**Recommendations for amendments to the Nairobi Convention *Protocol Concerning Protected Areas and Wild Fauna and Flora in the East African Region***

**February 2023 - Wildlife Conservation Society**

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**1. Rationale for amendment**

Decisions of the Nairobi Convention Conferences of Parties from 2015 (CP8/4) and 2018 (CP9/5) called for the revision of the *Protocol Concerning Protected Areas and Wild Fauna and Flora in the East African Region* (hereinafter the Protocol) and its annexes. As this activity is now underway, and to further contribute to the revision of the Protocol and its annexes, the Wildlife Conservation Society (WCS) hereby submits recommendations for several revisions to the text and definitions of the Protocol, as well as to the annexes, and the titles, descriptions and coverage of the annexes, and proposes criteria that could be used for the identification of species to be listed in the revised annexes, with a focus on marine megafauna species. Recommendations are made relevant to Annexes II, III and IV, which pertain to fauna species, but not specifically for Annex I that pertains to flora species. However, some of the recommendations made herein for Annexes II, II and IV may also be relevant also for Annex I.

Furthermore, Decision CP7/12[[1]](#footnote-1) from the 2012 Conference of Parties, called for collaboration with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on the Conservation of Migratory Species of Wild Fauna (CMS), regional fisheries management organizations (i.e., the Indian Ocean Tuna Commission, IOTC) and other partners, on the conservation and management of sharks in the Nairobi Convention area. The recommendations presented in this document, if implemented, would improve adherence at the national level, with the measures defined under such agreements. The Nairobi Convention Member States are all Party to all or most of these agreements, and should thus benefit from implementing these recommendations.

**2. Definitions – proposal of new definitions of selected terms**

The *Red List of Threatened Species* (Red List), developed under the *International Union for the Conservation of Nature* (IUCN), is a comprehensive inventory of the conservation status of the world’s plants and animals ([IUCN 2023](https://www.iucnredlist.org)[[2]](#footnote-2)). Red List assessments provide an objective measure of the extinction risk of species, by placing each species within specific categories of threat risk, each defined by multiple, carefully developed quantitative and qualitative criteria and following very specific terms and definitions ([IUCN 2012](https://portals.iucn.org/library/node/10315)[[3]](#footnote-3), [IUCN 2019](https://www.iucnredlist.org/resources/redlistguidelines)[[4]](#footnote-4)). The Red List is thus an important tool to help focus management and biodiversity conservation efforts towards those species most at risk of extinction or in need of concerted research. For standardization and objectivity, it would be of significant value to align the Protocol with these terms and definitions.

Within the original Protocol and its annexes, as well as within the draft revised Protocol, there is a need to better define several terms presented in the text, which refer to threatened or vulnerable or at-risk species, or the groups of species facing different threat levels. There are two main concerns: 1) definitions of terms used are not clearly defined based on other global measures/standards (particularly the definitions or terms used by the IUCN Red List and the Categories and Criteria that define the Red List, [IUCN 2012](https://portals.iucn.org/library/node/10315)), and 2) if the IUCN definitions are applied, some of the terms used in the original Protocol text are inappropriate if following IUCN definitions, in part because they refer to more restricted species groups than the IUCN definition would imply (e.g. in the case of the use of the term “Endangered” in the original Protocol to refer to species under threat, rather than using the IUCN term “Threatened”, which by definition includes “Endangered” species but also “Critically Endangered” and “Vulnerable” species).

* We therefore recommend that definitions of certain terms used in the Protocol text be revised to align with those of the IUCN Red List as noted below.

Currently, there is a mismatch, particularly with IUCN definitions, in the way the Protocol uses the terms:

* “rare”, “unique” and “depleted”, as these terms have limited global standard definition, and are not well defined in the Protocol, leaving them open to interpretation;
* “threatened”: this term is used in the Protocol, but the definition in the Protocol instead matches the IUCN’s definition for “Near Threatened”;
* “endangered”: this term is used in the Protocol, but the definition in the Protocol instead matches the IUCN’s definition of “threatened”.
* We therefore propose that the following terms used in the Protocol be amended to align with the IUCN definitions in the following way:
* The term “Endangered”, where used in the Protocol, be replaced by the term “Threatened”, and that the definition of the term “Threatened” aligns with the IUCN definition and classification for “Threatened[[5]](#footnote-5)”;
* The term “Threatened”, where used in the Protocol, be replaced by the term “Near Threatened”, and that the definition of the term “Near Threatened” aligns with the IUCN definition and classification for “Near Threatened[[6]](#footnote-6)”; and
* The term “Depleted”, where used in the Protocol, also be replaced by the term “Near Threatened”, aligning with the IUCN definition for “Near Threatened”.
* We further propose to include the terms “Vulnerable”, “Endangered” and “Critically Endangered”, with definitions that align with those defined by the IUCN, with the terms being included in the criteria proposed for listing of species under relevant Annexes. The definitions of these three terms as presented in the revised Protocol should for simplicity refer simply to their IUCN listing, but with the understanding that each incorporates the relevant detailed technical criteria used by the IUCN Red List for the categorization of species in that threat category.

Overall, adopting these revisions would ensure that the definitions match global standards, and align with the IUCN Red List definitions, which is critical as the IUCN Red List is the primary global standard for objective, science-based categorizations of a species’ threat status. Adopting such standard definitions will ensure that the conservation status of a species, or a recognised sub-population of a particular species, can be easily determined based on global scientific expertise. This will also avoid several issues:

* the need to subjectively classify species that may or may not be “rare”, “unique”, “depleted”, “threatened” or any other undefined description,
* the need to create new definitions for these terms that are specific to this Protocol, and
* the need for the Convention Secretariat, Parties or Partners to spend the time and resources having to subjectively allocate each species to a threat category.
* We therefore propose the following definitions:

**“Threatened Species”** are all taxa classified globally or regionally by the IUCN Red List of Threatened Species as either Critically Endangered, Endangered or Vulnerable, due to their populations facing an extremely high, very high or high risk of extinction in the wild, respectively;

“**Near Threatened Species**” are all taxa classified globally or regionally by the IUCN Red List of Threatened Species as Near Threatened, due to not qualifying now for a Threatened category (Critically Endangered, Endangered or Vulnerable), but which are close to qualifying for or are likely to qualify for a threatened category in the near future;

“**Vulnerable Species**” are all taxa classified globally or regionally by the IUCN Red List of Threatened Species as Vulnerable. Such species are understood to meet the criteria for Vulnerable[[7]](#footnote-7) as defined by the IUCN Categories and Criteria and are therefore “considered to be facing a *high risk of extinction in the wild*”;

“**Endangered Species**” are all taxa classified globally or regionally by the IUCN Red List of Threatened Species as Endangered. Such species are understood to meet the criteria for Endangered[[8]](#footnote-8) as defined by the IUCN Categories and Criteria and are therefore “considered to be facing *a very high risk of extinction in the wild*”;

“**Critically** **Endangered Species**” are all taxa classified globally or regionally by the IUCN Red List of Threatened Species as Critically Endangered. Such species are understood to meet the criteria for Critically Endangered[[9]](#footnote-9) as defined by the IUCN Categories and Criteria and are therefore “considered to be facing *an extremely high risk of extinction in the wild*.”

**3. Annex titles and descriptions/definitions**

The Protocol includes four annexes, listing species for different reasons, yet the titles of the annexes in the original version of the Protocol do not clearly define the content of each annex.

* We therefore propose here amended titles for each of Annexes II, III and IV as per below.

Furthermore, the annexes of the Protocol list species that should be managed in a certain way, although the annexes themselves and the reasons for listing species within each are not well defined, thus leaving it unclear as to exactly what the implications are of listing of a species on any of the annexes.

* We therefore propose here paragraphs recommended for insertion into the relevant sections of the text of the Protocol, to clearly define the annexes. These link to recommended revisions to the annex titles.

*Annex II*

*Annex Title in Original Protocol Text: Species of wild fauna requiring special protection*

The term “special protection” is not clearly defined and thus leaves this annex open to interpretation. Article 3, paragraph 2 of the Protocol text, referring to this annex, calls for “the strictest protection of the endangered[[10]](#footnote-10) wild animal species listed in Annex II”. However, how “special protection” relates to “the strictest protection” is not clearly defined. Similarly, the term “strict” is not defined, and is more appropriate to the enforcement of the measure than then level of protection that should be provided. The title of this annex is therefore unclear and inconsistent with the text of the Protocol.

* Considering the text of paragraph 2 and its sub-paragraphs a-e, we propose a revised title for this annex as “**Species of wild fauna requiring full protection**”.

Aligned with the proposed revised title for Annex II, it is fitting that a paragraph be added under Article 3, preferably immediately under “National measures for the protection and conservation of biological diversity” to define the purpose or content of Annex II (similarly this could include a definition for Annex I).

Article 3 paragraph 2 of the draft revised Protocol calls on Parties to “take appropriate measures to ensure the strictest protection of the endangered wild animal species listed in Annex II”. The term “strictest protection” suggests full protection, prohibition, total no-take, etc, for these species, although the use of “where appropriate” elsewhere in the same paragraph leaves a loophole for interpretation – i.e., whether or not protection is deemed appropriate is subjective. Parties are required to “strictly protect” these species, *not* only where appropriate, therefore this subjectivity should be removed. This annex should thus present a list of species requiring full protection, with any text allowing subjective interpretation removed.

* We propose a new paragraph defining this annex, as **“Annex II presents a list of threatened wild fauna species that are required to be fully protected within all Party States.”**

Furthermore, within Article 3 paragraph 2, the term “endangered” i) does not follow the proposed revisions to definitions and terminology described above and ii) suggests that there are species listed in this annex that that are not endangered, which creates ambiguity for paragraph 2 that calls on states to strictly protect “endangered species listed in Annex II”, i.e., not necessarily any species that are listed in the annex that are not endangered. We therefore propose to delete the clause “endangered wild animal” here and rather have "…protection of the ~~endangered wild animal~~ species listed in Annex II" or "…protection of all species listed in Annex II".

*Annex III*

*Annex Title in Original Protocol Text: Harvestable species of wild fauna*

*Annex Title in Original Protocol Annex: Harvestable species of wild fauna requiring protection*

*Annex Title in Draft Revised Protocol Text Nov 2022: Exploitable biological species*

The term “harvestable” in the original title suggests that the species in this annex can be harvested. In so doing, the species are no different to all other species not listed. The part of the title “requiring protection” contradicts the “harvestable” nature, as protected species should not be harvested. The original title is therefore contradictory and ambiguous. The proposed title “Exploitable biological species” in the draft revised Protocol is also quite different to the current title as presented in the annex of the original text "Harvestable species of wild fauna requiring protection” (as labelled in the actual annexes of the original protocol, not the text of the protocol). The revised title proposed in the 2022 draft Protocol revision refers to “exploitable biological species”. However, this makes no mention of the need for stricter controls of the harvesting or trade of the species, as referred to in Article 5, paragraphs 1 and 2 (including sub-points a-f under paragraph 2), and may be confused for an annex listing species for which harvesting is encouraged. The draft title and paragraphs 1 and 2 under article 5 are thus also contradictory and ambiguous.

* We propose a revised title for this annex as “**Species of wild fauna requiring harvesting and/or trade restrictions**”.

Aligned with the proposed revised title for Annex III, it is fitting that a paragraph be added under Article 5 of the draft revised Protocol, preferably immediately under the title (currently “Exploitable biological species”, which itself should be revised) to define the purpose or content of Annex III. This is particularly relevant considering the contradiction between the current title “exploitable biological species” and Paragraph 1 of Article 5 that calls for "ensuring protection of the depleted and threatened biological species listed in Annex III".

Overall, what this annex is trying to achieve is not totally clear. It could be interpreted to be about identifying exploitable species or species that are suited for exploitation, or about protecting or controlling fishery impacts on species that are not yet threatened but that may become so in the future if their catches or trade are not in some way regulated. The terminology of the original text and annex title (as presented in the annex, not the text) suggest the latter, calling for “protection of the depleted and threatened biological species listed in Annex III”, which does not align with species that are identified as appropriate for exploitation.

Ultimately, there should be no planned exploitation of species that are known to be threatened or Near Threatened (following IUCN definitions). Rather this annex should be about species that are threatened or Near Threatened, but not yet at a level which meets the criteria for listing on Annex II (full protection), but for which harvest or fishery catch levels and/or trade should be regulated to avoid further declines, at least until a point where the population(s) has recovered to sustainable levels, at which stage they could be removed from the annex if appropriate.

* We therefore propose a new paragraph defining this annex, as **“Annex III presents a list of primarily threatened and Near Threatened wild fauna species for which harvesting and/or trade should be regulated within all Party States, to avoid further population declines and to allow population restoration.”**

*Annex IV*

*Annex Title in Original Protocol Text: Migratory species*

*Annex Title in Original Protocol Annex: Protected migratory species*

Article 6 of the Protocol refers simply to “migratory species” whereas the title of the annex as it appears in the annex of the Protocol refers to “protected migratory species”, indicating disagreement between article and annex. The text within paragraph 1 under Article 6 calls on parties to coordinate their efforts for “the protection of migratory species listed in Annex IV”, suggesting that the annex is intended for “protected” species or species requiring protection. However, paragraph 1 also calls on Parties to implement measures listed in Article 5 paragraph 2, which relates to “*Harvestable species of wild fauna*” not “*Species of wild fauna requiring special protection*”, suggesting that Article 6 on migratory species is not necessarily on “protected” migratory species.

Ultimately, the title of this annex should accurately reflect the species that are listed – if this annex is intended for migratory species that require coordinated multilateral management (which may include *inter alia* prohibitions, regulated harvesting, trade controls and/or joint management plans), the title should reflect that. However, if this annex is simply to state that listed migratory species should also be protected, then such species could simply be listed under Annex II (currently 6 of the 8 species listed in Annex IV are also already listed in Annex II). Alternatively, if this is intended to list migratory species that require regulated harvesting (but not strict protection), then the species could simply be listed under Annex III. Thus, it appears that Annex IV would be relevant only if the intended purpose thereof is to specify species for which Parties are required to coordinate their conservation and management actions, which again may include regulation or full protection (and thus may even include species also listed in Annex II or Annex III).

* In this case, we propose a revised title for this annex as “**Migratory species requiring coordinated multilateral management and conservation**”.

Aligned with the proposed revised title for Annex IV, it is fitting that a paragraph be added under Article 6 of the draft revised Protocol, preferably immediately under the title (currently “Migratory species”, which itself should be revised) to define the purpose or content of Annex III.

* We therefore propose a new paragraph defining this annex, as **“Annex IV presents a list of migratory species requiring coordinated multilateral management and conservation action between/among Party States or between/among one or more Party States and other non-Party range states of the species”;** thereby binding Party States to coordinate their actions over and above national measures that may be implemented for Annex II and Annex III species.

Furthermore, Article 6 calls on Party States to “coordinate their efforts for the protection of migratory species listed in Annex IV”. This could be interpreted to suggest that there are also non-migratory species listed in Annex IV, to which this measure does not apply. Therefore, the adjective “migratory” could be removed here, so as to not allude to there being non-migratory species listed in this annex. i.e., to read that States must “coordinate their efforts for the protection of all species listed in Annex IV”.

**4. Annex listing criteria**

The four annexes list different, but in some cases overlapping, species lists, whereby species have been listed on a specific annex for certain reasons or conservation or management needs, although the justifications or reasons for listing are unclear and there are no formal criteria to guide the listing of species on any one annex.

* We therefore propose that a set of criteria be developed for each annex, to assist with the identification of species warranting listing on that annex. Such criteria should include, but not be limited to, those defined below.

For simplicity, the use of these criteria as proposed for inclusion in the revised Protocol should simply refer to a species’ listing under the annexes, appendices or similar of other multilateral agreements or listings, such that the actual listing thereunder is the criterion for listing under the relevant Protocol Annex, but with the understanding that the criterion incorporates and is thus justified by the relevant detailed technical criteria used by the original agreement or convention. For example, one criterion for Annex II could be that “the species is listed on Appendix I of the *Convention on the Conservation of Migratory Species of Wild Animals* (CMS)”, which calls for strict protection in range states. Therefore, species listed on CMS Appendix I should be listed in Annex II of the Protocol based on the criterion that “the species is listed under CMS Appendix I”, but with the understanding that the criterion incorporates the relevant detailed technical criteria used by CMS for the inclusion of species in CMS Appendix I, i.e., “migratory species that have been assessed as being in danger of extinction throughout all or a significant portion of their range”.

*Proposed criteria - Annex II*

**Article 4 of the original Protocol: *Species of Wild Fauna Requiring Special Protection*** stipulates: “The Contracting Parties shall take all appropriate measures to ensure the strictest protection of the endangered wild fauna species listed in Annex II. To this end, each Contracting Party shall strictly regulate and, where required, prohibit activities having adverse effects on the habitats of such species. In particular, the following activities shall, where required, be prohibited with regard to such species:

1. all forms of capture, keeping or killing;
2. damage to, or destruction of, critical habitats;
3. disturbance of wild fauna, particularly during the period of breeding, rearing and hibernation;
4. destruction or taking of eggs from the wild or keeping these eggs even if empty;
5. possession of and internal trade in these animals, alive or dead, including stuffed animals and any readily recognizable part or derivative thereof.”

* Following this definition, we propose the following criteria for listing species under Protocol Annex II:

1. **Convention on the Conservation of Migratory Species of Wild Animals Appendix I – Endangered migratory species**[[11]](#footnote-11) **(CMS Appendix I):** This Appendix “comprises migratory species that have been assessed as being in danger of extinction throughout all or a significant portion of their range. The Conference of the Parties has further interpreted the term “endangered” as meaning “facing a very high risk of extinction in the wild in the near future” (Res. 11.33 paragraph 1).” Noting that CMS Appendix I requires that CMS Parties *“that are a Range State to a migratory species listed in Appendix I shall endeavour to* ***strictly protect*** *them by: prohibiting the taking of such species*, with very restricted scope for exceptions; conserving and where appropriate restoring their habitats; preventing, removing or mitigating obstacles to their migration and controlling other factors that might endanger them”. Thus, CMS Party States are expected to fully protect all species listed on CMS Appendix I. All Nairobi Convention member states, other than Comoros, are Party to CMS.
2. **Indian Ocean Tuna Commission (IOTC) Resolutions:** IOTC resolutions 12/04, 12/09, 13/04, 13/05, 13/06 and 19/03 prohibit the capture/retention of turtles, marine mammals and several shark and ray species by vessels in the IOTC Register of Active Vessels in Contracting Parties and Cooperating Non-Contracting Parties (CPCs). Thus, IOTC prohibited species should be **prohibited from capture** in IOTC fisheries of IOTC member states. All Nairobi Convention member states are Party to IOTC.
3. **International Union for the Conservation of Nature (IUCN) Red List of Threatened Species**[[12]](#footnote-12)**:**thosespecies assessed as Critically Endangered (CR) or Endangered (EN)[[13]](#footnote-13):
   1. Critically Endangered (CR) species are “considered to be facing an extremely high risk of extinction in the wild”;
   2. Endangered (EN) species are “considered to be facing a very high risk of extinction in the wild”.
4. **Convention on International Trade in Endangered Species of Wild Fauna and Flora Appendix I**[[14]](#footnote-14) **(CITES Appendix I):** This Appendix lists species that are “threatened with extinction and CITES prohibits international trade in specimens of these species”. Thus, *species listed in CITES Appendix I should be prohibited from international trade*, from or to a signatory state. All Nairobi Convention member states are Party to CITES.
5. **International Whaling Commission:** The IWC set a moratorium on commercial whaling, which specifically covers the “great whales” [[15]](#footnote-15), therefore all species covered under this moratorium are appropriate for listing under Annex II of the Protocol. Since 1979 the Indian Ocean is also an agreed “Sanctuary”, ratification of which also prohibited the capture of all whale and dolphin species. Unless there is evidence of “traditional” hunts; all cetacean species should thus also be listed under Annex II of the Protocol. Four Nairobi Convention member states, Kenya, Tanzania, South Africa and France, are Party to the IWC.
6. **The United Nations Convention on the Law of the Sea**[[16]](#footnote-16) **(UNCLOS)** calls on signatory states to conserve marine mammals, and is thus a valid rationale for listing marine mammal species on Annex II of the Protocol. UNCLOS also imposes a duty on signatory states to follow the guidelines of the IWC. All Nairobi Convention member states are Party to UNCLOS.

*Proposed criteria - Annex III*

**Article 5 of the original Protocol: *Harvestable Species of Wild Fauna*** stipulates:

“1. The Contracting Parties shall take all appropriate measures to ensure the protection of the depleted or threatened wild fauna species listed in Annex III.

2. Any exploitation of such wild fauna species shall be regulated in order to restore and maintain the populations at optimum levels. Each Contracting Party shall develop, adopt and implement management plans for the exploitation of such species which may include:

1. the prohibition of the use of all indiscriminate means of capture and killing and of the use of all means capable of causing local disappearance of, or serious disturbance to, populations of a species;
2. closed seasons and other procedures regulating exploitation;
3. the temporary or local prohibition of exploitation, as appropriate, in order to restore viable population levels;
4. the regulation, as appropriate, of sale, keeping for sale, transport for sale or offering for sale of live and dead wild animals;
5. the safeguarding of breeding stocks of such species and their critical habitats in protected areas designated in accordance with article 8 of this Protocol;
6. exploitation in captivity.”

* Following this definition, we propose the following criteria for listing species under Protocol Annex III:

1. **CMS Appendix II – Migratory species conserved through Agreements**[[17]](#footnote-17):This Appendix comprises “migratory species that have an unfavourable conservation status and that require international agreements for their conservation and management, as well as those that have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement. The Convention encourages the Range States to species listed on Appendix II to conclude global or regional Agreements for the conservation and management of individual species or groups of related species.” This list would exclude those species listed in CMS Appendix II that are also listed on CMS Appendix I and which would be identified in the preceding section as being proposed for inclusion on Annex II of the Protocol, based on listing under CMS Appendix I.
2. **CITES Appendix II**[[18]](#footnote-18):This Appendix lists species that are “not necessarily now threatened with extinction but that may become so unless trade is closely controlled”.
3. **Southern Indian Ocean Fisheries Agreement (SIOFA[[19]](#footnote-19)) Conservation and Management Measure 2019/12**: *Conservation and Management Measures for Sharks[[20]](#footnote-20) (Sharks)*, Annex I: This annex lists deep-sea shark species that are considered by SIOFA as being “of concern”. The annex does not prohibit the capture of these species, but States that are Contracting Parties are obliged to ensure that their fishing vessels do not target any of the deep-sea sharks listed in this annex. Of the Nairobi Convention Member States, Mauritius, France and the Seychelles are Party to SIOFA, while Kenya, Madagascar and Mozambique are Signatories but have not yet ratified the Agreement, and Comoros is a Cooperating non-Contracting Party. These States are therefore obliged to adhere to the SIOFA management measures.
4. **IUCN Red List of Threatened Species**[[21]](#footnote-21):those species assessed as either Vulnerable (VU) or Near Threatened (NT)[[22]](#footnote-22):
   1. Vulnerable (VU) species are “considered to be facing a high risk of extinction in the wild”;
   2. Near Threatened (NT) – a Near Threatened species “does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future”.

*Proposed criteria - Annex IV*

**Article 6 of the Protocol: Migratory Species** stipulates: “The Contracting Parties shall, in addition to the measures specified in Articles 3, 4 and 5, co-ordinate their efforts for the protection of migratory species listed in Annex IV whose range extends into their territories. To this end, each Contracting Party shall ensure that, where appropriate, the closed seasons and other measures referred to in paragraph 2 of Article 5 are also applied with regard to such migratory species.”

* Following this definition, we propose the following criteria for listing species under Protocol Annex IV:

1. **CMS**[[23]](#footnote-23) **Appendix I – Endangered migratory species (CMS Appendix I) or Appendix II – Migratory species conserved through Agreements:** The appendices of CMS list threatened migratory species. Therefore, all species listed on these two CMS appendices are proposed for Annex IV of the Nairobi Convention Protocol.
2. **CMS taxon-specific Memoranda of Understanding (MOUs):**
   1. **CMS Sharks MOU, Annex I[[24]](#footnote-24)**: In addition to the listing of shark and batoid species on Appendices I and II of CMS, a taxon-specific MOU was developed for migratory shark and batoid species (CMS Sharks MOU). This MOU provides an instrument under the CMS for achieving a favourable conservation status for migratory sharks and batoids. The CMS Sharks MOU is non-binding, but encourages signatories “to strengthen and improve their role in taking measures to improve or restore a favourable conservation status of sharks listed in Annex 1 of the Memorandum of Understanding”. Annex I lists migratory species of sharks and batoids for which this conservation measure is intended to apply.
   2. **CMS Dugong MOU[[25]](#footnote-25)**: The Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range (Dugong MOU) aims to promote internationally coordinated actions to ensure the long-term survival of dugongs and their seagrass habitats throughout their extensive range. The MOU promotes a conservation plan for this species, and the species warrants listing under Annex IV of the Protocol, on migratory species requiring coordinated multilateral management.
   3. **CMS Indian Ocean and South-East Asia Turtle MOU**[[26]](#footnote-26): The Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia puts in place a framework through which States, territories, inter- and non-governmental stakeholders of the Indian Ocean and South-East Asian region, as well as other concerned States, can work together to conserve marine turtle populations and their habitats for which they share responsibility. Species of turtles listed in this MOU are appropriate listing under Annex IV of the Protocol, on migratory species requiring coordinated multilateral management.
3. **The United Nations Convention on the Law of the Sea**[[27]](#footnote-27) **(UNCLOS) Annex I *Highly Migratory Species***[[28]](#footnote-28): UNCLOS Annex I lists species considered to be “highly migratory species”, making this an appropriate source for defining migratory species.
4. **Fowler**[[29]](#footnote-29) **(2014)**: In a global review of migratory chondrichthyan fishes, Fowler (2014) identified and listed a number of shark and batoid species that can be defined as migratory or possibly migratory. These include 30 migratory shark species and 14 migratory batoid species, as well as 12 possibly migratory shark species and 9 possibly migratory batoid species, that occur within the WIO. Fowler (2014) used the definitions presented in CMS Article I[[30]](#footnote-30) and defined “migratory species” as species for which “the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries”.

**5. Species proposed for listing under Protocol Annexes II, III and IV**

Following the proposed criteria, we present in the tables that follow proposed lists of marine megafauna species in the WIO that are recommended for listing under Annex II (Table 1), Annex III (Table 2) and Annex IV (Table 3) of the revised Protocol.

It should be noted that each criterion should be considered adequate justification for listing of a species under that Annex, and that the species need not meet all of the proposed criteria in order to be listed under that Annex. Furthermore, the criteria proposed in this document should not be considered a finite list, and other parties may propose additional criteria that could be considered, particularly for other species groups.

We propose the listing of relevant marine megafauna species, including sharks, batoids, chimaeras, turtles and marine mammals. However, the proposed lists are not necessarily finite lists, as other parties and experts may propose additional species or species groups that are not considered here. However, the proposed lists are objective, based on global expert opinions and each proposed listing is well justified, therefore the listings as proposed in Tables 1 to 3 should be given consideration for inclusion in their entirety in the revised Protocol.

**6. Concluding remarks**

Pursuant to Conference of Party Decisions CP8/4 and CP9/5, this technical document is intended to provide biological and conservation information, to assist with the revision of the Nairobi Convention’s *Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region* and its annexes, and to provide robust and objective rationales for the listing of species under each annex.

The document includes recommendations for several revisions and additions to the text and definitions of the Protocol, as well as to the annexes, and the titles, descriptions and coverage of the annexes, and proposes criteria to be used for the identification of species to be listed in the revised annexes. The proposed criteria are objective and scientifically robust, and based on global expertise and criteria already established and well defined under several other multilateral agreements, and thus offer well justified criteria for the Protocol’s annexes.

Nairobi Convention Member States are all signatory to CITES, IOTC and UNCLOS, most are signatory to CMS, the CMS Sharks MOU, the CMS dugong MOU and the CMS turtle MOU. Kenya, Tanzania, South Africa and France are Party to the IWC. Mauritius, France and the Seychelles are Party to SIOFA, while Kenya, Madagascar and Mozambique are Signatories but have not yet ratified SIOFA, and Comoros is a Cooperating non-Contracting Party. States are thus encouraged to consider and accept the recommendations within this technical document, as these are strongly aligned with and would improve adherence at the national level to the measures defined under numerous multilateral environmental agreements, including the Nairobi Convention itself.

**Table 1:** Shark, batoid, marine turtle and marine mammal species recommended for listing on Nairobi Convention Annex II, based on their listing either on the Convention on the Conservation of Migratory Species of Wild Animals Appendix I (CMS I), as an Indian Ocean Tuna Commission prohibited species (IOTC), on the Convention on International Trade in Endangered Species of Wild Flora and Fauna Appendix I (CITES I), on the International Union for Conservation of Nature Red List of Threatened Species as Critically Endangered (IUCN CR) or Endangered (IUCN EN), on the International Whaling Commission moratorium on commercial whaling (IWC), or on the United Nations Convention on the Law of the Sea (UNCLOS). Countries in which the species is confirmed (1) or reported but not confirmed (-), if the species is listed on CITES and/or CMS Appendix I or II, if the species is prohibited from capture by the IOTC (x) and the current IUCN Red List status (IUCN) for each species is also presented (CR = Critically Endangered, EN = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern, DD = Dada Deficient). ZA = South Africa, MZ = Mozambique, TZ = Tanzania, KE = Kenya, SO = Somalia, MG = Madagascar, MU = Mauritius, RE = La Réunion, SC = Seychelles, KM = Comoros, YT = Mayotte, ABNJ = Areas Beyond National Jurisdiction.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Family** | **Species** | **Common name** | **Taxonomic reference** | **ZA** | **MZ** | **TZ** | **KE** | **SO** | **MG** | **MU** | **RE** | **SC** | **KM** | **YT** | **ABNJ** | **CITES** | **CMS** | **IOTC** | **IUCN** | **Criteria for listing on Annex II** |
| ***Sharks*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alopiidae | *Alopias pelagicus a* | Pelagic thresher shark | Nakamura, 1935 | 1 | 1 | 1 | 1 | 1 | 1 | - | - | 1 | 1 | 1 | - | II | II | x | EN | IOTC; IUCN EN |
| Alopiidae | *Alopias superciliosus a* | Bigeye thresher shark | (Lowe, 1841) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - | II | II | x | VU | IOTC |
| Alopiidae | *Alopias vulpinus a* | Common thresher shark | (Bonnaterre, 1788) | 1 | - | - | - | - | - | - | - | - | - | - | 1 | II | II | x | VU | IOTC |
| Carcharhinidae | *Carcharhinus amblyrhynchos* | Grey reef shark | (Bleeker, 1856) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | EN | IUCN EN |
| Carcharhinidae | *Carcharhinus longimanus b* | Oceanic whitetip shark | (Poey, 1861) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | I | x | CR | CMS I; IOTC; IUCN CR |
| Carcharhinidae | *Carcharhinus obscurus* | Dusky shark | (Lesueur, 1818) | 1 | 1 | - |  | 1 | 1 |  |  |  |  |  | - | II | II |  | EN | IUCN EN |
| Carcharhinidae | *Carcharhinus plumbeus* | Sandbar shark | (Nardo, 1827) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | EN | IUCN EN |
| Carcharhinidae | *Negaprion acutidens* | Sicklefin lemon shark | (Rüppell, 1837) | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 |  | II |  |  | EN | IUCN EN |
| Carchariidae | *Carcharias taurus* | Ragged-tooth shark | Rafinesque, 1810 | 1 | 1 | 1 | - | 1 |  |  |  | 1 |  |  |  |  |  |  | CR | IUCN CR |
| Centrophoridae | *Centrophorus granulosus* | Gulper shark | (Bloch & Schneider, 1801) | 1 | 1 | 1 |  | 1 | 1 |  |  | 1 | 1 | 1 | 1 |  |  |  | EN | IUCN EN |
| Centrophoridae | *Centrophorus lesliei* | African gulper shark | White, Ebert & Naylor 2017 |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  | EN | IUCN EN |
| Centrophoridae | *Centrophorus squamosus* | Leafscale gulper shark | (Bonnaterre, 1788) | 1 | 1 |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  | EN | IUCN EN |
| Centrophoridae | *Centrophorus uyato* | Little gulper shark | (Rafinesque, 1810) | 1 | 1 | 1 |  | 1 | 1 | 1 |  |  |  | 1 | 1 |  |  |  | EN | IUCN EN |
| Cetorhinidae | *Cetorhinus maximus* | Basking shark | (Gunnerus, 1765) | 1 |  |  |  |  |  |  |  |  |  |  | 1 | II | I, II |  | EN | CMS I; IUCN EN |
| Echinorhinidae | *Echinorhinus brucus* | Bramble shark | (Bonnaterre, 1788) | 1 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  | EN | IUCN EN |
| Ginglymostomatidae | *Pseudoginglymostoma brevicaudatum* | Shorttail nurse shark | Günther, 1867 | 1 | 1 | 1 | 1 |  | 1 |  |  |  |  |  |  |  |  |  | CR | IUCN CR |
| Lamnidae | *Carcharodon carcharias* | Great white shark | (Linnaeus, 1758) | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | I, II |  | VU | CMS I |
| Lamnidae | *Isurus oxyrinchus* | Shortfin mako shark | Rafinesque, 1810 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | II |  | EN | IUCN EN |
| Lamnidae | *Isurus paucus* | Longfin mako shark | Guitart Manday, 1966 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | II |  | EN | IUCN EN |
| Oxynotidae | *Oxynotus centrina* | Angular rough shark | (Linnaeus, 1758) |  | - | - |  |  | 1 |  |  |  |  |  | - |  |  |  | EN | IUCN EN |
| Pentanchidae | *Holohalaelurus favus* | Honeycomb catshark | Human, 2006 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | EN | IUCN EN |
| Pentanchidae | *Holohalaelurus punctatus* | African spotted catshark | (Gilchrist, 1914) | 1 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  | EN | IUCN EN |
| Rhincodontidae | *Rhincodon typus c* | Whale shark | Smith, 1828 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | I, II | x | EN | CMS I; IOTC; IUCN EN |
| Scyliorhinidae | *Haploblepharus edwardsii* | Puffadder shyshark | (Schinz, 1822) | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | EN | IUCN EN |
| Sphyrnidae | *Sphyrna lewini* | Scalloped hammerhead shark | (Griffith & Smith, 1834) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II | II |  | CR | IUCN CR |
| Sphyrnidae | *Sphyrna mokarran* | Great hammerhead shark | (Rüppell, 1837) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II | II |  | CR | IUCN CR |
| Stegostomatidae | *Stegostoma tigrinum* | Zebra shark | (Herman, 1783) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  |  |  |  | EN | IUCN EN |
| Triakidae | *Mustelus manazo* | Starspotted smoothhound | Bleeker, 1855 |  | - | 1 | 1 |  | - |  |  | 1 |  |  |  |  |  |  | EN | IUCN EN |
| Triakidae | *Mustelus mustelus* | Common smoothhound | (Linnaeus, 1758) | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | EN | IUCN EN |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Batoids (rays, skates, wedgefishes, sawfishes)*** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dasyatidae | *Himantura uarnak* | Honeycomb stingray | (Gmelin, 1789) | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  | 1 |  |  |  |  | EN | IUCN EN |
| Glaucostegidae | *Glaucostegus halavi* | Halavi guitarfish | Forsskål, 1775 |  |  |  | 1 |  |  |  |  |  |  |  |  | II |  |  | CR | IUCN CR |
| Mobulidae | *Mobula alfredi d* | Reef manta ray | (Krefft, 1868) | 1 | 1 | 1 |  |  | 1 |  |  | 1 | 1 | 1 | 1 | II | I, II | x | VU | CMS I; IOTC |
| Mobulidae | *Mobula birostris d* | Giant manta ray | (Walbaum, 1792) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | I, II | x | EN | CMS I; IOTC; IUCN EN |
| Mobulidae | *Mobula eregoodoo d* | Longhorned pygmy devil ray | (Cantor 1849) | 1 | - | - | - | 1 | - | - | - | - | - | - | - | II | I, II | x | EN | CMS I; IOTC; IUCN EN |
| Mobulidae | *Mobula kuhlii d* | Shortfin devil ray | (Valenciennes, 1841) | 1 | 1 | 1 | 1 | 1 | 1 | - | - | 1 | - | 1 |  | II | I, II | x | EN | CMS I; IOTC; IUCN EN |
| Mobulidae | *Mobula mobular d* | Spinetail devil ray | (Bonnaterre, 1788) | 1 | 1 | 1 | 1 | 1 | 1 |  |  | 1 |  | 1 | 1 | II | I, II | x | EN | CMS I; IOTC; IUCN EN |
| Mobulidae | *Mobula tarapacana d* | Sicklefin devil ray | (Philippi, 1892) | 1 | - | 1 |  |  |  | 1 | 1 |  |  |  | 1 | II | I, II | x | EN | CMS I; IOTC; IUCN EN |
| Mobulidae | *Mobula thurstoni d* | Bentfin devil ray | (Lloyd, 1908) | 1 | - | 1 |  |  | 1 |  |  |  |  |  | - | II | I, II | x | EN | CMS I; IOTC; IUCN EN |
| Myliobatidae | *Aetomylaeus bovinus* | Duckbill ray | (Saint-Hilaire, 1817) | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | CR | IUCN CR |
| Myliobatidae | *Aetomylaeus vespertilio* | Ornate eagle ray | (Bleeker, 1852) | 1 | 1 | 1 | 1 |  |  |  |  | 1 |  |  |  |  |  |  | EN | IUCN EN |
| Myliobatidae | *Myliobatis aquila* | Common eagle ray | (Linnaeus, 1758) | 1 | 1 | 1 | 1 |  |  | 1 | 1 |  |  |  |  |  |  |  | CR | IUCN CR |
| Pristidae | *Pristis pristis* | Largetooth sawfish | (Linnaeus, 1758) | 1 | 1 | 1 | 1 | 1 | 1 | - | - | - |  |  |  | I | I, II |  | CR | CMS I; CITES I; IUCN CR |
| Pristidae | *Pristis zijsron* | Green sawfish | (Bleeker, 1851) | 1 | 1 | - | 1 | 1 |  | - | - |  |  |  |  | I | I, II |  | CR | CMS I; CITES I; IUCN CR |
| Rajidae | *Raja ocellifera* | Twineyed skate | Regan, 1906 | 1 | - | - | - |  |  |  |  |  |  |  |  |  |  |  | EN | IUCN EN |
| Rajidae | *Rostroraja alba* | Spearnose skate | Lacepède, 1803 | 1 | 1 |  | 1 |  | 1 |  |  | 1 |  |  |  |  |  |  | EN | IUCN EN |
| Rhinidae | *Rhina ancylostomus* | Bowmouth guitarfish | Bloch & Schneider, 1801 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  | II |  |  | CR | IUCN CR |
| Rhinidae | *Rhynchobatus australiae* | Bottlenose wedgefish | Whitley, 1939 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | II | II |  | CR | IUCN CR |
| Rhinidae | *Rhynchobatus djiddensis* | Whitespotted wedgefish | (Forsskål, 1775) | 1 | 1 | - | - | - | - | - | - | - |  | - |  | II |  |  | CR | IUCN CR |
| Rhinobatidae | *Acroteriobatus leucospilus* | Greyspot guitarfish | Norman, 1926 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  | II |  |  | EN | IUCN EN |
| Rhinopteridae | *Rhinoptera jayakari* | Shorttail cownose ray | Boulenger, 1895 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  |  |  | 1 |  |  |  | EN | IUCN EN |
| **Family** | **Species** | **Common name** | **Taxonomic reference** | **ZA** | **MZ** | **TZ** | **KE** | **SO** | **MG** | **MU** | **RE** | **SC** | **KM** | **YT** | **ABNJ** | **CITES** | **CMS** | **IOTC** | **IUCN** | **Criteria for listing on Annex II** |
| ***Marine turtles*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cheloniidae | *Caretta caretta e* | Loggerhead turtle | (Linnaeus, 1758) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | I | x | VU | CMS I; CITES I; IOTC |
| Cheloniidae | *Chelonia mydas e* | Green turtle | (Linnaeus, 1758) |  | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 | 1 | I | I | x | EN | CMS I; CITES I; IOTC; IUCN EN |
| Cheloniidae | *Eretmochelys imbricata e* | Hawksbill turtle | (Linnaeus, 1766) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | I | x | CR | CMS I; CITES I; IOTC; IUCN CR |
| Cheloniidae | *Lepidochelys olivacea e* | Olive ridley turtle | (Eschscholtz, 1829) | - | 1 | 1 | 1 | 1 | 1 | - | - | 1 | 1 | 1 | - | I | I | x | VU | CMS I; CITES I; IOTC |
| Dermochelyidae | *Dermochelys coriacea e* | Leatherback turtle | (Vandelli, 1761) | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | I | x | VU | CMS I; CITES I; IOTC |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Marine mammals*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Balaenidae | *Eubalaena australis f* | Southern right whale | Desmoulins, 1822 | 1 | 1 |  |  |  | 1 |  |  |  |  |  | 1 | I | I | x | LC | CMS I; CITES I; IOTC; IWC; UNCLOS |
| Balaenopteridae | *Balaenoptera musculus intermedia f* | Antarctic blue whale | Burmeister, 1871 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | I | x | EN | CMS I; CITES I; IOTC; IUCN EN; IWC; UNCLOS |
| Balaenopteridae | *Balaenoptera musculus brevicauda f* | Pygmy blue whale | Ichihara, 1966 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | I | I | x | EN | CMS I; CITES I; IOTC; IUCN EN; IWC; UNCLOS |
| Balaenopteridae | *Balaenoptera physalus f* | Fin whale | Linnaeus, 1758 | 1 | 1 |  |  |  | 1 | 1 |  | 1 |  | 1 | 1 | I | I | x | VU | CMS I; CITES I; IOTC; IWC; UNCLOS |
| Balaenopteridae | *Balaenoptera borealis schlegelii f* | Sei whale | Flower, 1865 | 1 |  |  |  |  | 1 |  | 1 |  |  |  | 1 | I | I | x | EN | CMS I; CITES I; IOTC; IUCN EN; IWC; UNCLOS |
| Balaenopteridae | *Balaenoptera edeni brydei f* | Bryde's whale | Olsen, 1913 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | I | II | x | LC | CITES I; IOTC; IWC; UNCLOS |
| Balaenopteridae | *Balaenoptera edeni edeni f* | Bryde's whale | Anderson, 1879 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | I | II | x | LC | CITES I; IOTC; IWC; UNCLOS |
| Balaenopteridae | *Balaenoptera omurai f* | Omura's whale | Wada, Oishi and Yamada, 2003 |  |  |  | 1 | 1 |  |  |  |  |  |  |  | I | II | x | DD | CITES I; IOTC; IWC; UNCLOS |
| Balaenopteridae | *Balaenoptera acutorostrata f* | Common minke whale | Lacépède, 1804 | 1 | 1 |  |  |  |  |  |  |  |  |  | 1 | I |  | x | LC | CITES I; IOTC; IWC; UNCLOS |
| Balaenopteridae | *Balaenoptera bonaerensis f* | Antarctic minke whale | Burmeister, 1867 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 |  | 1 | 1 | 1 | I | II | x | NT | CITES I; IOTC; IWC; UNCLOS |
| Balaenopteridae | *Megaptera novaeangliae australis f* | Humpback whale | Borowski, 1781 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | I | I | x | LC | CMS I; CITES I; IOTC; IWC; UNCLOS |
| Delphinidae | *Orcinus orca f* | Killer whale | Linnaeus, 1758 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | II | II | x | DD | IOTC; UNCLOS |
| Delphinidae | *Pseudorca crassidens f* | False killer whale | Owen, 1846 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | NT | IOTC; UNCLOS |
| Delphinidae | *Feresa attenuata f* | Pygmy killer whale | Gray, 1874. | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Peponocephala electra f* | Melon-headed whale | Gray, 1846 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Globicephala macrorhynchus f* | Short-finned pilot whale | Gray, 1846 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Globicephala melas edwardii f* | Southern long-finned pilot whale | Smith, 1834 | 1 |  |  |  |  |  |  |  |  |  |  |  | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Grampus griseus f* | Risso's dolphin | Cuvier, 1812 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Lagenodelphis hosei f* | Frasers dolphin | Fraser, 1956. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Lissodelphis peronii f* | Southern right whale dolphin | Lacépède, 1804 | 1 | 1 |  |  |  |  |  |  |  |  |  | 1 | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Stenella attenuata f* | Pantropical spotted dolphin | Gray, 1846 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Stenella coeruleoalba f* | Striped dolphin | Meyen, 1833 | 1 | 1 | 1 | 1 | 1 | 1 |  |  | 1 | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Steno bredanensis f* | Rough-toothed dolphin | Lesson, 1828) | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Delphinus delphis delphis f* | Common dolphin | Linnaeus, 1758. | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Tursiops truncatus truncatus f* | Common bottlenose dolphin | Montagu, 1821 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Delphinidae | *Tursiops aduncus f* | Indo-Pacific bottlenose dolphin | Ehrenberg, 1833 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  | x | NT | IOTC; UNCLOS |
| Delphinidae | *Sousa plumbea f* | Indian Ocean humpback dolphin | Cuvier, 1829 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | 1 | 1 |  | I |  | x | EN | CITES I; IOTC; IUCN EN; UNCLOS |
| Delphinidae | *Stenella longirostris f* | Spinner dolphin | Gray, 1828 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Dugongidae | *Dugong dugon* | Dugong | Müller, 1776 |  | 1 |  |  |  | 1 |  |  |  |  | 1 |  | I | II |  | VU | CITES I; UNCLOS |
| Kogiidae | *Kogia breviceps f* | Pygmy sperm whale | Blainville, 1838 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Kogiidae | *Kogia sima f* | Dwarf sperm whale | Owen, 1866 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Neobalaenidae | *Caperea marginata f* | Pygmy right whale | Gray, 1846 | 1 |  |  |  |  |  |  |  |  |  |  |  | I | II | x | LC | CITES I; IOTC; UNCLOS |
| Otariidae | *Arctocephalus pusillus pusillus* | Cape fur seal | Schreber, 1775 | 1 | 1 |  |  |  |  |  | 1 |  |  |  | 1 | II | II |  | LC | UNCLOS |
| Otariidae | *Arctocephalus tropicalis* | Subantarctic fur seal | Gray, 1872 | 1 | 1 |  |  |  |  |  | 1 |  |  |  | 1 | II |  |  | LC | UNCLOS |
| Phocidae | *Mirounga leonina* | Southern elephant seal | Linnaeus, 1758 | 1 |  |  |  |  |  |  | 1 |  |  |  | 1 | II |  |  | LC | UNCLOS |
| Physeteridae | *Physeter macrocephalus f* | Sperm whale | Linnaeus, 1758 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | I | x | VU | CMS I; CITES I; IOTC; IWC; UNCLOS |
| Ziphiidae | *Ziphius cavirostris f* | Cuvier's beaked whale | Cuvier, 1823 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Ziphiidae | *Indopacetus pacificus f* | Longman's beaked whale | Longman, 1926 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Ziphiidae | *Hyperoodon planifrons f* | Southern bottlenose whale | Flower, 1882 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | I |  | x | LC | CITES I; IOTC; UNCLOS |
| Ziphiidae | *Mesoplodon densirostris f* | Blainville's beaked whale | Blainville, 1817 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | IOTC; UNCLOS |
| Ziphiidae | *Mesoplodon grayi f* | Gray's beaked whale | von Haast, 1876 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | II |  | x | LC | IOTC; UNCLOS |
| Ziphiidae | *Mesoplodon layardii f* | Strap-toothed beaked whale | Gray, 1865 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | II |  | x | LC | IOTC; UNCLOS |
| Ziphiidae | *Mesoplodon eueu f* | Ramari's beaked whale | Carroll et al. 2021 | 1 | 1 |  |  |  | 1 |  |  |  |  |  | 1 | II |  | x | LC | IOTC; UNCLOS |
| Ziphiidae | *Berardius arnuxii f* | Arnoux's beaked whale | Duvernoy, 1851 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | I |  | x | LC | CITES I; IOTC; UNCLOS |

*a* IOTC Resolution 12/09 (<http://www.iotc.org/cmm/resolution-1209-conservation-thresher-sharks-family-alopiidae-caught-association-fisheries-iotc>) “Fishing Vessels flying the flag of an IOTC Member or Cooperating Non-Contracting Party (CPCs) are prohibited from retaining on board, transhipping, landing, storing, selling or offering for sale any part or whole carcass of thresher sharks of all the species of the family Alopiidae”;

*b* IOTC Resolution 13/06 (<http://www.iotc.org/cmm/resolution-1306-scientific-and-management-framework-conservation-sharks-species-caught>) “CPCs shall prohibit, as an interim pilot measure, all fishing vessels flying their flag and on the IOTC Record of Authorised Vessels, or authorised to fish for tuna or tuna-like species managed by the IOTC on the high seas to retain onboard, tranship, land or store any part or whole carcass of oceanic whitetip sharks”;

*c* IOTC Resolution 13/05 (<http://www.iotc.org/cmm/resolution-1305-conservation-whale-sharks-rhincodon-typus>) CPC’s “shall prohibit their flagged vessels from intentionally setting a purse seine net around a whale shark in the IOTC area of competence, if it is sighted prior to the commencement of the set” and that “in the event that a whale shark is unintentionally encircled in the purse seine net, the master of the vessel shall: a) take all reasonable steps to ensure its safe release”;

*d* IOTC Resolution 19/03 (<https://iotc.org/cmm/resolution-1903-conservation-mobulid-rays-caught-association-fisheries-iotc-area-competence>) CPC’s “shall prohibit all vessels from intentionally setting any gear type for targeted fishing of mobulid rays in the IOTC Area of Competence, if the animal is sighted prior to commencement of the set” and “shall prohibit all vessels retaining onboard, transhipping, landing, storing, any part or whole carcass of mobulid rays caught in the IOTC Area of Competence” and “shall require all their fishing vessels, other than those carrying out subsistence fishery, to promptly release alive and unharmed, to the extent practicable, mobulid rays as soon as they are seen in the net, on the hook, or on the deck, and do it in a manner that will result in the least possible harm to the individuals captured”.

*e* IOTC Resolution 12/04 (<https://iotc.org/cmm/resolution-1204-conservation-marine-turtles>) CPC’s “shall require fishermen on vessels targeting species covered by the IOTC Agreement to bring aboard, if practicable, any captured marine turtle that is comatose or inactive as soon as possible and foster its recovery, including aiding in its resuscitation, before safely returning it to the water” and CPCs with longline vessels “Ensure that the operators of all longline vessels carry line cutters and de-hookers in order to facilitate the appropriate handling and prompt release of marine turtles caught or entangled, and that they do so in accordance with IOTC Guidelines” and CPCs with purse seine vessels shall “To the extent practicable, avoid encirclement of marine turtles, and if a marine turtle is encircled or entangled, take practicable measures to safely release the turtle in accordance with the handling guidelines in the IOTC Marine Turtle Identification Cards” and shall “To the extent practicable, release all marine turtles observed entangled in fish aggregating devices (FADs) or other fishing gear”.

*f* IOTC Resolution 13/04 (<https://iotc.org/cmm/resolution-1304-conservation-cetaceans>) CPC’s “shall prohibit their flagged vessels from intentionally setting a purse seine net around a cetacean in the IOTC area of competence, if the animal is sighted prior to the commencement of the set” and “CPCs shall require that, in the event that a cetacean is unintentionally encircled in a purse seine net, the master of the vessels shall: a) take all reasonable steps to ensure the safe release of the cetacean”.

**Table 2:** Shark, batoid and chimaera species recommended for listing on Nairobi Convention Annex III, based on their listing on the International Union for Conservation of Nature Red List of Threatened Species as Vulnerable (IUCN VU) or Near Threatened (IUCN NT), on the Convention on the Conservation of Migratory Species of Wild Animals Appendix II (CMS II), on the Convention on International Trade in Endangered Species of Wild Flora and Fauna Appendix II (CITES II) or the Southern Indian Ocean Fisheries Agreement Annex I (SIOFA). Countries in which the species is confirmed (1) or reported but not confirmed (-), if the species is listed on CITES and/or CMS Appendix I or II, if the species is prohibited from capture by the IOTC (x) and the current IUCN Red List status (IUCN) for each species is also presented (CR = Critically Endangered, EN = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern, DD = Data Deficient). ZA = South Africa, MZ = Mozambique, TZ = Tanzania, KE = Kenya, SO = Somalia, MG = Madagascar, MU = Mauritius, RE = La Réunion, SC = Seychelles, KM = Comoros, YT = Mayotte, ABNJ = Areas Beyond National Jurisdiction.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Family** | **Species** | **Common name** | **Taxonomic reference** | **ZA** | **MZ** | **TZ** | **KE** | **SO** | **MG** | **MU** | **RE** | **SC** | **KM** | **YT** | **ABNJ** | **CITES** | **CMS** | **IOTC** | **IUCN** | **Criteria for Annex III listing** |
| ***Sharks*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Carcharhinidae | *Carcharhinus albimarginatus* | Silvertip shark | (Rüppell, 1837) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | VU | CITES II; IUCN VU |
| Carcharhinidae | *Carcharhinus altimus* | Bignose shark | (Springer, 1950) | 1 | 1 | 1 | - | - | 1 |  |  |  |  | - |  | II |  |  | NT | CITES II; IUCN NT |
| Carcharhinidae | *Carcharhinus amblyrhynchoides* | Graceful shark | Whitley 1934 |  |  |  |  | 1 |  |  |  | - |  |  |  | II |  |  | VU | CITES II; IUCN VU |
| Carcharhinidae | *Carcharhinus amboinensis* | Pigeye shark | (Müller & Henle, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  |  |  | II |  |  | VU | CITES II; IUCN VU |
| Carcharhinidae | *Carcharhinus brachyurus* | Copper shark | (Günther, 1870) | 1 | - |  |  |  | 1 |  |  | 1 |  |  |  | II |  |  | VU | CITES II; IUCN VU |
| Carcharhinidae | *Carcharhinus brevipinna* | Spinner shark | (Valenciennes, 1839) | 1 | 1 |  |  |  | 1 | 1 | 1 | 1 |  |  |  | II |  |  | VU | CITES II; IUCN VU |
| Carcharhinidae | *Carcharhinus falciformis* | Silky shark | (Müller & Henle, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | II |  | VU | CITES II; CMS II; IUCN VU |
| Carcharhinidae | *Carcharhinus galapagensis* | Galapagos shark | (Snodgrass & Heller, 1905) |  | 1 |  |  |  | 1 |  |  | 1 |  |  | 1 | II |  |  | LC | CITES II |
| Carcharhinidae | *Carcharhinus humani* | Human's whaler shark | White & Weigmann, 2014 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | II |  |  | DD | CITES II |
| Carcharhinidae | *Carcharhinus leucas* | Bull shark | (Valenciennes, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | VU | CITES II; IUCN VU |
| Carcharhinidae | *Carcharhinus limbatus* | Blacktip shark | (Valenciennes, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | VU | CITES II; IUCN VU |
| Carcharhinidae | *Carcharhinus macloti* | Hardnose shark | (Müller & Henle, 1839) |  |  | 1 | 1 | 1 |  |  |  |  |  |  |  | II |  |  | NT | CITES II; IUCN NT |
| Carcharhinidae | *Carcharhinus melanopterus* | Blacktip reef shark | (Quoy & Gaimard, 1824) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | VU | CITES II; IUCN VU |
| Carcharhinidae | *Carcharhinus sorrah* | Spottail shark | (Valenciennes, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  | II |  |  | NT | CITES II; IUCN NT |
| Carcharhinidae | *Loxodon macrorhinus* | Sliteye shark | (Müller & Henle, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | II |  |  | NT | CITES II; IUCN NT |
| Carcharhinidae | *Prionace glauca* | Blue shark | (Linnaeus, 1758) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | II |  | NT | CITES II; CMS II; IUCN NT |
| Carcharhinidae | *Rhizoprionodon acutus* | Milk shark | (Rüppell, 1837) | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  |  |  | II |  |  | VU | CITES II; IUCN VU |
| Carcharhinidae | *Scoliodon laticaudus* | Spadenose shark | Müller & Henle, 1838 |  | - | 1 | 1 | 1 | 1 |  |  |  |  |  |  | II |  |  | NT | CITES II; IUCN NT |
| Carcharhinidae | *Triaenodon obesus* | Whitetip reef shark | (Rüppell, 1837) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | VU | CITES II; IUCN VU |
| Centrophoridae | *Centrophorus granulosus* | Gulper shark | (Bloch & Schneider, 1801) | 1 | 1 | 1 |  | 1 | 1 |  |  | 1 | 1 | 1 | 1 |  |  |  | EN | SIOFA |
| Centrophoridae | *Centrophorus moluccensis* | Smallfin gulper shark | Bleeker, 1860 | 1 | 1 | 1 |  |  | 1 |  |  | 1 |  | 1 | - |  |  |  | VU | IUCN VU |
| Centrophoridae | *Deania calceus* | Birdbeak dogfish | (Lowe, 1839) | 1 | - |  |  |  | - |  |  |  |  |  | 1 |  |  |  | NT | SIOFA; IUCN NT |
| Centrophoridae | *Deania profundorum* | Arrowhead dogfish | (Smith & Radcliffe, 1912) | 1 | - |  |  |  | - |  | - |  |  |  | 1 |  |  |  | NT | IUCN NT |
| Centrophoridae | *Deania quadrispinosa* | Longsnout dogfish | (McCulloch, 1915) | 1 | 1 |  |  |  | 1 |  | - |  |  |  |  |  |  |  | VU | IUCN VU |
| Chlamydoselachidae | *Chlamydoselachus africana* | Southern African frilled shark | Ebert & Compagno, 2009 | 1 | 1 |  |  |  |  |  |  |  |  |  | 1 |  |  |  | LC | SIOFA |
| Dalatiidae | *Dalatias licha* | Kitefin shark | (Bonnaterre, 1788) | 1 | 1 | 1 |  |  | 1 |  |  |  |  |  | 1 |  |  |  | VU | SIOFA; IUCN VU |
| Etmopteridae | *Etmopterus alphus* | Whitecheek lanternshark | Ebert, Straube, Leslie, & Weigmann, 2016 | 1 | 1 |  |  |  |  |  |  |  |  |  | 1 |  |  |  | LC | SIOFA |
| Etmopteridae | *Etmopterus pusillus* | Smooth lanternshark | (Lowe, 1839) | 1 | - |  |  |  |  | - | - |  |  |  | 1 |  |  |  | LC | SIOFA |
| Galeocerdonidae | *Galeocerdo cuvier* | Tiger shark | (Péron & Lesueur, in Lesueur, 1822) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | NT | IUCN NT |
| Ginglymostomatidae | *Nebrius ferrugineus* | Tawny nurse shark | (Lesson, 1831) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  |  | VU | IUCN VU |
| Hemigaleidae | *Hemigaleus microstoma* | Sickelfin weasel shark | Bleeker 1852 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
| Hemigaleidae | *Hemipristis elongata* | Snaggletooth shark | (Klunzinger, 1871) | 1 | 1 | 1 | 1 | 1 | 1 |  |  | 1 |  |  |  |  |  |  | VU | IUCN VU |
| Hemigaleidae | *Paragaleus leucolomatus* | Whitetip weasel shark | Compagno & Smale, 1985 | 1 | 1 | - | - | - | 1 |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
| Hexanchidae | *Heptranchias perlo* | Sharpnose sevengill shark | (Bonnaterre, 1788) | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - |  |  |  | NT | IUCN NT |
| Hexanchidae | *Hexanchus griseus* | Bluntnose sixgill shark | (Bonnaterre, 1788) | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  |  | NT | IUCN NT |
| Hexanchidae | *Hexanchus nakamurai* | Bigeyed sixgill shark | Teng, 1962 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  |  | NT | SIOFA; IUCN NT |
| Hexanchidae | *Notorynchus cepedianus* | Sevengill shark | (Peron, 1807) | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
| Mitsukurinidae | *Mitsukurina owstoni* | Goblin shark | Jordan, 1898 | 1 | 1 |  |  |  |  |  |  |  |  |  | - |  |  |  | LC | SIOFA |
| Odontaspididae | *Odontaspis ferox* | Smalltooth sand tiger shark | (Risso, 1810) | 1 | - | 1 |  |  | 1 |  |  | 1 | 1 |  |  |  |  |  | VU | IUCN VU |
| Pentanchidae | *Bythaelurus hispidus* | Bristly catshark | (Alcock, 1891) |  |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  | NT | IUCN NT |
| Pentanchidae | *Bythaelurus tenuicephalus* | Narrowhead catshark | Kaschner, Weigmann & Thiel, 2015 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | LC | SIOFA |
| Pentanchidae | *Halaelurus boesemani* | Speckled catshark | Springer & D’Aubrey, 1972 |  |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
| Pentanchidae | *Halaelurus natalensis* | Tiger catshark | (Regan, 1904) | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
| Pentanchidae | *Haploblepharus fuscus* | Brown shyshark | Smith, 1950 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
| Pentanchidae | *Haploblepharus kistnasamyi* | Natal shyshark | Human & Compagno, 2006 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
| Scyliorhinidae | *Cephaloscyllium sufflans* | Balloon shark | (Regan, 1921) | 1 | 1 | - | - | - | 1 |  |  |  | 1 |  | - |  |  |  | NT | IUCN NT |
| Scyliorhinidae | *Scyliorhinus capensis* | Yellowspotted catshark | (Smith, 1838) | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | NT | IUCN NT |
| Somniosidae | *Centroscymnus coelolepis* | Portuguese dogfish | Barbosa du Bocage & de Brito Capello, 1864 | 1 | 1 |  |  |  | 1 |  |  | 1 |  |  | 1 |  |  |  | NT | SIOFA; IUCN NT |
| Somniosidae | *Centroscymnus owstoni* | Roughskin dogfish | Gaman, 1906 | - | - |  |  |  | 1 |  | 1 | 1 |  | 1 | 1 |  |  |  | VU | IUCN VU |
| Somniosidae | *Centroselachus crepidater* | Longnose velvet dogfish | (Barbosa du Bocage & de Brito Capello, 1864) | - | - |  |  |  | 1 |  | 1 | 1 |  | 1 | 1 |  |  |  | NT | SIOFA; IUCN NT |
| Somniosidae | *Somniosus antarcticus* | Southern sleeper shark | Whitley, 1939 | - | - |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  | LC | SIOFA |
| **Family** | **Species** | **Common name** | **Taxonomic reference** | **ZA** | **MZ** | **TZ** | **KE** | **SO** | **MG** | **MU** | **RE** | **SC** | **KM** | **YT** | **ABNJ** | **CITES** | **CMS** | **IOTC** | **IUCN** | **Criteria for Annex III listing** |
| ***Sharks continued*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Somniosidae | *Scymnodon macracanthus* | Largespine velvet dogfish | Regan, 1906 | - | - |  |  |  |  |  |  |  |  |  | 1 |  |  |  | DD | SIOFA |
| Somniosidae | *Zameus squamulosus* | Velvet dogfish | (Günther, 1877) | 1 | - |  |  |  | 1 | 1 | 1 | 1 |  |  | 1 |  |  |  | LC | SIOFA |
| Sphyrnidae | *Sphyrna zygaena* | Smooth hammerhead shark | (Linnaeus, 1758) | 1 | 1 | - |  | 1 | 1 | 1 | 1 | 1 | 1 |  | - | II | II |  | VU | CITES II; CMS II; IUCN VU |
| Squalidae | *Squalus acutipinnis* | Southern African spiny dogfish | Regan, 1906 | 1 | - |  |  |  |  | 1 | - |  |  |  |  |  |  |  | NT | IUCN NT |
| Squatinidae | *Squatina africana* | African angelshark | Regan, 1908 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  |  |  |  |  |  | NT | IUCN NT |
| Triakidae | *Mustelus mosis* | Arabian smoothhound | Hemprich & Ehrenberg, 1899 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 |  |  |  |  |  |  |  | NT | IUCN NT |
| Triakidae | *Scylliogaleus quecketti* | Flapnose houndshark | Boulenger, 1902 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Batoids (rays, skates, wedgefishes, sawfishes)*** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aetobatidae | *Aetobatus ocellatus* | Indian eagle ray | (Kuhl, 1823) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | VU | IUCN VU |
| Anacanthobatidae | *Anacanthobatis marmorata* | Spotted legskate | (Von Bonde & Swart, 1923) | 1 | 1 |  |  |  |  |  |  |  |  |  | - |  |  |  | NT | IUCN NT |
| Dasyatidae | *Bathytoshia lata* | Brown stingray | (Garman, 1880) | 1 | 1 | 1 | 1 |  |  |  | 1 |  | 1 |  |  |  |  |  | VU | IUCN VU |
| Dasyatidae | *Dasyatis chrysonota* | Blue stingray | (Smith, 1828) | 1 | - |  |  |  | 1 |  | - |  | - |  |  |  |  |  | NT | IUCN NT |
| Dasyatidae | *Himantura leoparda* | Leopard whipray | Manjaji-Matsumoto & Last, 2008 | 1 | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
| Dasyatidae | *Maculabatis ambigua* | Baraka's whipray | Last, Bogorodsky, & Alpermann, 2016 |  | 1 | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  | NT | IUCN NT |
| Dasyatidae | *Pastinachus ater* | Broad cowtail ray | (Macleay, 1883) | 1 | 1 | 1 | 1 | 1 | 1 |  |  | 1 | - | 1 |  |  |  |  | VU | IUCN VU |
| Dasyatidae | *Pateobatis fai* | Pink whipray | (Jordan & Seale, 1906) | 1 | 1 | 1 |  |  | 1 |  |  |  |  | 1 |  |  |  |  | VU | IUCN VU |
| Dasyatidae | *Pateobatis jenkinsii* | Jenkins whipray | (Annandale, 1909) | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
| Dasyatidae | *Taeniurops meyeni* | Blotched stingray | (Müller & Henle, 1841) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  |  |  |  | VU | IUCN VU |
| Dasyatidae | *Urogymnus asperrimus* | Porcupine ray | (Bloch & Schneider, 1801) | 1 | 1 | 1 | 1 | 1 | 1 |  |  | 1 |  | 1 |  |  |  |  | VU | IUCN VU |
| Dasyatidae | *Urogymnus granulatus* | Mangrove whipray | (Macleay, 1883) |  |  |  | 1 |  |  |  |  | 1 |  | 1 |  |  |  |  | VU | IUCN VU |
| Gymnuridae | *Gymnura poecilura* | Longtail butterfly ray | (Shaw, 1804) |  | - | - | 1 | 1 | - |  |  |  |  |  |  |  |  |  | VU | IUCN VU |
| Narkidae | *Heteronarce garmani* | Natal electric ray | Regan, 1921 | 1 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  | NT | IUCN NT |
| Rajidae | *Dipturus campbelli* | Blackspot skate | (Wallace, 1967) | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | NT | IUCN NT |
| Rajidae | *Dipturus crosnieri* | Madagascar skate | (Serét, 1989) |  |  |  |  |  | 1 |  |  |  |  |  | - |  |  |  | VU | IUCN VU |
| Rajidae | *Leucoraja wallacei* | Yellowspotted skate | (Hulley, 1970) | 1 | 1 |  |  |  |  |  |  |  |  |  | - |  |  |  | VU | IUCN VU |
| Rajidae | *Raja clavata* | Thornback skate | Linnaeus, 1758 | 1 |  |  |  |  | 1 | 1 | 1 |  |  |  |  |  |  |  | NT | IUCN NT |
| Rajidae | *Raja straeleni* | Biscuit skate | Poll, 1951 | 1 | 1 |  |  |  | - | - |  |  |  |  |  |  |  |  | NT | IUCN NT |
| Rhinobatidae | *Acroteriobatus annulatus* | Lesser guitarfish | Smith, 1841 | 1 |  |  |  |  |  |  |  |  |  |  |  | II |  |  | VU | CITES II; IUCN VU |
| Rhinobatidae | *Acroteriobatus andysabini* | Malagasy blue-spotted guitarfish | Weigmann, Ebert, & Séret, 2021 |  |  |  |  |  | 1 |  |  |  |  |  |  | II |  |  | NE | CITES II |
| Rhinobatidae | *Acroteriobatus ocellatus* | Speckled guitarfish | Norman, 1926 | 1 | 1 |  |  |  |  |  |  |  |  |  |  | II |  |  | DD | CITES II |
| Rhinobatidae | *Acroteriobatus zanzibarensis* | Zanzibar guitarfish | Norman, 1926 |  |  | 1 | 1 | - |  |  |  |  |  |  |  | II |  |  | NT | CITES II; IUCN NT |
| Rhinobatidae | *Rhinobatos austini* | Austin's guitarfish | Ebert & Gon, 2017 | 1 | 1 | 1 |  |  | 1 |  |  |  |  |  |  | II |  |  | DD | CITES II |
| Rhinobatidae | *Rhinobatos holcorhynchus* | Slender guitarfish | Norman, 1922 | 1 | 1 | 1 | 1 |  | 1 |  |  |  |  |  |  | II |  |  | DD | CITES II |
| Rhinobatidae | *Rhinobatos nudidorsalis* | Bareback Guitarfish | Last, Compagno, & Nakaya, 2004 |  |  |  |  |  |  |  |  |  |  |  | 1 | II |  |  | DD | CITES II |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Chimaeras*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chimaeridae | *Chimaera didierae* | The Falkor chimaera | Clerkin, Ebert & Kemper, 2017 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  | DD | SIOFA |
| Chimaeridae | *Chimaera willwatchi* | Seafarer’s ghost shark | Clerkin, Ebert & Kemper 2017 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  | DD | SIOFA |
| Rhinochimaeridae | *Harriotta raleighana* | Narrownose chimaera | Goode & Bean, 1895 | 1 | 1 |  |  |  |  |  |  |  |  |  | - |  |  |  | LC | SIOFA |

**Table 3:** Shark, batoid, marine turtle and marine mammal species recommended for listing on Nairobi Convention Annex IV, based on their listing on the Convention on the Conservation of Migratory Species of Wild Animals Appendix I (CMS I), CMS Appendix II (CMS II), the CMS Sharks MOU (if not listed on CMS Appendix I or II), CMS Indian Ocean and South-East Asia Turtle MOU (CMS Turtle MOU), or CMS Dugong MOU, or being identified as migratory (M) or possibly migratory (PM) as defined by Fowler (2014), or their listing as migratory on the United Nations Convention on the Law of the Sea Annex I at the family level (UNCLOS) or species level (UNCLOS species). Countries in which the species is confirmed (1) or reported but not confirmed (-), if the species is listed on CITES and/or CMS Appendix I or II, if the species is prohibited from capture by the IOTC (x) and the current IUCN Red List status (IUCN) for each species is also presented (CR = Critically Endangered, EN = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern, DD = Data Deficient). ZA = South Africa, MZ = Mozambique, TZ = Tanzania, KE = Kenya, SO = Somalia, MG = Madagascar, MU = Mauritius, RE = La Réunion, SC = Seychelles, KM = Comoros, YT = Mayotte, ABNJ = Areas Beyond National Jurisdiction.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Family** | **Species** | **Common name** | **Taxonomic reference** | **ZA** | **MZ** | **TZ** | **KE** | **SO** | **MG** | **MU** | **RE** | **SC** | **KM** | **YT** | **ABNJ** | **CITES** | **CMS** | **IOTC** | **IUCN** | **Criteria for listing on Annex IV** |
| ***Sharks*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alopiidae a | *Alopias pelagicus* | Pelagic thresher shark | Nakamura, 1935 | 1 | 1 | 1 | 1 | 1 | 1 | - | - | 1 | 1 | 1 | - | II | II | x | EN | CMS II; M; UNCLOS |
| Alopiidae a | *Alopias superciliosus* | Bigeye thresher shark | (Lowe, 1841) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - | II | II | x | VU | CMS II; M; UNCLOS |
| Alopiidae a | *Alopias vulpinus* | Common thresher shark | (Bonnaterre, 1788) | 1 | - | - | - | - | - | - | - | - | - | - | 1 | II | II | x | VU | CMS II; M; UNCLOS |
| Carcharhinidae a | *Carcharhinus albimarginatus* | Silvertip shark | (Rüppell, 1837) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | VU | PM; UNCLOS |
| Carcharhinidae a | *Carcharhinus altimus* | Bignose shark | (Springer, 1950) | 1 | 1 | 1 | - | - | 1 |  |  |  |  | - |  | II |  |  | NT | PM; UNCLOS |
| Carcharhinidae a | *Carcharhinus amblyrhynchos* | Grey reef shark | (Bleeker, 1856) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | EN | PM; UNCLOS |
| Carcharhinidae a | *Carcharhinus amboinensis* | Pigeye shark | (Müller & Henle, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  |  |  | II |  |  | VU | PM; UNCLOS |
| Carcharhinidae a | *Carcharhinus amblyrhynchoides* | Graceful shark | Whitley 1934 |  |  |  |  | 1 |  |  |  | - |  |  |  | II |  |  | VU | M; UNCLOS |
| Carcharhinidae a | *Carcharhinus brachyurus* | Copper shark | (Günther, 1870) | 1 | - |  |  |  | 1 |  |  | 1 |  |  |  | II |  |  | VU | M; UNCLOS |
| Carcharhinidae a | *Carcharhinus brevipinna* | Spinner shark | (Valenciennes, 1839) | 1 | 1 |  |  |  | 1 | 1 | 1 | 1 |  |  |  | II |  |  | VU | M; UNCLOS |
| Carcharhinidae a | *Carcharhinus falciformis* | Silky shark | (Müller & Henle, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | II |  | VU | CMS II; M; UNCLOS |
| Carcharhinidae a | *Carcharhinus galapagensis* | Galapagos shark | (Snodgrass & Heller, 1905) |  | 1 |  |  |  | 1 |  |  | 1 |  |  | 1 | II |  |  | LC | PM; UNCLOS |
| Carcharhinidae a | *Carcharhinus humani* | Human's whaler shark | White & Weigmann, 2014 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | II |  |  | DD | PM; UNCLOS |
| Carcharhinidae a | *Carcharhinus leucas* | Bull shark | (Valenciennes, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | VU | M; UNCLOS |
| Carcharhinidae a | *Carcharhinus limbatus* | Blacktip shark | (Valenciennes, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | VU | M; UNCLOS |
| Carcharhinidae a | *Carcharhinus longimanus* | Oceanic whitetip shark | (Poey, 1861) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | I | x | CR | CMS I; M; UNCLOS |
| Carcharhinidae a | *Carcharhinus macloti* | Hardnose shark | (Müller & Henle, 1839) |  |  | 1 | 1 | 1 |  |  |  |  |  |  |  | II |  |  | NT | M; UNCLOS |
| Carcharhinidae a | *Carcharhinus melanopterus* | Blacktip reef shark | (Quoy & Gaimard, 1824) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | VU | PM; UNCLOS |
| Carcharhinidae a | *Carcharhinus obscurus* | Dusky shark | (Lesueur, 1818) | 1 | 1 | - |  | 1 | 1 |  |  |  |  |  | - | II | II |  | EN | CMS II; M; UNCLOS |
| Carcharhinidae a | *Carcharhinus plumbeus* | Sandbar shark | (Nardo, 1827) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  |  | EN | M; UNCLOS |
| Carcharhinidae a | *Carcharhinus sorrah* | Spottail shark | (Valenciennes, 1839) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  | II |  |  | NT | PM; UNCLOS |
| Carcharhinidae a | *Negaprion acutidens* | Sicklefin lemon shark | (Rüppell, 1837) | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 |  | II |  |  | EN | M; UNCLOS |
| Carcharhinidae a | *Prionace glauca* | Blue shark | (Linnaeus, 1758) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | II |  | NT | CMS II; M; UNCLOS |
| Carcharhinidae a | *Rhizoprionodon acutus* | Milk shark | (Rüppell, 1837) | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  |  |  | II |  |  | VU | PM; UNCLOS |
| Carchariidae | *Carcharias taurus* | Ragged-tooth shark | Rafinesque, 1810 | 1 | 1 | 1 | - | 1 |  |  |  | 1 |  |  |  |  |  |  | CR | M |
| Cetorhinidae | *Cetorhinus maximus* | Basking shark | (Gunnerus, 1765) | 1 |  |  |  |  |  |  |  |  |  |  | 1 | II | I, II |  | EN | CMS I; M; UNCLOS species |
| Galeocerdonidae b | *Galeocerdo cuvier* | Tiger shark | (Péron & Lesueur, 1822) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | NT | M |
| Ginglymostomatidae | *Nebrius ferrugineus* | Tawny nurse shark | (Lesson, 1831) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  |  | VU | M |
| Hemigaleidae | *Hemipristis elongata* | Snaggletooth shark | (Klunzinger, 1871) | 1 | 1 | 1 | 1 | 1 | 1 |  |  | 1 |  |  |  |  |  |  | VU | PM |
| Hexanchidae | *Hexanchus griseus* | Bluntnose sixgill shark | (Bonnaterre, 1788) | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  |  | NT | M; UNCLOS species |
| Hexanchidae | *Notorynchus cepedianus* | Sevengill shark | (Peron, 1807) | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | VU | M |
| Lamnidae a, c | *Carcharodon carcharias* | Great white shark | (Linnaeus, 1758) | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | I, II |  | VU | CMS I; M; UNCLOS |
| Lamnidae a, c | *Isurus oxyrinchus* | Shortfin mako shark | Rafinesque, 1810 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | II |  | EN | CMS II; M; UNCLOS |
| Lamnidae a, c | *Isurus paucus* | Longfin mako shark | Guitart Manday, 1966 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | II |  | EN | CMS II; M; UNCLOS |
| Odontaspididae | *Odontaspis ferox* | Smalltooth sand tiger shark | (Risso, 1810) | 1 | - | 1 |  |  | 1 |  |  | 1 | 1 |  |  |  |  |  | VU | PM |
| Odontaspididae | *Odontaspis noronhai* | Bigeye sand tiger shark | (Maul, 1955) |  |  |  |  |  |  | 1 |  | - |  |  | 1 |  |  |  | LC | PM |
| Pseudocarchariidae | *Pseudocarcharias kamoharai* | Crocodile shark | (Matsubara, 1936) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - |  |  |  | LC | PM |
| Rhincodontidae | *Rhincodon typus* | Whale shark | Smith, 1828 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | I, II | x | EN | CMS I; M; UNCLOS species |
| Somniosidae | *Somniosus antarcticus* | Southern sleeper shark | Whitley, 1939 |  |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  | LC |  |
| Sphyrnidae a | *Sphyrna lewini* | Scalloped hammerhead shark | (Griffith & Smith, 1834) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - | II | II |  | CR | CMS II; M; UNCLOS |
| Sphyrnidae a | *Sphyrna mokarran* | Great hammerhead shark | (Rüppell, 1837) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | - | II | II |  | CR | CMS II; M; UNCLOS |
| Sphyrnidae a | *Sphyrna zygaena* | Smooth hammerhead shark | (Linnaeus, 1758) | 1 | 1 | - |  | 1 | 1 | 1 | 1 | 1 | 1 |  | - | II | II |  | VU | CMS II; M; UNCLOS |
| Triakidae | *Mustelus mustelus* | Common smoothhound | (Linnaeus, 1758) | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | EN | M |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Batoids (rays, skates, wedgefishes, sawfishes)*** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aetobatidae | *Aetobatus ocellatus* d | Indian eagle ray | (Kuhl, 1823) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | VU | M |
| Dasyatidae | *Dasyatis chrysonota* | Blue stingray | (Smith, 1828) | 1 | - |  |  |  | 1 |  | - |  | - |  |  |  |  |  | NT | PM |
| Dasyatidae | *Himantura uarnak* | Honeycomb stingray | (Gmelin, 1789) | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  | 1 |  |  |  |  | EN | M |
| Dasyatidae | *Pateobatis fai* d | Pink whipray | (Jordan & Seale, 1906) | 1 | 1 | 1 |  |  | 1 |  |  |  |  | 1 |  |  |  |  | VU | M |
| **Family** | **Species** | **Common name** | **Taxonomic reference** | **ZA** | **MZ** | **TZ** | **KE** | **SO** | **MG** | **MU** | **RE** | **SC** | **KM** | **YT** | **ABNJ** | **CITES** | **CMS** | **IOTC** | **IUCN** | **Criteria for listing on Annex IV** |
| ***Batoids (rays, skates, wedgefishes, sawfishes) continued…*** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dasyatidae | *Pteroplatytrygon violacea* | Pelagic stingray | (Bonaparte, 1832) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | LC | M |
| Gymnuridae | *Gymnura natalensis* | Diamond ray | (Gilchrist & Thompson, 1911) | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | LC | PM |
| Mobulidae | *Mobula alfredi* | Reef manta ray | (Krefft, 1868) | 1 | 1 | 1 |  |  | 1 |  |  | 1 | 1 | 1 | 1 | II | I, II | x | VU | CMS I; M |
| Mobulidae | *Mobula birostris* | Giant manta ray | (Walbaum, 1792) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II | I, II | x | EN | CMS I; M |
| Mobulidae | *Mobula eregoodoo* | Longhorned pygmy devil ray | (Cantor 1849) | 1 | - | - | - | 1 | - | - | - | - | - | - | - | II | I, II | x | EN | CMS I; PM |
| Mobulidae | *Mobula kuhlii* | Shortfin devil ray | (Valenciennes, 1841) | 1 | 1 | 1 | 1 | 1 | 1 | - | - | 1 | - | 1 |  | II | I, II | x | EN | CMS I; M |
| Mobulidae | *Mobula mobular* | Spinetail devil ray | (Bonnaterre, 1788) | 1 | 1 | 1 | 1 | 1 | 1 |  |  | 1 |  | 1 | 1 | II | I, II | x | EN | CMS I; M |
| Mobulidae | *Mobula tarapacana* | Sicklefin devil ray | (Philippi, 1892) | 1 | - | 1 |  |  |  | 1 | 1 |  |  |  | 1 | II | I, II | x | EN | CMS I; M |
| Mobulidae | *Mobula thurstoni* | Bentfin devil ray | (Lloyd, 1908) | 1 | - | 1 |  |  | 1 |  |  |  |  |  | - | II | I, II | x | EN | CMS I; PM |
| Myliobatidae | *Aetomylaeus bovinus* d | Duckbill ray | (Saint-Hilaire, 1817) | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | CR | PM |
| Myliobatidae | *Aetomylaeus vespertilio* | Ornate eagle ray | (Bleeker, 1852) | 1 | 1 | 1 | 1 |  |  |  |  | 1 |  |  |  |  |  |  | EN | PM |
| Myliobatidae | *Myliobatis aquila* | Common eagle ray | (Linnaeus, 1758) | 1 | 1 | 1 | 1 |  |  | 1 | 1 |  |  |  |  |  |  |  | CR | PM |
| Pristidae | *Pristis pristis* | Largetooth sawfish | (Linnaeus, 1758) | 1 | 1 | 1 | 1 | 1 | 1 | - | - | - |  |  |  | I | I, II |  | CR | CMS I; M |
| Pristidae | *Pristis zijsron* | Green sawfish | (Bleeker, 1851) | 1 | 1 | - | 1 | 1 |  | - | - |  |  |  |  | I | I, II |  | CR | CMS I |
| Rajidae | *Raja clavata* | Thornback skate | Linnaeus, 1758 | 1 |  |  |  |  | 1 | 1 | 1 |  |  |  |  |  |  |  | NT | PM |
| Rajidae | *Raja straeleni* | Biscuit skate | Poll, 1951 | 1 | 1 |  |  |  | - | - |  |  |  |  |  |  |  |  | NT | M |
| Rhinidae | *Rhynchobatus australiae* | Bottlenose wedgefish | Whitley, 1939 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | II | II |  | CR | CMS II |
| Rhinidae | *Rhynchobatus djiddensis* | Whitespotted wedgefish | (Forsskål, 1775) | 1 | 1 | - | - | - | - | - | - | - |  | - |  | II |  |  | CR | CMS Sharks MOU; M |
| Rhinobatidae | *Acroteriobatus annulatus* d | Lesser guitarfish | Smith, 1841 | 1 |  |  |  |  |  |  |  |  |  |  |  | II |  |  | VU | M |
| Torpedinidae | *Torpedo fuscomaculata* | Blackspotted electric ray | Peters, 1855 | 1 | 1 | 1 |  |  | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  |  | DD | PM |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Marine turtles*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cheloniidae | *Caretta caretta e* | Loggerhead turtle | (Linnaeus, 1758) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | I | x | VU | CMS I; CITES I; IOTC |
| Cheloniidae | *Chelonia mydas e* | Green turtle | (Linnaeus, 1758) |  | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 | 1 | I | I | x | EN | CMS I; CITES I; IOTC; IUCN EN |
| Cheloniidae | *Eretmochelys imbricata e* | Hawksbill turtle | (Linnaeus, 1766) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | I | x | CR | CMS I; CITES I; IOTC; IUCN CR |
| Cheloniidae | *Lepidochelys olivacea e* | Olive ridley turtle | (Eschscholtz, 1829) | - | 1 | 1 | 1 | 1 | 1 | - | - | 1 | 1 | 1 | - | I | I | x | VU | CMS I; CITES I; IOTC |
| Dermochelyidae | *Dermochelys coriacea e* | Leatherback turtle | (Vandelli, 1761) | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | I | x | VU | CMS I; CITES I; IOTC |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Marine mammals*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Balaenidae a | *Eubalaena australis* | Southern right whale | Desmoulins, 1822 | 1 | 1 |  |  |  | 1 |  |  |  |  |  | 1 | I | I | x | LC | CMS I; UNCLOS |
| Balaenopteridae a | *Balaenoptera acutorostrata* | Common minke whale | Lacépède, 1804 | 1 | 1 |  |  |  |  |  |  |  |  |  | 1 | I |  | x | LC | UNCLOS |
| Balaenopteridae a | *Balaenoptera bonaerensis* | Antarctic minke whale | Burmeister, 1867 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 |  | 1 | 1 | 1 | I | II | x | NT | CMS II; UNCLOS |
| Balaenopteridae a | *Balaenoptera borealis schlegelii* | Sei whale | Flower, 1865 | 1 |  |  |  |  | 1 |  | 1 |  |  |  | 1 | I | I | x | EN | CMS I; UNCLOS |
| Balaenopteridae a | *Balaenoptera edeni brydei* | Bryde's whale | Olsen, 1913 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | I | II | x | LC | CMS II; UNCLOS |
| Balaenopteridae a | *Balaenoptera edeni edeni* | Bryde's whale | Anderson, 1879 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | I | II | x | LC | CMS II; UNCLOS |
| Balaenopteridae a | *Balaenoptera musculus brevicauda* | Pygmy blue whale | Ichihara, 1966 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | I | I | x | EN | CMS I; UNCLOS |
| Balaenopteridae a | *Balaenoptera musculus intermedia* | Antarctic blue whale | Burmeister, 1871 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | I | x | EN | CMS I; UNCLOS |
| Balaenopteridae a | *Balaenoptera omurai* | Omura's whale | Wada, Oishi and Yamada, 2003 |  |  |  |  | 1 | 1 |  |  |  |  |  |  | I | II | x | DD | CMS II; UNCLOS |
| Balaenopteridae a | *Balaenoptera physalus* | Fin whale | Linnaeus, 1758 | 1 | 1 |  |  |  | 1 | 1 |  | 1 |  | 1 | 1 | I | I | x | VU | CMS I; UNCLOS |
| Balaenopteridae a | *Megaptera novaeangliae australis* | Humpback whale | Borowski, 1781 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | I | I | x | LC | CMS I; UNCLOS |
| Delphinidae a | *Delphinus delphis delphis* | Common dolphin | Linnaeus, 1758. | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | 1 | 1 | 1 | II |  | x | LC | UNCLOS |
| Delphinidae a | *Feresa attenuata* | Pygmy killer whale | Gray, 1874. | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | 1 | 1 | 1 | II |  | x | LC | UNCLOS |
| Delphinidae a | *Globicephala macrorhynchus* | Short-finned pilot whale | Gray, 1846 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  | x | LC | UNCLOS |
| Delphinidae a | *Globicephala melas edwardii* | Southern long-finned pilot whale | Smith, 1834 | 1 |  |  |  |  |  |  |  |  |  |  |  | II |  | x | LC | UNCLOS |
| Delphinidae a | *Grampus griseus* | Risso's dolphin | Cuvier, 1812 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  | x | LC | UNCLOS |
| Delphinidae a | *Lagenodelphis hosei* | Frasers dolphin | Fraser, 1956. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | UNCLOS |
| Delphinidae a | *Lissodelphis peronii* | Southern right whale dolphin | Lacépède, 1804 | 1 | 1 |  |  |  |  |  |  |  |  |  | 1 | II |  | x | LC | UNCLOS |
| Delphinidae a | *Orcinus orca* | Killer whale | Linnaeus, 1758 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | II | II | x | DD | CMS II |
| Delphinidae a | *Peponocephala electra* | Melon-headed whale | Gray, 1846 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  | x | LC | UNCLOS |
| Delphinidae a | *Pseudorca crassidens* | False killer whale | Owen, 1846 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | NT | UNCLOS |
| Delphinidae a | *Sousa plumbea* | Indian Ocean humpback dolphin | Cuvier, 1829 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | 1 | 1 |  | I |  | x | EN | UNCLOS |
| Delphinidae a | *Stenella attenuata* | Pantropical spotted dolphin | Gray, 1846 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | UNCLOS |
| Delphinidae a | *Stenella coeruleoalba* | Striped dolphin | Meyen, 1833 | 1 | 1 | 1 | 1 | 1 | 1 |  |  | 1 | 1 | 1 | 1 | II |  | x | LC | UNCLOS |
| Delphinidae a | *Stenella longirostris* | Spinner dolphin | Gray, 1828 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | UNCLOS |
| Delphinidae a | *Steno bredanensis* | Rough-toothed dolphin | Lesson, 1828) | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | UNCLOS |
| Delphinidae a | *Tursiops aduncus* | Indo-Pacific bottlenose dolphin | Ehrenberg, 1833 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | II |  | x | NT | UNCLOS |
| Delphinidae a | *Tursiops truncatus truncatus* | Common bottlenose dolphin | Montagu, 1821 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | UNCLOS |
| **Family** | **Species** | **Common name** | **Taxonomic reference** | **ZA** | **MZ** | **TZ** | **KE** | **SO** | **MG** | **MU** | **RE** | **SC** | **KM** | **YT** | **ABNJ** | **CITES** | **CMS** | **IOTC** | **IUCN** | **Criteria for listing on Annex IV** |
| ***Marine mammals continued…*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dugongidae | *Dugong dugon* | Dugong | Müller, 1776 |  | 1 | 1 | 1 | 1 | 1 |  |  | 1 | 1 | 1 |  | I | II |  | VU | CMS II; CMS Dugong MOU |
| Neobalaenidae | *Caperea marginata* | Pygmy right whale | Gray, 1846 | 1 |  |  |  |  |  |  |  |  |  |  |  | I | II | x | LC | CMS II |
| Otariidae | *Arctocephalus pusillus pusillus* | Cape Fur Seal | Schreber, 1775 | 1 | 1 |  |  |  |  |  | 1 |  |  |  | 1 | II | II |  | LC | CMS II |
| Physeteridae a | *Physeter macrocephalus* | Sperm whale, cachalot | Linnaeus, 1758 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | I | I | x | VU | CMS I; UNCLOS |
| Ziphiidae a | *Berardius arnuxii* | Arnoux's beaked whale | Duvernoy, 1851 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | I |  | x | LC | UNCLOS |
| Ziphiidae a | *Hyperoodon planifrons* | Southern bottlenose whale | Flower, 1882 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | I |  | x | LC | UNCLOS |
| Ziphiidae a | *Indopacetus pacificus* | Longman's beaked whale | Longman, 1926 | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  | 1 | 1 | 1 | II |  | x | LC | UNCLOS |
| Ziphiidae a | *Mesoplodon densirostris* | Blainville's beaked whale | Blainville, 1817 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | UNCLOS |
| Ziphiidae a | *Mesoplodon eueu* | Ramari's beaked whale | Carroll et al. 2021 | 1 | 1 |  |  |  | 1 |  |  |  |  |  | 1 | II |  | x | LC | UNCLOS |
| Ziphiidae a | *Mesoplodon grayi* | Gray's beaked whale | von Haast, 1876 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | II |  | x | LC | UNCLOS |
| Ziphiidae a | *Mesoplodon layardii* | Strap-toothed beaked whale | Gray, 1865 | 1 |  |  |  |  |  |  |  |  |  |  | 1 | II |  | x | LC | UNCLOS |
| Ziphiidae a | *Ziphius cavirostris* | Cuvier's beaked whale | Cuvier, 1823 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | II |  | x | LC | UNCLOS |

a Listed by family in UNCLOS Annex I: [un.org/depts/los/convention\_agreements/texts/unclos/annex1.htm](http://www.un.org/depts/los/convention_agreements/texts/unclos/annex1.htm)

b Previously in family Carcharhinidae and therefore listed by family in UNCLOS Annex I

c Listed on UNCLOS Annex I under previous taxonomic family name - Isuridae

d Taxonomic update since Fowler (2014)

1. *“Decision CP7/12: Conservation of Sharks. 1. To call for regional collaboration, in consultation with the Secretariats of the Convention on International Trade in Endangered Species, Convention on Migratory Species, regional fisheries management organizations and other partners, on the conservation and management of sharks.* [↑](#footnote-ref-1)
2. IUCN 2023. The IUCN Red List of Threatened Species. Version 2023-2. [iucnredlist.org](http://www.iucnredlist.org), accessed 20 February 2023 [↑](#footnote-ref-2)
3. IUCN 2012. *IUCN Red List Categories and Criteria: Version 3.1*. Second edition. Gland, Switzerland and Cambridge, UK: IUCN. iv + 32pp. <https://portals.iucn.org/library/node/10315> [↑](#footnote-ref-3)
4. IUCN 2019. Guidelines for Using the IUCN Red List Categories and Criteria. Version 14. <https://www.iucnredlist.org/resources/redlistguidelines> [↑](#footnote-ref-4)
5. “All taxa listed as Critically Endangered qualify for Vulnerable and Endangered, and all listed as Endangered qualify for Vulnerable. Together these categories are described as ‘threatened’” (IUCN 2012) [↑](#footnote-ref-5)
6. A Near Threatened species “does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future” (IUCN 2012) [↑](#footnote-ref-6)
7. “A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable”, and “it is therefore considered to be facing a *high risk of extinction in the wild.*” (IUCN 2012) <https://portals.iucn.org/library/node/10315> [↑](#footnote-ref-7)
8. “A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered”, and “it is therefore considered to be facing *a very high risk of extinction in the wild.*” (IUCN 2012) <https://portals.iucn.org/library/node/10315> [↑](#footnote-ref-8)
9. “A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered”, and “it is therefore considered to be facing *an extremely high risk of extinction in the wild*.”(IUCN 2012) <https://portals.iucn.org/library/node/10315> [↑](#footnote-ref-9)
10. Following the original Protocol’s definition for Endangered [↑](#footnote-ref-10)
11. [cms.int/en/page/appendix-i-ii-cms](https://www.cms.int/en/page/appendix-i-ii-cms) [↑](#footnote-ref-11)
12. IUCN 2023. The IUCN Red List of Threatened Species. Version 2023-2. [iucnredlist.org](http://www.iucnredlist.org), accessed 20 February 2023 [↑](#footnote-ref-12)
13. IUCN 2012. *IUCN Red List Categories and Criteria: Version 3.1*. Second edition. Gland, Switzerland and Cambridge, UK: IUCN. iv + 32pp. [↑](#footnote-ref-13)
14. [cites.org/eng/app/appendices.php](https://www.cites.org/eng/app/appendices.php) [↑](#footnote-ref-14)
15. The ‘great whales’ comprise 13 species, 12 of which occur in the NC area: Antarctic blue whale, pygmy blue whale, fin whale, sei whale, two subspecies of Bryde’s whale, humpback whale, Omura’s whale, common minke whale, Antarctic minke whale, Southern right whale, sperm whale [↑](#footnote-ref-15)
16. [un.org/depts/los/convention\_agreements/convention\_overview\_convention.htm](http://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm) [↑](#footnote-ref-16)
17. [cms.int/en/page/appendix-i-ii-cms](https://www.cms.int/en/page/appendix-i-ii-cms) [↑](#footnote-ref-17)
18. [cites.org/eng/app/appendices.php](https://www.cites.org/eng/app/appendices.php) [↑](#footnote-ref-18)
19. <https://www.apsoi.org/> [↑](#footnote-ref-19)
20. SIOFA 2019. *Conservation and Management Measure for Sharks (Sharks)*. 1–3. [↑](#footnote-ref-20)
21. IUCN 2023. The IUCN Red List of Threatened Species. Version 2023-2. [iucnredlist.org](http://www.iucnredlist.org), accessed 20 February 2023 [↑](#footnote-ref-21)
22. IUCN 2012. *IUCN Red List Categories and Criteria: Version 3.1*. Second edition. Gland, Switzerland and Cambridge, UK: IUCN. iv + 32pp. [↑](#footnote-ref-22)
23. [cms.int/en/page/appendix-i-ii-cms](https://www.cms.int/en/page/appendix-i-ii-cms) [↑](#footnote-ref-23)
24. [cms.int/sharks/en/species](https://www.cms.int/sharks/en/species) [↑](#footnote-ref-24)
25. <https://www.cms.int/dugong> [↑](#footnote-ref-25)
26. <https://www.cms.int/iosea-turtles> [↑](#footnote-ref-26)
27. [un.org/depts/los/convention\_agreements/convention\_overview\_convention.htm](http://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm) [↑](#footnote-ref-27)
28. [un.org/depts/los/convention\_agreements/texts/unclos/annex1.htm](http://www.un.org/depts/los/convention_agreements/texts/unclos/annex1.htm) [↑](#footnote-ref-28)
29. Fowler, S. 2014. *The Conservation Status of Migratory Sharks*. UNEP/CMS Secretariat. Bonn, Germany. 30pp. [↑](#footnote-ref-29)
30. [cms.int/en/convention-text](https://www.cms.int/en/convention-text) [↑](#footnote-ref-30)