopulation Red List assessments, where available, are included where the CMS listing is at the subspecies or population level.*

Taxon (common name) Listing note	CMS App. (Year of App. I listing)	IUCN Red List status, trend and date of assessment (global species assessment unless specified otherwise)	Previous IUCN Red List assessments
<i>Tadarida brasiliensis</i> (Mexican Free-Tailed Bat)	I (1979)	LC (–) (2015)	2008 – Least Concern (LC) 1996 – Lower Risk/near threatened (LR/nt)
<i>Vicugna vicugna</i> (Vicuña) Except Peruvian populations	I/II (1979)	LC (↑) (2018) (IUCN Red List global species assessment) National Red List: Argentina: LC, 2012 (IUCN); Bolivia: LC, 2009; Ecuador: LC, 2021, Peru, NT, 2018.	2008 – Least Concern (LC) 1996 – Lower Risk/conservation dependent (LR/cd) 1994, 1990, 1988, 1986, 1982 – Vulnerable (V)
<i>Cervus elaphus barbarus</i> (Barbary Deer)	I (1979)	LC (↑) (2015) in a species assessment for <i>Cervus elaphus</i> . However, within this assessment it was noted that <i>C. e. barbarus</i> “remain[s] rare” (Lovari et al., 2018).	2016 – Least Concern (LC)
<i>Cervus elaphus yarkandensis</i> (Bukhara Deer) Populations in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan and Afghanistan	I/II (2006)	LC (↑) (2017) included in <i>Cervus hanglu</i> by IUCN following a recent taxonomic revision. The assessment notes that further taxonomic revisions may be required (Brook et al., 2017).	2017 – Least Concern (LC) 1996 – Endangered (EN) 1990, 1988, 1986 – Endangered (E) 1965 – Very rare and believed to be decreasing in numbers
<i>Balaena mysticetus</i> (Bowhead Whale)	I (1979)	LC (↑) (2018)	2012, 2008 – Least Concern (LC) 1996 – Lower Risk/conservation dependent (LR/cd) 1994, 1990 – Vulnerable (V) 1988, 1986 – Endangered (E)

⁶ Following guidance in [CMS Resolution 13.7](#). Subspecies or subpopulation assessments were included for *Equus ferus przewalskii*, *Delphinus delphis* (Mediterranean population), *Ziphius cavirostris* (Mediterranean subpopulation), *Ursus arctos isabellinus* (supplementary information of species assessment) and *Rhinobatos rhinobatos* (Mediterranean subpopulation). Subspecies or subpopulation assessments annotated as “needs updating” were noted but not used in place of the species global assessments.

Taxon (common name) Listing note	CMS App. (Year of App. I listing)	IUCN Red List status, trend and date of assessment (global species assessment unless specified otherwise)	Previous IUCN Red List assessments
			1965 – Very rare but believed to be stable or increasing
<i>Eubalaena australis</i> (Southern Right Whale)	I (1979)	LC (?) (2017)	2013, 2008 – Least Concern (LC) 1996 – Lower Risk/conservation dependent (LR/cd) 1994, 1990, 1988 – Vulnerable (V) 1965 – Very rare but believed to be stable or increasing
<i>Megaptera novaeangliae</i> (Humpback Whale)	I (1979)	LC (†) (2018)	2008 – Least Concern (LC) 1996 – Vulnerable (VU) 1994, 1990 – Vulnerable (V) 1988, 1986 – Endangered (E) 1965 – Less rare but believed to be threatened-requires watching
<i>Tursiops truncatus ponticus</i> (Black Sea Common Bottlenose Dolphin)	I/II (2009)	LC (?) (2018) in species global assessment. EN (?) (2008) subspecies assessment annotated as “needs updating”.	2008 – Endangered (EN) (subspecies assessment) 2012, 2008 – Least Concern (LC) 1996 – Data Deficient (DD) 1994 – Insufficiently Known (K) (species assessment)
<i>Chloephaga rubidiceps</i> (Ruddy-Headed Goose)	I/II (1979)	LC (↓) (2016)	2012, 2009, 2008, 2004 – Least Concern (LC) 2000 – Lower Risk/least concern (LR/lc) 1994 – Lower Risk/near threatened (LR/nt) 1988 – Threatened (T)
<i>Sibirionetta formosa</i> (Baikal Teal)	I/II (2002)	LC (†) (2016)	2012, 2011 – Least Concern (LC) 2008, 2006, 2004, 2000, 1996, 1994 – Vulnerable (VU) 1988 – Threatened (T)
<i>Pelecanus onocrotalus</i> (Great White Pelican) Only Palearctic populations	I/II (1986)	LC (?) (2020) The species was also assessed as LC (†) in Europe (2020)	2018, 2016, 2012, 2009, 2008, 2004 – Least Concern (LC) 2000, 1994, 1988 – Lower Risk/least concern (LR/lc)
<i>Larus leucophthalmus</i> (White-Eyed Gull)	I/II (1986)	LC (–) (2018)	2016, 2012, 2010, 2008, 2006, 2004 – Near Threatened (NT) 2000 – Lower Risk/near threatened (LR/nt) 1996, 1994 – Vulnerable (VU) 1988 – Threatened (T)
<i>Haliaeetus albicilla</i> (White-Tailed Sea-Eagle)	I/II (1986)	LC (†) (2021)	2020, 2016, 2015, 2013, 2012, 2009, 2008, 2005 – Least Concern (LC) 2004 – Near Threatened (NT) 2000, 1994 – Unknown (LR/NT) 1988 – Threatened (T)
<i>Coracias garrulus</i> (European Roller)	I/II (2015)	LC (↓) (2019)	2018, 2017, 2016, 2015 – Least Concern (LC) 2012, 2008, 2005 – Near Threatened (NT) 2004 – Least Concern (LC) 2000, 1994, 1988 – Lower Risk/least concern (LR/lc)
<i>Falco naumanni</i> (Lesser Kestrel)	I/II (1997)	LC (–) (2021)	2018, 2016, 2013, 2012, 2011 – Least Concern (LC)

Taxon (common name) Listing note	CMS App. (Year of App. I listing)	IUCN Red List status, trend and date of assessment (global species assessment unless specified otherwise)	Previous IUCN Red List assessments
<i>Podocnemis expansa</i> (South American River Turtle) Only Upper Amazon populations	I/II (1979)	LR/cd (1996). National Red List: Bolivia: EN, 2009; Brazil: NT, 2014; Colombia: CR, 2015; Ecuador: CR, 2005; Peru: EN, 2018; Venezuela: CR, 2015.	2008, 2004, 2000, 1996, 1994 – Vulnerable (VU) 1988 – Threatened (T) 1994, 1990, 1988, 1986, 1982 – Endangered (E)

Key: IUCN Categories and Criteria Version 3.1 (IUCN 2001 and later editions): Not Evaluated (NE), Data Deficient (DD), LC (Least Concern), NT (Near Threatened), VU (Vulnerable), EN (Endangered), CR (Critically Endangered), EW (Extinct in the Wild), Extinct (EX). Population trends are indicated by the following: stable (–), increasing (↑), decreasing (↓), unknown (?).

Decision 13.24 calls for an in-depth review of individual CMS-listed species, “starting with those species listed in Appendix I classified in the categories of lowest threat of extinction in the IUCN Red List of Threatened Species and whose conservation status has improved since first listed”. In this context, all 16 Least Concern species could be considered potential candidates for further in-depth review; however, further information helps to indicate a smaller subset within these that appear to most merit further in-depth review.

Seven of the 16 species listed in Table 1 appear to be good candidates for further in-depth review in the form of case studies (bolded in Table 1). These include six species that have been assessed as Least Concern in multiple assessments (>1), have stable or increasing population trends and/or their IUCN Red List assessments suggest a possible improvement in conservation status since listing in CMS⁷. In addition, the South American River Turtle (*Podocnemis expansa*), may also benefit from further review to provide an update on conservation status. While all other Appendix I species categorised as Least Concern have been assessed by the IUCN Red List in the last ten years, and four within the last five years, *P. expansa* was last assessed for the IUCN Red List in 1996 as Lower Risk/conservation dependent; however, more recent National Red List assessments indicate a more threatened status⁸.

In contrast, the remaining nine taxa globally assessed as Least Concern may not be good candidates for further in-depth review at this time for one of the following reasons:

- they show decreasing population trends (*Coracias garrulus* (European Roller) and *Chloephaga rubidiceps* (Ruddy-Headed Goose))
- the species has only been assessed as Least Concern in a single assessment and previously assessed as Near Threatened (*Larus leucophthalmus* (White-Eyed Gull))
- there are taxonomic issues that need resolving (*Cervus elaphus yarkandensis* (Bukhara Deer))
- populations listed in CMS appear to be more threatened than the species global status indicates (*Cervus elaphus barbarus* (Barbary Deer) and *Tursiops truncatus ponticus* (Black Sea Common Bottlenose Dolphin))
- while a number of baleen whale populations have shown strong recoveries over the past several decades (Thomas et al., 2015; Zerbini et al., 2019), many subpopulations remain depleted, and

⁷ It is important to note that a change in the IUCN Red List category across assessments does not necessarily indicate that a species’ conservation status has improved or declined. ‘Non-genuine’ reasons for a change in IUCN Red List Category include new information becoming available since the last assessment, a taxonomic revision of the species, errors discovered in the previous assessment, and previous assessments may have assessed the species against an older version of the IUCN Red List Categories and Criteria (IUCN, 2022).

⁸ Brazil: Near Threatened, 2014; Colombia: Critically Endangered, 2002; Ecuador: Critically Endangered, 2005; Peru: Endangered, 2018; Venezuela: Critically Endangered, 2015.

considerable uncertainty exists as to the conservation status of subspecies and subpopulations throughout their range (Thomas *et al.*, 2015). For example, all three Appendix I whale species classified as Least Concern globally - *Balaena mysticetus* (Bowhead Whale), *Eubalaena australis* (Southern Right Whale), *Megaptera novaeangliae* (Humpback Whale) have subpopulations that have been assessed as threatened by the IUCN Red List (e.g. Childerhouse *et al.*, 2008; Cooke *et al.*, 2018; Cooke and Reeves, 2018), and, notably, there are subpopulations suspected to be of conservation concern that have not yet been assessed (Thomas *et al.*, 2015).

While the focus of Decision 13.24 - and this report - is on the Least Concern Appendix I species, the conservation status of all Appendix I taxa were considered. A short summary of the remaining species and their conservation status is provided below.

Taxa assessed as Vulnerable and Near Threatened (n=68)

Of the 180 CMS Appendix I taxa, 38% (68 taxa) have been assessed as Vulnerable (29%; 52 taxa) or Near Threatened (9%; 16 taxa). When comparing different taxonomic groups, birds had the highest proportion of taxa (49%; 49 taxa) assessed in these two categories, while fish had the lowest (12.5%; three taxa).

Fifty-six of the 68 Vulnerable or Near Threatened taxa had decreasing populations trends, six had increasing population trends, three had stable population trends and three had unknown population trends.

Taxa assessed as Extinct in the Wild, Critically Endangered and Endangered (n=96)

Fifty-three percent (96 taxa) of CMS Appendix I taxa are categorised as Extinct in the Wild (<1%; one species), Critically Endangered (24%; 43 taxa), or Endangered (29%; 52 taxa) in the IUCN Red List. When different taxonomic groups are compared, fish (primarily sharks, rays and sawfish) have the highest percentage of taxa (88%; 21 taxa) that have been assessed in these categories, whereas birds have the lowest (44%; 44 taxa). While only one CMS Appendix I-listed species has been officially categorised as Extinct in the Wild (the Scimitar-horned Oryx, *Oryx dammah*), the IUCN Red List assessments for Kouprey, *Bos sauveli*, and Eskimo Curlew, *Numenius borealis*, list these species as Critically Endangered (Possibly Extinct), with the last published or confirmed records reported to be from 1974 (Timmins *et al.*, 2016) and 1963 (BirdLife International, 2021), respectively.

Next steps

The results of this assessment provide a starting point towards fulfilling Decision 13.24. The Decision calls for an in-depth review of the conservation status of individual CMS-listed species, starting with those species “classified in the lowest threat of extinction in the IUCN Red List of Threatened Species and whose conservation status has improved since first listed”. The “in-depth review” will take the form of case studies, providing the next steps in relation to Decision 13.24.

This process identified seven species that may be good candidates for further review (see Table 2).

Based on available resources, **five** of these species (as selected by the CMS Secretariat) have been considered further in the form of **case studies**, using the [template](#) agreed at the 5th Meeting of the Sessional Committee of the Scientific Council (ScC-SC5). The case studies provide further information on conservation status and trends, including national and regional assessments of status, as well as consideration of whether any changes in conservation status are genuine and/or the result of improved data. They also include information on biological vulnerability, key threats, relevant CMS instruments and, where appropriate, reflections on the importance of the protection provided by the Appendix I listing in line with the information sought through Decision 13.24.

Table 2. CMS Appendix I-listed species that may be good candidates for further in-depth review, including indication of the five species for which a case study has been prepared.

Taxon (common name) Listing note	CMS App. (Year of App. I listing)	IUCN Red List status and trend (global species assessment unless specified otherwise)	Case study prepared?
<i>Tadarida brasiliensis</i> (Mexican Free-Tailed Bat)	I (1979)	LC (–) (2015)	Yes
<i>Vicugna vicugna</i> (Vicuña) Except Peruvian populations	I/II (1979)	LC (↑) (2018) (IUCN Red List global species assessment) National Red List: Argentina: LC, 2012 (IUCN); Bolivia: LC, 2009; Ecuador: LC, 2021, Peru, NT, 2018.	Yes
<i>Sibirionetta formosa</i> (Baikal Teal)	I/II (2002)	LC (↑) (2016)	
<i>Pelecanus onocrotalus</i> (Great White Pelican) Only Palearctic populations	I/II (1986)	LC (?) (2020) The species was also assessed as LC (↑) in Europe (2020)	Yes
<i>Haliaeetus albicilla</i> (White-Tailed Sea-Eagle)	I/II (1986)	LC (↑) (2021)	Yes
<i>Falco naumanni</i> (Lesser Kestrel)	I/II (1997)	LC (–) (2021)	
<i>Podocnemis expansa</i> (South American River Turtle) Only Upper Amazon populations	I/II (1979)	LR/cd (1996). National Red List: Bolivia: EN, 2009; Brazil: NT, 2014; Colombia: CR, 2015; Ecuador: CR, 2005; Peru: EN, 2018; Venezuela: CR, 2015.	Yes

Key: IUCN Categories and Criteria Version 3.1 (IUCN 2001 and later editions): Not Evaluated (NE), Data Deficient (DD), LC (Least Concern), NT (Near Threatened), VU (Vulnerable), EN (Endangered), CR (Critically Endangered), EW (Extinct in the Wild), Extinct (EX). Population trends are indicated by the following: stable (–), increasing (↑), decreasing (↓), unknown (?)

The case studies will be available for review by the CMS Parties at COP14.

Annex A. Information on conservation status for Appendix I taxa

Table A.1. Overview of CMS Appendix I taxa conservation status

Taxon (Listing note)	Common name	CMS App. (Year of App. I listing)	IUCN Red List status, trend and date of assessment (global species assessment unless specified otherwise)
Terrestrial mammals			
<i>Elephas maximus indicus</i>	Asian Elephant	I (2020)	EN (↓) (2019) species assessment. Subspecies <i>indicus</i> occurs on mainland Asia. "While populations of Asian Elephants in South Asia are believed to have been relatively stable in the recent past, numbers have plummeted in Vietnam, Laos, Malaysia, Myanmar and Indonesian Sumatra" (Menon and Tiwari, 2019 in Williams <i>et al.</i> , 2020). National Red List: China: EN, 2015 & Nepal: EN, 2011 (IUCN)
<i>Gorilla beringei</i>	Eastern Gorilla	I (1979)	CR (↓) (2018)
<i>Gorilla gorilla</i>	Western Gorilla	I (2006)	CR (↓) (2016)
<i>Pan troglodytes</i>	Chimpanzee	I/II (2018)	EN (↓) (2016)
<i>Tadarida brasiliensis</i>	Mexican Free-Tailed Bat	I (1979)	LC (–) (2015)
<i>Acinonyx jubatus</i> (Except the populations in Botswana, Namibia and Zimbabwe)	Cheetah	I (2009)	VU (↓) (2021) Remaining population strongholds in Southern and Eastern Africa (Durant <i>et al.</i> , 2022). "Cheetah have declined particularly precipitously across western, central and northern Africa" (Durant <i>et al.</i> , 2022). National Red List: Angola: EN, 2018 (Unknown); South Africa, Lesotho, Swaziland (regional): VU, 2016 (IUCN); Uganda: CR, 2016 (IUCN).
<i>Panthera onca</i>	Jaguar	I/II (2020)	NT (↓) (2016)
<i>Uncia uncia</i>	Snow Leopard	I (1986)	VU (↓) (2016)
<i>Ursus arctos isabellinus</i> (Populations in Mongolia and China)	Gobi Bear	I (2018)	LC (–) (2016) in the species assessment for <i>Ursus arctos</i> . However, the brown bear subpopulation of the Gobi Desert was categorised as CR due to its extremely small population size, low genetic diversity, and a range contraction since the 1970s (McLellan <i>et al.</i> , 2016). National Red List: Mongolia: CR, 2006 (as <i>Ursus arctos gobiensis</i>).
<i>Equus africanus</i>	African Wild Ass	I (2018)	CR (↓) (2014)
<i>Equus ferus przewalskii</i>	Przewalski's Horse	I (2018)	EN (↑) (2014) subspecies assessment
<i>Equus grevyi</i>	Grevy's Zebra	I (1979)	EN (–) (2016)
<i>Camelus bactrianus</i>	Bactrian Camel	I (2002)	CR (↓) (2008)
<i>Vicugna vicugna</i> (Except Peruvian populations)	Vicuña	I/II (1979)	LC (↑) (2018) National Red List: Argentina: LC, 2012 (IUCN); Bolivia: LC, 2009; Ecuador: LC, 2021, Peru, NT, 2018.
<i>Hippocamelus bisulcus</i>	Huemul	I (1997)	EN (↓) (2015)

Taxon (Listing note)	Common name	CMS App. (Year of App. I listing)	IUCN Red List status, trend and date of assessment (global species assessment unless specified otherwise)
<i>Cervus elaphus barbarus</i>	Barbary Deer	I (1979)	LC (↑) (2015) in a species assessment for <i>Cervus elaphus</i> . However, within this assessment it was noted that <i>C. e. barbarus</i> “remain[s] rare” (Lovari <i>et al.</i> , 2018).
<i>Cervus elaphus yarkandensis</i> (Populations in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan and Afghanistan)	Bukhara Deer	I/II (2006)	LC (↑) (2017) included in <i>Cervus hanglu</i> by IUCN following a recent taxonomic revision (Brook <i>et al.</i> , 2017).
<i>Eudorcas rufifrons</i>	Red-fronted Gazelle	I (2015)	VU (↓) (2016)
<i>Gazella cuvieri</i>	Cuvier's Gazelle	I (1979)	VU (↓) (2016)
<i>Gazella dorcas</i> (Only Northwest African populations)	Dorcas Gazelle	I (1979)	VU (↓) (2016). Populations unlikely to exceed 1000 individuals each in Algeria and Tunisia, and wild population estimated at 800-2000 individuals in Morocco (IUCN SSC Antelope Specialist Group, 2017). National Red List: Algeria: VU, 2001 (non-IUCN); Morocco: VU, 2001 (non-IUCN); Tunisia: VU 2001 (non-IUCN).
<i>Gazella leptoceros</i>	Rhim	I (1986)	EN (↓) (2016)
<i>Nanger dama</i>	Dama Gazelle	I (1979)	CR (↓) (2015)
<i>Bos grunniens</i>	Yak	I (1986)	VU (↓) (2014)
<i>Bos sauveli</i>	Kouprey	I (1979)	CR (↓) (2016) (Possibly Extinct) Species considered “most likely to be extinct” (Timmins <i>et al.</i> , 2016).
<i>Addax nasomaculatus</i>	Addax	I (1979)	CR (↓) (2016)
<i>Oryx dammah</i>	Scimitar-Horned Oryx	I/II (1994)	EW (2016)
Aquatic mammals			
<i>Trichechus manatus</i> (Populations between Honduras and Panama)	Manatee	I/II (2000)	VU (↓) (2008). Supplementary information: <u>Costa Rica</u> : Probably Declining; Min. Population Estimate: 30; <u>Honduras</u> : Likely Stable; Min. Population Estimate: 50; <u>Nicaragua</u> : Probably Declining; Min. Population Estimate: 71; <u>Panama</u> : Unknown due to data deficiency; Min. Population Estimate: 10. National Red List: Honduras: In danger, Cultural significance, Importance for ecotourism, Prioritizing areas, 2007 (Non-IUCN); Nicaragua: CR, 2013 (for subspecies <i>manatus</i> ; IUCN)
<i>Trichechus senegalensis</i>	West African Manatee	I/II (2009)	VU (?) (2015)
<i>Monachus monachus</i>	Mediterranean Monk Seal	I/II (1979)	EN (↑) (2015)
<i>Pusa caspica</i>	Caspian Seal	I/II (2018)	EN (?) (2015)
<i>Lontra felina</i>	Marine Otter	I (1979)	EN (↓) (2022)
<i>Lontra provocax</i>	Southern River Otter	I (1979)	EN (↓) (2019)
<i>Balaena mysticetus</i>	Bowhead Whale	I (1979)	LC (↑) (2018)
<i>Eubalaena australis</i>	Southern Right Whale	I (1979)	LC (?) (2017)

Taxon (Listing note)	Common name	CMS App. (Year of App. I listing)	IUCN Red List status, trend and date of assessment (global species assessment unless specified otherwise)
<i>Eubalaena glacialis</i> (North Atlantic)	North Atlantic Right Whale	I (1979)	CR (↓) (2020). Population note specifying North Atlantic; however, <i>E. glacialis</i> occurs only in the north Atlantic and the global IUCN assessment is therefore appropriate to use in this case.
<i>Eubalaena japonica</i> (North Pacific)	North Pacific Right Whale	I (1979)	EN (?) (2017). Population note specifying North Pacific; however, <i>E. japonica</i> occurs only in the north Pacific and the global IUCN assessment is therefore appropriate to use in this case.
<i>Balaenoptera borealis</i>	Sei Whale	I/II (2002)	EN (↑) (2018)
<i>Balaenoptera musculus</i>	Blue Whale	I (1979)	EN (↑) (2018)
<i>Balaenoptera physalus</i>	Fin Whale	I/II (2002)	VU (↑) (2018)
<i>Megaptera novaeangliae</i>	Humpback Whale	I (1979)	LC (↑) (2018)
<i>Delphinus delphis</i> (Only Mediterranean population)	Common Dolphin	I/II (2006)	LC (?) (2020) in a global assessment for <i>Delphinus delphis</i> , however, the inner Mediterranean subpopulation was assessed as EN (↓) (2020). Aerial surveys in 2018 indicated “low abundance across most of the Mediterranean subpopulation’s range, and an absence or near absence of Common Dolphins within areas known to have hosted large numbers historically” (Braulik <i>et al.</i> , 2021).
<i>Tursiops truncatus ponticus</i>	Black Sea Common Bottlenose Dolphin	I/II (2009)	LC (?) (2018) in species global assessment. EN (?) (2008) subspecies assessment annotated as needs updating.
<i>Orcaella brevirostris</i>	Irrawaddy Dolphin	I/II (2009)	EN (↓) (2017)
<i>Sousa teuszii</i>	Atlantic Humpback Dolphin	I/II (2009)	CR (↓) (2017)
<i>Physeter macrocephalus</i>	Sperm Whale	I/II (2002)	VU (?) (2008)
<i>Platanista gangetica gangetica</i>	Ganges River Dolphin	I/II (2002)	EN (↓) (2021) species assessment (<i>Platanista gangetica gangetica</i> recognised as a species by IUCN)
<i>Pontoporia blainvillei</i>	La Plata Dolphin	I/II (1997)	VU (↓) (2017)
<i>Ziphius cavirostris</i> (Only Mediterranean subpopulation)	Cuvier’s Beaked Whale	I (2015)	LC (?) (2018) globally, while the Mediterranean population was categorised as VU (↓) (2018) on the basis that the subpopulation was considered genetically distinct, and that there was an inferred decline in the number of mature individuals in the subpopulation (Cañadas and Notarbartolo di Sciara, 2018).
Birds			
<i>Oxyura leucocephala</i>	White-Headed Duck	I/II (1994)	EN (↓) (2017)
<i>Branta ruficollis</i>	Red-Breasted Goose	I/II (1997)	VU (↓) (2016)
<i>Anser cygnoid</i>	Swan Goose	I/II (2002)	VU (↓) (2016)
<i>Anser erythropus</i>	Lesser White-Fronted Goose	I/II (1997)	VU (↓) (2018)
<i>Polysticta stelleri</i>	Steller’s Eider	I/II (1997)	VU (↓) (2018)
<i>Chloephaga rubidiceps</i>	Ruddy-Headed Goose	I/II (1979)	LC (↓) (2016)

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<i>Marmaronetta angustirostris</i>	Marbled Teal	I/II (1997)	NT (↓) (2022)
<i>Aythya baeri</i>	Baer's Pochard	I/II (2009)	CR (↓) (2019)
<i>Aythya nyroca</i>	Ferruginous Duck	I/II (1997)	NT (↓) (2019)
<i>Sibirionetta formosa</i>	Baikal Teal	I/II (2002)	LC (↑) (2016)
<i>Phoenicoparrus andinus</i>	Andean Flamingo	I/II (1997)	VU (↓) (2020)
<i>Phoenicoparrus jamesi</i>	James's Flamingo	I/II (1997)	NT (–) (2016)
<i>Sarothrura ayresi</i>	White-Winged Flufftail	I/II (1997)	CR (↓) (2020)
<i>Leucogeranus leucogeranus</i>	Siberian Crane	I/II (1979)	CR (↓) (2018)
<i>Antigone vipio</i>	White-Naped Crane	I/II (2002)	VU (↓) (2018)
<i>Grus japonensis</i>	Japanese Crane	I/II (1979)	VU (↓) (2021)
<i>Grus monacha</i>	Hooded Crane	I/II (2002)	VU (↑) (2016)
<i>Grus nigricollis</i>	Black-Necked Crane	I/II (1979)	NT (–) (2020)
<i>Tetrax tetrax</i>	Little Bustard	I/II (2020)	NT (↓) (2018)
<i>Otis tarda</i>	Great Bustard	I/II (2015)	VU (↓) (2017)
<i>Chlamydotis undulata</i> (Only Northwest African populations)	Houbara Bustard	I/II (1979)	VU (↓) (2016) species assessment. Described as “extremely rare” in Tunisia (Ayé in litt. 2013 in BirdLife International, 2016).
<i>Ardeotis nigriceps</i>	Great Indian Bustard	I (2020)	CR (↓) (2018)
<i>Houbaropsis bengalensis bengalensis</i>	Bengal Florican	I (2020)	CR (↓) (2018) species assessment, which describes the population in India and Nepal (which corresponds to the distribution of the subspecies <i>H. b. bengalensis</i>) as having “declined dramatically and only survives in small, highly fragmented populations” (BirdLife International, 2018b). National Red List: India: CR, 2011 (IUCN); Nepal: CR, 2017 (IUCN).
<i>Spheniscus humboldti</i>	Humboldt Penguin	I (1997)	VU (↓) (2020)
<i>Diomedea amsterdamensis</i>	Amsterdam Albatross	I (1997)	EN (↑) (2018)
<i>Diomedea antipodensis</i>	Antipodean Albatross	I/II (2020)	EN (↓) (2018)
<i>Phoebastria albatrus</i>	Short-Tailed Albatross	I (1979)	VU (↑) (2018)
<i>Pterodroma atrata</i>	Henderson Petrel	I (2006)	EN (↓) (2018)
<i>Pterodroma cahow</i>	Bermuda Petrel	I (1979)	EN (↑) (2018)
<i>Pterodroma phaeopygia</i>	Dark-Rumped Petrel	I (1979)	CR (↓) (2018)
<i>Pterodroma sandwichensis</i>	Hawaiian Petrel	I (1979)	EN (↓) (2018)
<i>Ardenna creatopus</i>	Pink-Footed Shearwater	I (2002)	VU (?) (2018)
<i>Puffinus mauretanicus</i>	Balearic Shearwater	I (2006)	CR (↓) (2018)
<i>Pelecanoides garnotii</i>	Peruvian Diving Petrel	I (2002)	NT (↑) (2020)
<i>Ciconia boyciana</i>	Japanese White Stork	I (1979)	EN (↓) (2018)
<i>Platalea minor</i>	Black-Faced Spoonbill	I (2002)	EN (↑) (2017)
<i>Geronticus eremita</i>	Northern Bald Ibis	I/II (1979)	EN (–) (2018)
<i>Gorsachius goisagi</i>	Japanese Night Heron	I (2002)	VU (↓) (2020)

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<i>Ardeola idae</i>	Madagascar Pond-Heron	I/II (2006)	EN (↓) (2020)
<i>Egretta eulophotes</i>	Chinese Egret	I (1979)	VU (↓) (2016)
<i>Pelecanus crispus</i>	Dalmatian Pelican	I/II (1986)	NT (↓) (2017)
<i>Pelecanus onocrotalus</i> (Only Palearctic populations)	Great White Pelican	I/II (1986)	LC (?) (2020). Also listed as LC (↑) in Europe (2020). National Red List: Bulgaria: EX, 2011 (IUCN); EU: LC, 2015 (IUCN); Greece: VU, 2009 (IUCN).
<i>Fregata andrewsi</i>	Andrews' Frigatebird	I (2018)	VU (↓) (2021)
<i>Vanellus gregarius</i>	Sociable Lapwing	I/II (1997)	CR (↓) (2018)
<i>Numenius borealis</i>	Eskimo Curlew	I/II (1979)	CR (Possibly Extinct) (?) (2020)
<i>Numenius madagascariensis</i>	Far Eastern Curlew	I/II (2012)	EN (↓) (2016)
<i>Numenius tahitiensis</i>	Bristle-Thighed Curlew	I/II (2012)	NT (↓) (2020)
<i>Numenius tenuirostris</i>	Slender-Billed Curlew	I/II (1979)	CR (↓) (2018)
<i>Calidris canutus rufa</i>	Red Knot	I/II (20015)	NT (↓) (2018) species assessment, which notes "the <i>rufa</i> population has undergone a significant decline in the last decade (Andres <i>et al.</i> , 2012 in BirdLife International, 2018a). National Red List: Canada: CR - <i>Calidris canutus rufa</i> (IUCN).
<i>Calidris pusilla</i>	Semipalmated Sandpiper	I/II (2015)	NT (↓) (2016)
<i>Calidris pygmaea</i>	Spoon-billed Sandpiper	I/II (2002)	CR (↓) (2021)
<i>Calidris subruficollis</i>	Buff-Breasted Sandpiper	I/II (2000)	NT (↓) (2016)
<i>Calidris tenuirostris</i>	Great Knot	I/II (2015)	EN (↓) (2016)
<i>Tringa guttifer</i>	Spotted Greenshank	I/II (2002)	EN (↓) (2016)
<i>Saundersilarus saundersi</i>	Saunders' Gull	I (1979)	VU (↓) (2018)
<i>Larus atlanticus</i>	Olrog's Gull	I (1997)	NT (–) (2018)
<i>Larus audouinii</i>	Audouin's Gull	I/II (1979)	VU (↓) (2020)
<i>Larus leucophthalmus</i>	White-Eyed Gull	I/II (1986)	LC (–) (2018)
<i>Larus relictus</i>	Relict Gull	I (1979)	VU (↓) (2017)
<i>Sternula lorata</i>	Peruvian Tern	I (2009)	EN (↓) (2018)
<i>Thalasseus bernsteini</i>	Chinese Crested-Tern	I (2002)	CR (↓) (2018)
<i>Synthliboramphus wumizusume</i>	Crested Murrelet	I (1989)	VU (↓) (2018)
<i>Neophron percnopterus</i>	Egyptian Vulture	I/II (2009)	EN (↓) (2021)
<i>Sarcogyps calvus</i>	Red-headed Vulture	I/II (2018)	CR (↓) (2021)
<i>Trionoceps occipitalis</i>	White-Headed Vulture	I/II (2018)	CR (↓) (2021)
<i>Necrosyrtes monachus</i>	Hooded Vulture	I/II (2018)	CR (↓) (2021)
<i>Gyps africanus</i>	White-Backed Vulture	I/II (2018)	CR (↓) (2021)
<i>Gyps bengalensis</i>	White-Rumped Vulture	I/II (2018)	CR (↓) (2021)
<i>Gyps coprotheres</i>	Cape Vulture	I/II (2018)	VU (↓) (2021)

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<i>Gyps indicus</i>	Indian Vulture	I/II (2018)	CR (↓) (2021)
<i>Gyps rueppelli</i>	Rüppell's Vulture	I/II (2018)	CR (↓) (2021)
<i>Gyps tenuirostris</i>	Slender-Billed Vulture	I/II (2018)	CR (↓) (2021)
<i>Torgos tracheliotos</i>	Lappet-Faced Vulture	I/II (2018)	EN (↓) (2021)
<i>Clanga clanga</i>	Greater Spotted Eagle	I/II (1997)	VU (↓) (2021)
<i>Aquila adalberti</i>	Spanish Imperial Eagle	I/II (1997)	VU (↑) (2021)
<i>Aquila heliaca</i>	Eastern Imperial Eagle	I/II (1997)	VU (↓) (2016)
<i>Aquila nipalensis</i>	Steppe Eagle	I/II (2018)	EN (↓) (2021)
<i>Haliaeetus albicilla</i>	White-Tailed Sea-Eagle	I/II (1986)	LC (↑) (2021)
<i>Haliaeetus leucoryphus</i>	Pallas's Fish-Eagle	I/II (2002)	EN (↓) (2021)
<i>Haliaeetus pelagicus</i>	Steller's Sea-Eagle	I/II (1979)	VU (↓) (2021)
<i>Coracias garrulus</i>	European Roller	I/II (2015)	LC (↓) (2019)
<i>Falco cherrug</i> (Except Mongolian populations)	Saker Falcon	I/II (2012)	EN (↓) (2021). Widespread distribution and all Range States except one included in the listing - the species global IUCN Red List assessment was therefore considered a good indication of the overall conservation status of the listed populations.
<i>Falco naumanni</i>	Lesser Kestrel	I/II (1997)	LC (–) (2021)
<i>Falco vespertinus</i>	Red-Footed Falcon	I/II (2012)	VU (↓) (2021)
<i>Brotogeris pyrrhoptera</i>	Grey-Cheeked Parakeet	I (2002)	VU (↓) (2021)
<i>Alectrurus risora</i>	Strange-Tailed Tyrant	I/II (2000)	VU (↓) (2016)
<i>Alectrurus tricolor</i>	Cock-Tailed Tyrant	I/II (2002)	VU (↓) (2016)
<i>Acrocephalus griseldis</i>	Basra Reed Warbler	I/II (2006)	EN (–) (2022)
<i>Acrocephalus paludicola</i>	Aquatic Warbler	I/II (1997)	VU (↓) (2022)
<i>Acrocephalus sorghophilus</i>	Speckled Reed Warbler	I/II (2009)	CR (↓) (2022)
<i>Hirundo atrocaerulea</i>	Blue Swallow	I/II (1997)	VU (↓) (2016)
<i>Geokichla guttata</i>	Spotted Ground-Thrush	I/II (2006)	VU (↓) (2020)
<i>Serinus syriacus</i>	Syrian Serin	I (1979)	VU (↓) (2022)
<i>Emberiza aureola</i>	Yellow-Breasted Bunting	I (2009)	CR (↓) (2017)
<i>Xanthopsar flavus</i>	Saffron-Cowled Blackbird	I/II (2000)	EN (↓) (2019)
<i>Setophaga cerulea</i>	Cerulean Warbler	I (2009)	NT (↓) (2020)
<i>Setophaga kirtlandii</i>	Kirtland's Warbler	I (1979)	NT (↑) (2020)
<i>Sporophila cinnamomea</i>	Chestnut Seedeater	I/II (2000)	VU (↓) (2018)
<i>Sporophila hypochroma</i>	Grey-and-Chestnut Seedeater	I/II (2000)	NT (↓) (2018)
<i>Sporophila palustris</i>	Marsh Seedeater	I/II (2002)	EN (↓) (2016)
Reptiles			
<i>Chelonia mydas</i>	Green Turtle	I/II (1979)	EN (↓) (2004)

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<i>Caretta caretta</i>	Loggerhead	I/II (1986)	VU (↓) (2015)
<i>Eretmochelys imbricata</i>	Hawksbill Turtle	I/II (1986)	CR (↓) (2008)
<i>Lepidochelys kempii</i>	Kemp's Ridley Turtle	I/II (1979)	CR (?) (2019)
<i>Lepidochelys olivacea</i>	Olive Ridley	I/II (1986)	VU (↓) (2008)
<i>Dermochelys coriacea</i>	Leatherback Turtle	I/II (1979)	VU (↓) (2013)
<i>Podocnemis expansa</i> (Only Upper Amazon populations)	South American River Turtle	I/II (1979)	LR/cd (1996). National Red List: Bolivia: EN, 2009; Brazil: NT, 2014; Colombia: CR, 2015; Ecuador: CR, 2005; Peru: EN, 2018; Venezuela: CR, 2015.
<i>Gavialis gangeticus</i>	Gharial	I (1979)	CR (↑) (2017)
Fish			
<i>Rhincodon typus</i>	Whale Shark	I/II (2018)	EN (↓) (2016)
<i>Carcharodon carcharias</i>	Great White Shark	I/II (2002)	VU (↓) (2018)
<i>Cetorhinus maximus</i>	Basking Shark	I/II (2006)	EN (↓) (2018)
<i>Carcharhinus longimanus</i>	Oceanic Whitetip Shark	I (2020)	CR (↓) (2018)
<i>Squatina squatina</i>	Angelshark	I/II (2018)	CR (↓) (2017)
<i>Rhinobatos rhinobatos</i> (Mediterranean population)	Common Guitarfish	I/II (2018)	CR (↓) (2020) globally. The regional assessment for the Mediterranean in 2016 categorised <i>R. rhinobatos</i> as EN (↓).
<i>Anoxypristis cuspidata</i>	Narrow Sawfish	I/II (2015)	EN (↓) (2012)
<i>Pristis clavata</i>	Dwarf Sawfish	I/II (2015)	CR (↓) (2022) "now 'possibly extinct' throughout its east Indian and Southeast Asian range and is now only extant in Papua Province (Indonesia), Papua New Guinea, and northern Australia" (Grant <i>et al.</i> , 2022).
<i>Pristis pectinata</i>	Smalltooth Sawfish	I/II (2015)	CR (↓) (2022)
<i>Pristis pristis</i>	Large-tooth Sawfish	I/II (2015)	CR (↓) (2022)
<i>Pristis zijsron</i>	Green Sawfish	I/II (2015)	CR (↓) (2022)
<i>Manta alfredi</i>	Reef Manta Ray	I/II (2015)	VU (↓) (2018)
<i>Manta birostris</i>	Oceanic Manta Ray	I/II (2012)	EN (↓) (2019)
<i>Mobula eregoodootenkee</i>	Longhorned Devil Ray	I/II (2015)	EN (↓) (2020)
<i>Mobula hypostoma</i>	Atlantic Devil Ray	I/II (2015)	EN (↓) (2018)
<i>Mobula japanica</i>	Japanese Devil Ray	I/II (2015)	EN (↓) (2018); considered a synonym of <i>Mobula mobular</i> by IUCN.
<i>Mobula kuhlii</i>	Lesser Devil Ray	I/II (2015)	EN (↓) (2020)
<i>Mobula mobular</i>	Giant Devil Ray	I/II (2015)	EN (↓) (2018)
<i>Mobula munkiana</i>	Munk's Devil Ray	I/II (2015)	VU (↓) (2018)
<i>Mobula rochebrunei</i>	Lesser Guinean Devil Ray	I/II (2015)	EN (↓) (2018); considered a synonym of <i>Mobula hypostoma</i> by IUCN.
<i>Mobula tarapacana</i>	Box Ray	I/II (2015)	EN (↓) (2018)
<i>Mobula thurstoni</i>	Bentfin Devil Ray	I/II (2015)	EN (↓) (2018)
<i>Acipenser sturio</i>	Baltic Sturgeon	I/II (2006)	CR (↓) (2020)
<i>Pangasianodon gigas</i>	Giant Catfish	I (1979)	CR (↓) (2011)

Key: IUCN Categories and Criteria Version 3.1 (IUCN 2001 and later editions): Not Evaluated (NE), Data Deficient (DD), LC (Least Concern), NT (Near Threatened) VU (Vulnerable), EN (Endangered), CR (Critically Endangered), EW (Extinct in the Wild), Extinct (EX).

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