

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



Thirty-third meeting of the Animals Committee  
Geneva (Switzerland), 12 – 19 July 2024

Species conservation and trade

Aquatic species

SHARKS AND RAYS (ELASMOBRANCHII SPP.)

1. This document has been prepared by the Secretariat.
2. In Resolution Conf. 12.6 (Rev. CoP18) on *Conservation and management of sharks*, the Conference of the Parties:
  13. *DIRECTS the Animals Committee to periodically examine new information provided by range States on the implementation of the shark listings and other available relevant data and information;*
  14. *DIRECTS the Animals Committee to make species-specific recommendations, if necessary, on improving the conservation status of sharks and implementation of shark and ray listings;*
3. At its 19th meeting (CoP19; Panama City, 2022), the Conference of the Parties adopted Decisions 19.222 to 19.227 on *Sharks and rays (Elasmobranchii spp.)* which are presented in Annex 1 to the present document.

Implementation of Decisions 19.222 and 19.224

4. Pursuant to Decisions 19.222 and 19.224, the Secretariat issued Notification to the Parties [No. 2023/027](#) on 16 March 2023, inviting Parties to submit information related to conservation and management of sharks. The Secretariat presented information related to conservation and management of sharks and rays as reported by Parties in response to the Notification, including copies of non-detriment findings (NDF) and conversion factors to the 32nd meeting of the Animals Committee (AC32; Geneva, June 2023) in document [AC32 Doc. 37 \(Rev. 1\)](#). The Animals Committee invited the Secretariat to issue an additional Notification to the Parties and to report on the responses received to the present meeting (see summary record [AC32 SR](#)). The Secretariat published [Notification to the Parties No. 2024/004](#) on 4 January 2024.
5. In addition to the Parties that responded to Notification to the Parties No. 2023/027 [see document AC32 Doc. 37 (Rev. 1)], the following 17 Parties responded to Notification to the Parties No. 2024/004: Australia, Bangladesh, Canada, Colombia, European Union, Finland, Indonesia, Japan, Mexico, Morocco, Mozambique, Namibia, Philippines, Republic of Korea, Senegal, United Kingdom of Great Britain and Northern Ireland, and United States of America. A non-governmental organization, Wildlife Conservation Society, also provided a response. The responses are provided in Annex 2 to the present document.
6. Since AC32, Australia, Brazil, El Salvador, Namibia and Japan shared non-detriment findings (NDFs) with the Secretariat, which are available on the sharks and rays portal and the Virtual College NDF database. In addition, Guatemala shared conversion factors, which are available on the sharks and rays portal.
7. In accordance with Decision 19.224, paragraph b), the Secretariat provides information from the CITES Trade Database on commercial trade in CITES-listed sharks and rays since 2010 sorted by species and by

product. The overview is presented in Annex 3 and the raw data accessed on 25 March 2024 is presented as an Excel file in Annex 4 to the present document.

8. The information from the CITES Trade Database is presented at the shipment level as opposed to the aggregate records available on the database to show a fine-scale view of the trade in sharks and rays. The main findings since a similar report was provided to AC32 are:
  - a) the information provided in the Annex is based on shipment level records as opposed to the aggregate records used for the report provided to AC32;
  - b) there are no major changes in the most traded species for commercial purposes with *Isurus oxyrinchus* and *Carcharhinus falciformis* making up the largest number of shipment records and the largest volume of species in trade;
  - c) for introduction from the sea (one-state trade), the majority of the transactions are of *I. oxyrinchus* and the main trade term used is “bodies”; and
  - d) a diverse number of species continues to be recorded for trade in fins with records using the new trade terms for fins (dried) and fins (wet) .

#### Implementation of Decision 19.223

##### *Paragraph a) on capacity-building assistance for implementing Appendix-II shark and ray listings*

9. Funding to provide capacity-building support to Parties has been secured thanks to the generous support of the European Union. The Secretariat appreciates the support provided in this regard. To date, Colombia, Nicaragua, Senegal, the Solomon Island and Yemen have requested technical support on making of NDFs for sharks and rays.
10. In implementation of Decisions 19.132 to 19.134 on *Non-detriment findings*, the CITES NDF guidance has been developed. In addition to the generic guidance modules, a module on “NDFs for aquatic species” has been developed that is relevant to Parties making NDFs on sharks and rays (further detail is presented in document [PC27 Doc. 16 / AC33 Doc. 16](#) on *Non-detriment findings*). Using the CITES NDF guidance, the Secretariat is planning to provide support to the Parties referred to in paragraph 9.
11. In addition, the Secretariat organized a technical workshop on *Non-detriment findings for specimens of Appendix-II species taken from areas beyond national jurisdiction (ABNJ)* in accordance with Decision 19.136. The workshop considered how NDFS might best be made for specimens of Appendix II-listed species taken from ABNJ, the majority of which are Elasmobranchii species (further detail is presented in document [AC33 Doc. 17](#)). Delegates from 18 Parties, including Colombia and Senegal that requested technical support as mentioned above, were sponsored to attend the workshop.

##### *Paragraph b) on liaising with relevant Regional Fisheries Management Organizations and Arrangements (RFMO/As)*

12. The Secretariat has been in close contact with several Secretariats of RFMOs and highlights the support received from RFMO Secretariats in the preparation of the background document to the workshop mentioned in paragraph 11 above. In addition, representatives of the Inter-American Tropical Tuna Commission (IATTC) and the International Commission for the Conservation of Atlantic Tunas (ICCAT) Secretariats attended the workshop to present information on sharks and rays and participate in the discussion. Furthermore, RFMO Secretariats were crucial in providing technical clarifications on the reports on shark species included in the Review of Significant Trade.

##### *Paragraph c) on the study on the apparent mismatch between reported and expected trade in shark species*

13. The Secretariat collaborated with TRAFFIC and Deakin University to conduct the further study on the apparent mismatch between the trade in products of CITES-listed sharks recoded in the CITES Trade Database and what would be expected against the information available on catches of listed species building on the study entitled “Missing sharks: A country review of catch, trade and management recommendations for CITES-listed shark species”. A summary of “Missing sharks: A country review of catch, trade and management recommendations for CITES-listed shark species” was shared with the 74th meeting of the Standing Committee (SC74, Lyon, March 2022) in document [SC74 Doc. 67.2](#) Annex 3 and the full report as

information document [SC74 Inf. 24](#). The further study entitled “Deep diving into shark catch and trade mismatches” is available in Annex 5 in English only.

14. The study built on the study in information document SC74 Inf. 24 and identified publicly available datasets on catch of Elasmobranchii species and identified the FAO Catch Statistics dataset and disaggregate data from ICCAT, IATTC and the Indian Ocean Tuna Commission (IOTC) as suitable datasets to analyse the mismatch on reported trade and expected trade. The Secretariat notes that the CITES Trade Database has been updated since it was used for the study and therefore new records have been added. The study identified that the possible sources of mismatch are:
  - a) the use of different units to report shark and ray trade within CITES Trade Database and others;
  - b) underreporting of exports and introduction from the sea of CITES-listed shark and ray species;
  - c) lack of clarity in the requirements of reporting under various scenarios of catch in the Economic Exclusive Zone (EEZ) of a Party and in ABNJ; and
  - d) difference in reporting of catch from territories and provinces in different databases (under CITES, the Party reports all catch from its dependent territories and provinces, but in other databases each territory may report separately);
15. Based on the studies, the Secretariat makes the following draft recommendations for consideration by the Animals Committee, noting that paragraph c) and d) would depend on availability of resources:
  - a) strongly encourage Parties to report all shark and ray trade in weight and not in number of specimens as indicated in the [Guidelines for the preparation and submission of CITES annual reports](#);
  - b) invite Parties to adopt traceability systems along the supply chains of CITES-listed species, noting the definition of traceability<sup>1</sup>, which has been agreed by the Parties to CITES and further guidance.
  - c) invite the Secretariat to follow-up on mismatches (differences in transactions reported by exporter/importer countries under the same permit; weights; species; etc.) in the CITES Trade Database and correct the mismatch, where possible;
  - d) invite the Secretariat to follow-up with countries that appear to not be reporting exports of sharks and rays (i.e., trade only reported by importing countries) to determine the reason for underreporting and provide necessary support to encourage reporting;
  - e) invite the Secretariat to examine the trade in source code “C” specimens of shark and rays that are unlikely to be captive-bred based on the biology of the specimens;
  - f) invite the Secretariat to propose clear guidance on the reporting of specimens taken from ABNJ; and
  - g) remind Parties of the obligation to submit annual reports to the CITES Secretariat, which includes introduction from the sea and export of sharks and rays and to report at the species level.

*Paragraph d) on collaboration with the UN Food and Agriculture Organization (FAO)*

16. Regarding the [shark measure database](#), the Secretariat has initiated discussions with FAO to ensure complementarity with the newly launched [CITES-LEX](#) and to ensure that the information including the database is organized in a manner that is most useful to CITES Parties. The Secretariat has secured funding to conduct this work through the contribution of the European Union. The Secretariat appreciates the support provided in this regard.
17. No funds were secured to compile clear imagery of wet and dried unprocessed shark fins to facilitate refinement of iSharkFin and so no progress has been made in compiling new images of shark fins. The

---

<sup>1</sup> *The working definition of CITES traceability is: traceability is the ability to access information on specimens and events in a CITES species supply chain. This information should be carried, on a case-by-case basis, from as close to the point of harvest as practicable and needed to the point at which the information facilitates the verification of legal acquisition and non-detriment findings and helps prevent laundering of illegal products.*

Secretariat notes that the images used to build iSharkFin have been useful in supporting other initiatives to develop digital identification tools for sharks such as [FinFinder](#).

18. FAO has conducted a study analysing the trade in non-fin shark products of CITES-listed species that is awaiting publication. The Secretariat looks forward to being able to share the publication with the Animals Committee, when available.

#### Recommendation from AC32

19. At AC32, the Committee invited the Standing Committee to consider several recommendations on sharks and rays. These recommendations were presented to the 77th meeting of the Standing Committee (SC77; Geneva, November 2023) in document [SC77 Doc. 67.2](#). The recommendations made by the Standing Committee are available in summary record [SC77 SR](#).
20. The Animals Committee further invited the Secretariat to consider the feasibility of including the addition of catch locations, at a minimum by ocean basin, of sharks and rays in the annual reports and amending the *Guidelines for the preparation and submission for CITES annual reports* (see summary record [AC32 SR](#)).
21. The Secretariat interprets the recommendation from AC32 to apply to specimens taken from ABNJ and presents three possible options for consideration by the Animals Committee to include catch locations in reporting.

#### *Option 1 – Ocean basins*

22. The catch locations of sharks could be considered at an ocean basin level to include all the oceans recognized by the International Hydrographic Organization (IHO) and their defined limits. This would include the Indian Ocean, North Pacific, South Pacific, North Atlantic, South Atlantic, Arctic Ocean and the Southern Ocean. The boundary line between the North and South Atlantic and Pacific Ocean is the equator, the southern boundary line between the South Atlantic and South Pacific is the meridian of Cape Horn and the northern geographic limit of the Southern Ocean is defined by the parallel of latitude 60°S (see Figure 1 below).



Figure 2. The ocean basin boundaries based on IHO. Flanders Marine Institute (2021). *Global Oceans and Seas*, version 1. Available online at <https://www.marinerregions.org/>. <https://doi.org/10.14284/542>.

23. This would provide a coarse view of the catch location of sharks and rays but may allow more Parties to be able to report catch locations.

#### *Option 2 – RFMO Convention areas*

24. Taking into consideration the existing boundaries established in tuna RFMOs, another option could be to use the four tuna RFMO (ICCAT, IATTC, IOTC and WCPFC<sup>2</sup>) Convention areas to demarcate the oceans for catch locations. However, the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) does not set geographic limits of its competence (see Figure 2 below).

---

<sup>2</sup> Western and Central Pacific Fisheries Commission

25. There is overlap in geographic areas of IATTC and WCPFC. Furthermore, the Convention areas of the five tuna RFMOs do not cover all the world's oceans. This option would require providing further clarification on the limits of each area and additional options to report on areas of the ocean that are not covered by the Convention areas of tuna RFMOs.

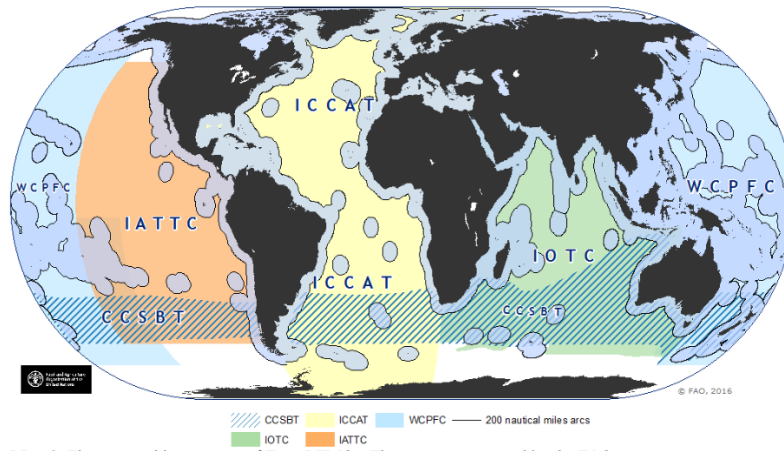


Figure 2. The geographic coverage of Tuna RFMOs. The map was prepared by FAO. (<https://www.cbd.int/doc/meetings/mar/soiom-2016-01/other/soiom-2016-01-fao-19-en.pdf>)

### Option 3 – FAO Major Fishing Areas

26. The 19 FAO major fishing areas provide a granular option to report catch locations for sharks and rays. As per the FAO website, the FAO major fishing areas are arbitrary areas, the boundaries of which were determined in consultation with international fishery agencies based on various considerations, including

- the boundary of natural regions and the natural divisions of oceans and seas;
- the boundaries of adjacent statistical fisheries bodies already established in intergovernmental conventions and treaties;
- existing national practices;
- national boundaries;
- the longitude and latitude grid system;
- the distribution of the aquatic fauna;
- the distribution of the resources and the environmental conditions within an area.

27. A map of the oceans with the 19 major marine fishing areas covering the waters of the Atlantic, Indian, Pacific and Southern Oceans with their adjacent seas is shown in Figure 3 below.

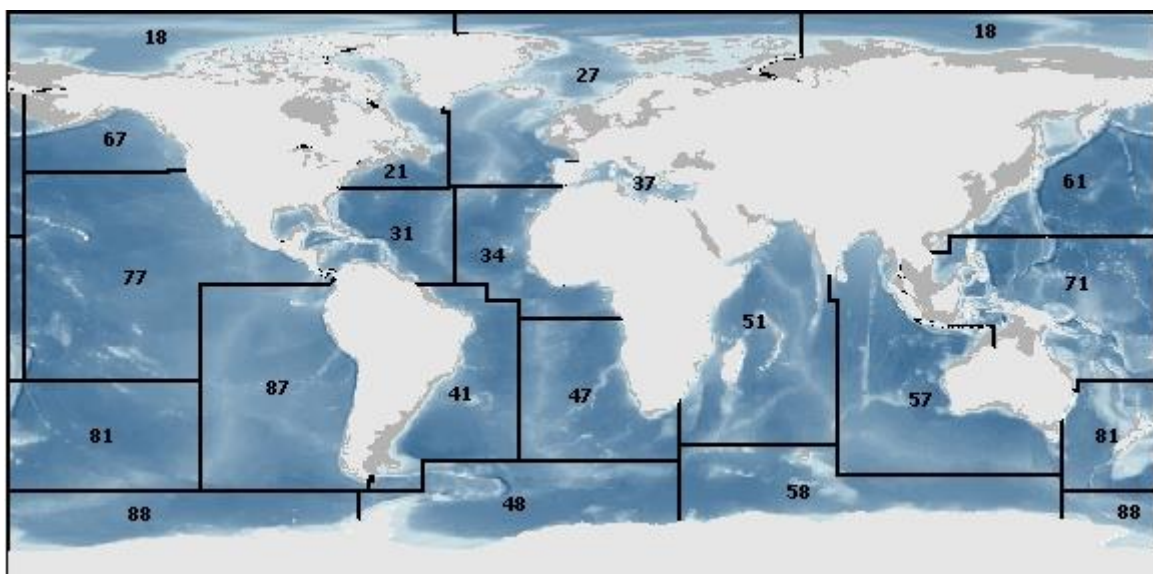


Figure 3. Map showing FAO major fishing areas. (<https://www.fao.org/fishery/en/area>)

28. The Secretariat is of the view that Option 1, which provides seven divisions of the high seas, is the best option. As the divisions proposed in Option 1 are simple, it would add a minimal burden on the Parties to include in their reporting, but still provide additional information on the location of the catch.

#### Recommendations

29. The Animals Committee is invited to:

- a) review the responses to the Notification the Parties in Annex 2 and the information from the CITES Trade Database on commercial trade in CITES-listed sharks and rays since 2010 presented in Annex 3;
- b) review the study and its recommendations conducted under Decision 19.223, paragraph c), as shown in paragraph 15;
- c) review the Secretariat's suggestions for adding ocean basins to the *Guidelines for the preparation and submission for CITES annual reports* shown in paragraphs 22-28; and
- d) draft recommendations and decisions to be submitted to the 78th meeting of the Standing Committee for its consideration.

DECISIONS ON *SHARKS AND RAYS (ELASMOBRANCHII SPP.)*  
ADOPTED BY THE 19TH MEETING OF THE CONFERENCE OF PARTIES

**Directed to Parties**

**19.222** Parties are encouraged to:

- a) in accordance with Resolution Conf. 12.6 (Rev. CoP18) on *Conservation and management of sharks*, provide brief information (with an executive summary not exceeding 200 words, if the report exceeds four pages) to the Secretariat, in particular on any national management measures that prohibit commercial take or trade and respond to the Notification called for in Decision 19.224;
- b) in accordance with their national legislation, provide a brief report (with an executive summary not exceeding 200 words, if the report exceeds four pages) to the Secretariat about the assessment of stockpiles of shark parts and derivatives for CITES-listed species stored and obtained before the entry into force of the inclusion in CITES in order to control and monitor their trade, if applicable;
- c) respond to the Notification called for in Decision 19.224 and share available national conversion factors used when estimating live catch weight by species, fishery, and product form for more accurate reporting of shark and ray trade data by Parties and indicate whether and how these are used in the development of their non-detriment findings (NDFs);
- d) in accordance with Resolution Conf. 9.7 (Rev. CoP15) on *Transit and transshipment*, inspect, to the extent possible under their national legislation, shipments of shark parts and derivatives in transit or being transhipped, to verify presence of CITES-listed species and verify the presence of a valid CITES permit or certificate as required under the Convention or to obtain satisfactory proof of its existence;
- e) seek external funding for a dedicated marine species officer and consider seconding staff members with expertise in fisheries and the sustainable management of aquatic resources to the Secretariat;
- f) in accordance with Resolution Conf. 11.3 (Rev. CoP19) on *Compliance and enforcement*, actively collaborate to combat illegal trafficking in sharks and ray products by developing mechanisms for coordination between source, transit, and destination countries; and
- g) consider if they are likely to be key beneficiaries from the guidance document(s) reviewed under Decision 19.226, paragraphs a) and b); if so, these Parties are strongly encouraged to participate in any Standing Committee working groups established to address Decision 19.226.

**Directed to the Secretariat**

**19.223** Subject to external funding, the Secretariat shall

- a) continue to provide capacity-building assistance for implementing Appendix-II shark and ray listings to Parties, especially developing countries and small island developing states, upon request;
- b) liaise with relevant Regional Fisheries Management Organizations and Arrangements (RFMO/As) to identify opportunities for capacity-building with the same organizations, possibly in the form of attending meetings (where the RFMO/A permits such attendance) or by directly liaising with the Secretariat of the organization to provide this information to its membership and/or the provision of training. The aim of this exercise would be to share information to improve the knowledge of CITES in the workings of each relevant RFMO/A;
- c) conduct a further study to look into the apparent mismatch between the trade in products of CITES-listed sharks recorded in the CITES Trade Database and what would be expected against the information available on catches of listed species, building on the study entitled *Missing sharks: A country review of catch, trade and management recommendations for CITES-listed shark species*

and share both studies with proposed solutions to resolve this issue to the Animals Committee and Standing Committee, in a timely manner;

- d) collaborate closely with the Food and Agriculture Organization of the United Nations (FAO) to:
  - i) verify that information about Parties' shark management measures is correctly reflected in the shark measures database developed by FAO (<http://www.fao.org/ipoa-sharks/database-of-measures/en/>) and if not, support FAO in correcting the information;
  - ii) compile clear imagery of wet and dried unprocessed shark fins (particularly, but not exclusively, those from CITES-listed species) along with related species level taxonomic information to facilitate refinement of iSharkFin software developed by FAO;
  - iii) conduct a study analysing the trade in non-fin shark products of CITES-listed species, including the level of species mixing in trade products and recommendations on how to address any implementation challenges arising from the mixing that may be identified; and
- e) bring the results of activities in this present Decision to the attention of the Animals Committee or Standing Committee, as appropriate.

**19.224** The Secretariat shall:

- a) issue a Notification to the Parties, inviting Parties to:
  - i) in accordance with Resolution Conf 12.6 (Rev. CoP18) on *Conservation and management of sharks*, provide concise (with 200 word executive summary, if the report exceeds four pages) new information on their shark and ray conservation and management activities, in particular:
    - A. the making of NDFs;
    - B. the making of legal acquisition findings (LAFs);
    - C. the identification and monitoring of CITES-listed shark-products in trade, in source, transit, and consumer Parties;
    - D. recording stockpiles of commercial and/or pre-Convention shark parts and derivatives for CITES Appendix-II elasmobranch species and controlling the entry of these stocks into trade; and
    - E. capacity-building needs to assist developing countries and small island developing states with reporting requirements; and
  - ii) share with the Secretariat their non-detriment findings (NDFs) and conversion factors used when estimating catch live weight through converting recorded shark landings and trade, where available, to post in the sharks and rays web portal;
  - iii) in accordance with Resolution Conf. 11.17 (Rev. CoP19) on *National reports*, highlight any questions, concerns or difficulties Parties are having in writing or submitting documentation on authorized trade data (e.g. which units are used in reporting trade) for the CITES Trade Database;
- b) provide information from the CITES Trade Database on commercial trade in CITES-listed sharks and rays since 2010, sorted by species and, if possible, by product;
- c) invite non-Party, intergovernmental organizations and non-governmental organization observers to support Parties by providing concise information related to the above;
- d) disseminate new or existing guidance identified by the Standing Committee on the control and monitoring of stockpiles of shark parts and derivatives pursuant to Decision 19.226, paragraph b);
- e) share information concerning capacity-building needs of developing countries including the possibility of training workshops; and



- f) collate this information for the consideration of the Animals Committee and the Standing Committee.

***Directed to the Animals Committee, in collaboration with relevant organizations and experts***

**19.225** The Animals Committee, in collaboration with relevant organizations and experts, shall:

- a) continue to develop guidance and review outcomes from the proposed international expert workshop on NDFs to support the making of NDFs for CITES-listed shark species, in particular in data-poor, multi-species, small-scale/artisanal, and non-target (by-catch) situations, and for shared and migratory stocks, and introduction from the sea;
- b) review the information submitted by the Secretariat under paragraph e) of Decision 19.223 and paragraph f) of Decision 19.224 and;
- c) report the outcomes of its work under the present Decision to the Standing Committee for incorporation into the joint report to the 20th meeting of the Conference of the Parties.

***Directed to the Standing Committee***

**19.226** The Standing Committee shall:

- a) review the revised *Rapid Guide on the making of legal acquisition findings*, and related assessments as they relate to trade in CITES-listed sharks species caught in areas beyond national jurisdiction (including introductions from the sea), and determine if more specific guidance is needed for CITES-listed-shark species, including engagement with RFMOs and any capacity-building which might support their role in the making of LAFs and related assessments;
- b) develop new guidance or identify existing guidance on the control and monitoring of stockpiles of shark parts and derivatives, in particular for specimens caught prior to the inclusion of the species in Appendix II;
- c) review the FAO's on-going guidance on Catch Document Schemes, Port State Measures and any other measures to reduce Illegal, Unregulated and Unreported (IUU) fishing;
- d) in consultation with the Animals Committee, discuss challenges related to transport of biological samples for research and data collection purposes in the context of fisheries management including the context of the provisions on introduction from the sea in Resolution Conf 14.6 (Rev. CoP16) and make recommendations to CoP20; and
- e) report its findings under the present Decision to the 20th meeting of the Conference of the Parties.

**19.227** The Standing Committee shall:

- a) review the comments and recommendations provided by the Parties, the Animals Committee and the Secretariat under Decisions 19.222 to 19.225; and
- b) prepare a report with any necessary recommendations for improving the implementation of the Convention for sharks and rays for consideration by the 20th meeting of the Conference of the Parties.

Responses to Notification to the Parties No. 2024/004

## Contents

Australia .....	2
Bangladesh .....	8
Canada .....	32
Colombia .....	34
European Union .....	38
Finland.....	39
Indonesia.....	40
Japan.....	45
Mexico .....	52
Morocco.....	65
Namibia.....	66
Philippines.....	67
Republic of Korea.....	95
Senegal .....	97
United Kingdom of Great Britain and Northern Ireland .....	100
United States of America .....	103
Wildlife Conservation Society.....	117

# Report by Australia's CITES Scientific Authority in response to Notification 2024/004 concerning a request for information on sharks and rays (Elasmobranchii spp.)

## Executive summary

At the 19th Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), proposals to list all species of hammerhead sharks (Sphyrnidae), guitarfishes (Rhinobatidae) and requiem sharks (Carcharhinidae) in CITES Appendix II were adopted.

The implications of these listings include that:

- a positive CITES non-detriment finding (NDF) must be made by Australia's CITES Scientific Authority certifying that the harvest of the species will not be detrimental to its survival in the wild
- a CITES export (or import) permit issued by Australia's CITES Management Authority under Australia's *Environment Protection and Biodiversity Conservation Act 1999* is required
- listed species must be sourced from a fishery with an approved Wildlife Trade Operation (WTO – export approval) declaration that is current at the time of harvest.

The Sustainable Fisheries section in the Australian Government Department of Climate Change, Energy, the Environment and Water (the department) acts as Australia's CITES Scientific Authority for marine and aquatic resources. In response to the recent listings, the department commissioned independent scientific advice from globally leading shark and ray experts Professor Colin Simpfendorfer and Dr Cassandra Rigby to support the development of NDFs for species harvested in Australian export fisheries. Their advice found that current levels of harvest of listed species was sustainable. Based on the expert advice, positive NDFs were made by Australia's CITES Management Authority for all species on the condition that species-specific data collection and reporting be improved. For a small number of species, 'Positive (conditional)' NDFs were made, meaning that additional conditions will be considered during the period of the NDF (provisionally 3–5 years) to maintain the positive findings.

## New information on Australia's shark and ray conservation and management activities

### The making of non-detriment findings (NDFs)

A summary report on Australia's NDFs for CITES listed shark and ray species harvested in Australian export fisheries is available (linked below) and is provided with Australia's submission:

[Non-detriment findings for CITES listed shark and ray species harvested in Australian export fisheries \(final\) \(PDF 1MB\) \(DOCX 1.7MB\)](#)

The list of species considered in Australia's recent NDF assessment of CITES listed sharks and rays from Australian export fisheries is provided below. The expert NDF advice is linked for each assessed species.

## **Requiem sharks (Carcharhinidae)**

[Silvertip shark \(\*Carcharhinus albimarginatus\*\)](#)

[Bignose shark \(\*Carcharhinus altimus\*\)](#)

[Graceful shark \(\*Carcharhinus amblyrhynchoides\*\)](#)

[Grey reef shark \(\*Carcharhinus amblyrhynchos\*\)](#)

[Pigeyside shark \(\*Carcharhinus amboinensis\*\)](#)

[Copper shark \(\*Carcharhinus brachyurus\*\)](#)

[Spinner shark \(\*Carcharhinus brevipinna\*\)](#)

[Nervous shark \(\*Carcharhinus cautus\*\)](#)

[Australian blackspot shark \(\*Carcharhinus coatesi\*\)](#)

[Creek whaler \(\*Carcharhinus fitzroyensis\*\)](#)

[Galapagos shark \(\*Carcharhinus galapagensis\*\)](#)

[Bull shark \(\*Carcharhinus leucas\*\)](#)

[Common blacktip shark \(\*Carcharhinus limbatus\*\)](#)

[Hardnose shark \(\*Carcharhinus macloti\*\)](#)

[Blacktip reef shark \(\*Carcharhinus melanopterus\*\)](#)

[Dusky shark \(\*Carcharhinus obscurus\*\)](#)

[Sandbar shark \(\*Carcharhinus plumbeus\*\)](#)

[Spot-tail shark \(\*Carcharhinus sorrah\*\)](#)

[Australian blacktip shark \(\*Carcharhinus tilstoni\*\)](#)

[Sliteye shark \(\*Loxodon macrorhinus\*\)](#)

[Sharptooth lemon shark \(\*Negaprion acutidens\*\)](#)

[Blue shark \(\*Prionace glauca\*\)](#)

[Milk shark \(\*Rhizoprionodon acutus\*\)](#)

[Grey sharpnose shark \(\*Rhizoprionodon oligonix\*\)](#)

[Australian sharpnose shark \(\*Rhizoprionodon taylori\*\)](#)

[Whitetip reef shark \(\*Trienodon obesus\*\)](#)

## **Hammerhead sharks (Sphyrnidae)**

[Great hammerhead shark \(\*Sphyrna mokarran\*\)](#)

[Smooth hammerhead shark \(\*Sphyrna zygaena\*\)](#)

[Winghead shark \(\*Eusphyra blochii\*\)](#)

## Giant guitarfishes (Glaucostegidae)

[Giant shovelnose ray \(\*Glaucostegus typus\*\)](#)

## Guitarfishes (Rhinobatidae)

[Goldeneye shovelnose ray \(\*Rhinobatus sainsburyi\*\)](#)

## Wedgefishes (Rhinidae)

[Whitespotted guitarfish/bottlenose wedgefish \(\*Rhynchobatus australiae\*\)](#)

[Eyebrow wedgefish \(\*Rhynchobatus palpebratus\*\)](#)

---

The expert NDF advice and report by Australia's Scientific Authority can be published on the [CITES Sharks and rays web portal](#) and the [NDF database](#). Please contact [sustainablefisheries@dceew.gov.au](mailto:sustainablefisheries@dceew.gov.au) if Microsoft Word and Adobe pdf versions of the documents are required.

[Australia's 2014 NDFs](#) for Porbeagle shark (*Lamna nasus*), Oceanic whitetip shark (*Carcharhinus longimanus*) and Scalloped hammerhead shark (*Sphyrna lewini*) remain in effect. The NDF for scalloped hammerhead was not updated as part of the recent assessment as the species' EPBC Act 'threatened' listing is currently being reassessed. No Australian NDFs are in place for Whale shark (*Rhincodon typus*), Basking shark (*Cetorhinus maximus*), White shark (*Carcharodon carcharius*) and several other CITES-listed shark species as these are fully protected in Australian waters under national laws.

## Independent scientific advice to inform the NDF for CITES listed shark and ray species

To support the development of NDFs for CITES listed shark and ray species harvested in Australian export fisheries, the Scientific Authority commissioned leading shark scientists Dr Colin Simpfendorfer and Dr Cassandra Rigby to provide independent expert advice. The scientific advice commissioned used the [CITES electronic NDF \(e-NDF\) portal for sharks and rays](#) to generate a series of species-specific reports. The information used to inform these assessments was based on current and available information for each species and included species' range, population structure, stock status in Australian waters; an analysis of Australian commercial fisheries interacting with the listed species, including an assessment of existing management measures; and consideration of regional and global management measures, threats, stocks and harvests.

The outcomes of the advice for all species found that while current levels of harvest were sustainable, and therefore support a positive NDF, recommendations were made to improve sustainability in the event that harvest levels increase in future. For a small number of species 'Positive (conditional)' NDFs were recommended, meaning that additional species-specific recommendations should be considered to further support the positive NDF.

## Management actions in response to key NDF findings

Across all species assessed, recommendations were focused on the following key areas:

- **Fisheries monitoring:** Improvements should be made to species-specific data collection and reporting for catches (including discards) of CITES-listed sharks and rays. Implementation of species-specific data collection and reporting will allow for improved monitoring of total mortality and trends. Changes in catch from year to year or over the effective duration of

NDFs (typically 3 or 5 years) could be used as triggers to consider or implement further management actions.

- **Trade:** CITES-listed shark and ray species must only be exported from export-approved fisheries, and international trade volumes should be monitored.

For a small number of species 'Positive (conditional)' NDFs were recommended, meaning that additional species-specific recommendations should be considered to further support the positive NDF. Species-specific recommendations will be considered when the relevant fisheries' export approval is next reassessed. These re-assessments will occur within the next 3 years. Fisheries that do not currently have export approval or do not export any of the listed shark and ray species were not considered in the assessment.

The CITES Scientific Authority will continue to communicate with fisheries management agencies and industry in implementing and monitoring any recommendations for future management arrangements for relevant fisheries and species.

The timeframe for the implementation of recommendations is between 1–5 years, with the expert advice recommending an effective duration for NDFs of 3 years for higher risk species or 5 years for lower risk species.

#### Fisheries monitoring (species-specific data collection and reporting)

Many shark and ray species are susceptible to overfishing due to their biological characteristics. Consequently, ongoing monitoring of catches and population trends are required. The expert advice recommended that improved data on total mortality (catches and discards) at a species level will enable the monitoring of catch levels at a national or stock level to ensure catches stay within sustainable bounds.

As a result of this recommendation, Australia's CITES Scientific Authority has negotiated conditions for each affected fishery to improve species-specific data collection and reporting for CITES-listed sharks and rays. Where possible, this includes a requirement to collect information on both catches and discards at a species level. However, collection of information on discards can be challenging, particularly in fisheries in which sharks and rays may be cut from the line while still in the water or may be released when brought over or through gears. In these situations, the Scientific Authority has sought assurances from fisheries management agencies that estimates of discards (and thus total mortality) could be made using other means (for example, extrapolation of studies on catch/discard composition and/or information on post capture mortality). In general, the ability to identify catches of sharks and rays to a species level is high and all fisheries have identification guides in place. Australia also has 'fins naturally attached' conditions in place in all jurisdictions, meaning that sharks must be landed with the fins attached to the carcass to aid in species identification on landing.

Conditions associated with export approvals also include a requirement to ensure information on total catches of CITES-listed sharks and rays is reported annually to the CITES Scientific Authority. If catches or total mortality increase substantially, this would trigger investigation of the reasons for the increase and determination of whether any management intervention, for example via updating the NDF or export approval, was required.

#### Monitoring volume and characteristics of domestic and international trade

The expert advice recommended that domestic and international trade should be monitored using CITES permits for any trade in products (fins and meat) from these species. Exports could be compared to catches reported from fisheries to ensure export levels do not exceed reported catch

levels. The Scientific Authority will routinely analyse data on trade in shark and ray products and take management action (e.g. updating NDFs or export approvals) where required.

### The making of legal acquisition findings (LAFs)

LAFs are made by Australia's CITES Management Authority in the course of issuing export and import permits for CITES-listed species. For exported specimens, LAFs are supported by the requirement for Australia's Management Authority to ascertain the species and the fishery from which it was taken as part of issuing a CITES export permit. The ability to do this is underpinned by Australia's strong regulatory, legislative and fisheries management frameworks.

### Identification and monitoring of CITES-listed shark products in trade in source, transit and consumer Parties

The Australian Government Department of Agriculture, Fisheries and Forestry is currently consulting on measures to prevent the importation of illegal, unreported and unregulated seafood. The draft report contains three proposals:

1. Review Australia's Harmonised Tariff Item Statistical Codes (HTISC) and related data reporting requirements to allow for a more comprehensive classification of Australia's seafood imports.
2. Introduce a seafood traceability program for high-risk species
3. Support expansion of multilateral catch documentation schemes.

More information on these proposals is available [here](#). Australia's CITES Scientific Authority supports these proposals.

### Recording of stockpiles of commercial and/or pre-Convention shark parts and derivatives for CITES Appendix-II elasmobranch species and controlling the entry of these stocks into trade

Australia's CITES Scientific Authority is not aware of any significant stockpiles.

### Information on conversion factors used when estimating catch live weight through converting recorded shark landings and trade

Australian shark fisheries are typically managed using a combination of input and output controls and fishers are required to record and report weights of fish landed. This allows robust estimates of catch volume. As such, conversion factors are rarely required unless they are being used for catch history reconstructions or other specific purposes. Some well-established conversion factors for certain species are available by searching the published literature.

### Request for information on oceanic whitetip shark (*Carcharhinus longimanus*)

#### Information on national-level implementation efforts and regulations for implementing the listing of *C. longimanus*

A negative NDF for Oceanic whitetip shark was completed in 2014 and remains in effect. There are no records in either Australian or UNEP-WCMC reports of export of Oceanic whitetip shark since the listing of the species on CITES Appendix II in September 2014.

Following the listing of this species on Appendix I of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) in 2020 the species was listed as a protected migratory species under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Listing as a protected migratory species under the EPBC Act prohibits the retention or sale of any products derived from the listed species.

#### Difficulties in implementing the listing

As Oceanic whitetip shark are listed as protected under the EPBC Act and a negative NDF finding has been in effect since 2014, any attempts to retain, sell or export Oceanic whitetip shark products would be responded to as a compliance and enforcement matter.

#### Other relevant information

Australia has been compliant with Indian Ocean Tuna Commission (IOTC) and Western and Central Pacific Fisheries Commission (WCPFC) prohibitions on the retention, trans-shipping and landing of Oceanic whitetip shark since these prohibitions were implemented in 2013. Small amounts of Oceanic whitetip shark (approx. 300kg) were reported as retained by Australian vessels in 2014 and 2015, which was dealt with as a compliance matter.



## **Response by the National CITES Management Authority for the People's Republic of Bangladesh to the CITES Notification to the Parties N° 2024/004:**

### **Request for information on sharks and rays (Elasmobranchii spp.)**

Since the last update provided in response to the previous request for information on sharks and rays in 2023, Bangladesh made further progress on collaborative efforts for improved shark and ray conservation management.

#### **Shark and ray conservation management including Non-Detriment Findings**

In accordance with Notification to the Parties No. 2023/027 pursuant to Decision 19.222 (CoP19) and in accordance with Resolution Conf. 12.6 (Rev. CoP18), Bangladesh has already submitted a report mentioning significant achievements on national management measures to enable improved management of shark and ray fisheries and trade, including prohibiting commercial take or trade of globally threatened species/species groups/genera. These include most notably four Non-Detriment Findings (NDFs), strengthened capacity and tools for improved identification and monitoring of CITES-listed shark and ray products in trade, and a National Conservation Strategy and Plan of Action for Sharks and Rays in Bangladesh (2023-2032) developed through enhanced collaborations between fisheries, wildlife, and law enforcement agencies.

#### **Harmonizing national fish and fish product export policies and procedures with national and international shark and ray trade regulations**

Following recommendations from CITES NDF development workshops and the *National Conservation Strategy and Plan of Action for Sharks and Rays of Bangladesh*, two consultative workshops were conducted in December 2022 and February 2023 to specify feasible approaches for aligning national fish and fish product export policies, legislation, and procedures with shark and ray trade regulations as per Wildlife (Conservation and Security) Act 2012 and CITES with the technical assistance of Wildlife Conservation Society (WCS), Bangladesh.

The 31 inspectors and desk officers from Customs, the Fish Inspection and Quality Control Unit of the Department of Fisheries, and the Wildlife Crime Control Unit, Bangladesh Forest Department agreed on key actions for improved trade traceability and reporting, including revisions to the Fish & Fish Product (Inspection & Quality Control) Rules, 1997, the Salubrity Certificate of Exportable Fish, and the national import-export policies. Participants agreed that species-specific packaging, declaration, and reporting for trade and revenue payments levied is feasible and should be mandated in relevant national policies and procedures. Participants also discussed the challenges of monitoring informal/small-scale fish processing sites that cannot meet current registration and export licensing requirements. Additional consultations were suggested for identifying best approaches to ensure their compliance with species protection and trade regulations. For increasing awareness, capacity, and cooperation, participants refined recommendations for jointly developed outreach initiatives and trainings on species identification and applicable regulations for mandated government officers, traders and their service providers. The workshop report including the detailed recommendations resulting from the consultations has been shared with ministerial representatives, government agency heads, and workshop participants as guidance for their implementation.

### **Improving collaborative law enforcement to stop illegal shark and ray exports to Myanmar**

In September 2023, two day-long workshops have been organized to improve the understanding of current procedures, gaps, and feasible actions for stopping illegal shark and ray trade with Myanmar with the support of Wildlife Conservation Society, Bangladesh. The workshops were held in Teknaf, a shark and ray trade hotspot in the Bangladesh-Myanmar border area, with a total of 28 mid-level and frontline officers from the Bangladesh Forest Department, Department of Fisheries, Border Guard Bangladesh, Coast Guard, Navy (BN), and Customs.

Participants suggested prioritizing public support and interagency collaborations, including strengthened surveillance and modernizing port facilities, along with enhancing prosecutorial and judicial processing, including blacklisting or restricting licenses for non-compliant traders, for improving the monitoring and enforcement of shark and ray trade regulations in the Teknaf/Myanmar border area. A detailed report intended to guide interventions by government and non-government organizations for stopping illegal trade of sharks, rays, and their parts to Myanmar was disseminated widely.

### **Strengthening government commitment and cooperation for CITES compliance**

In October 2023, the fifth national CITES seminar for senior policy and decision makers from multiple government sectors was hosted by the Ministry of Environment, Forest and Climate Change (MoEFCC) in Dhaka with the assistance of WCS Bangladesh. The aim of these annual events is to strengthen interministerial and multiagency collaborations for effectively combatting illegal wildlife trade and improving CITES compliance in Bangladesh by increasing the understanding of CITES, CoP decisions, and their implications for Bangladesh; recognizing progress made toward CITES compliance; and agreeing on priority actions.

The seminar was attended by 37 government representatives, including high-ranking Additional Secretaries, Joint Secretary, and Deputy Secretaries from four ministries (MoEFCC, Ministry of Fisheries and Livestock, Ministry of Finance, Ministry of Home Affairs), twelve government agencies, departments and institutions (Forest Department, Department of Fisheries, Customs, Coast Guard, Police, Border Guards, Navy, Bangladesh Fisheries Research Institute, Bangladesh Fisheries Development Corporation, Public Security Division of Ministry of Home Affairs, Bangladesh National Zoo, and Dhaka University), and three INGOs (JICA, IUCN, WCS). In facilitated discussions participants reflected on the recommendations from the four consultative workshops on CITES implementation (see above) and shared their concerns and suggestions on how to enhance CITES compliance in Bangladesh and effectively combat illegal wildlife trade, particularly in sharks and rays. [The seminar report](#) documenting the seminar procedures and resulting recommendations, which was widely disseminated to communicate and garner support for implementing priority interventions.

### **Improving spatial protection and reducing fisheries bycatch risks for globally threatened sharks and rays through integrated management and expansion of the Swatch-of-No-Ground MPA**

The Swatch-of-No-Ground (SoNG) multi-use marine protected area (MPA) covers priority shark and ray habitat, particularly in a proposed expansion that will connect it with the Sundarbans mangrove forest - a critical breeding and nursery area for several globally threatened species. An integrated management plan for the Swatch-of-No-Ground MPA (IMP-SoNG MPA) developed

through a consultative process proposes three management zones and zone-wise gear restrictions to be monitored and enforced through government and community-led SMART patrols. If the management plan will effectively be implemented, the SoNG MPA will benefit Critically Endangered (CR) scalloped hammerheads, largetooth sawfish, sharpnose and Bengal guitarfish, and Endangered whale sharks confirmed in these waters, as well as another 12 CR shark and ray species suspected to occur here. It would also increase compliance incentives for small-scale fishers that perceive industrial fishing vessels entering <40m depths as a major threat to their catch and sustainable fisheries.

An interministerial committee with 17 members representing eight ministries, government departments and agencies, established and chaired by the Ministry of Environment, Forest and Climate Change (MoEFCC) for finalizing the IMP-SoNG MPA has met three times to address comments and recommended changes in support of official government endorsement expected in the coming months.

### **Information on Oceanic Whitetip Sharks**

There are no confirmed reports of captures or trade for oceanic whitetip sharks in Bangladesh. They are however listed as strictly protected under Schedule I of the Wildlife (Conservation and Security) Act, 2012.

Report on the  
5<sup>th</sup> National Seminar on  
**Strengthening compliance with CITES in Bangladesh**  
12 October 2023, Dhaka, Bangladesh



Shark  
Conservation  
Fund



February 2024

**Cover Photo:** Seminar participants representing the Ministry of Environment, Forest and Climate Change, Ministry of Home Affairs and its Public Security Division, Ministry of Finance, Ministry of Fisheries and Livestock, Bangladesh Forest Department, Bangladesh Customs, Bangladesh Coast Guard, Bangladesh Police, Department of Fisheries, Border Guard Bangladesh, Bangladesh Navy, Bangladesh Fisheries Research Institute, Bangladesh Fisheries Development Corporation, Bangladesh National Zoo, Dhaka University, International Union for Conservation of Nature Bangladesh Country Program, Japan International Cooperation Agency, and the Wildlife Conservation Society.

## Acknowledgement

The Wildlife Conservation Society Bangladesh Program is grateful to the Ministry of Environment, Forest and Climate Change for hosting this event. Encouragement and support from the Secretary Dr. Farhina Ahmed were invaluable for its successful completion. We thank the Chief Conservator of Forest, Mr. Md. Amir Hosain Chowdhury, and senior officers from the Forest Department for their guidance and commitment to enabling this and previous national CITES seminars. This event was made possible by technical and logistical support from the Wildlife Conservation Society Bangladesh Program staff and financial support from the Shark Conservation Fund and the Paul G. Allen Family Foundation. We thank Luke Warwick and Dana Tricarico for joining the event from New York, USA. The organizers appreciate the reporting by members of the media.



The **Wildlife Conservation Society (WCS)** saves wildlife and wild places worldwide through science, conservation action, education, and inspiring people to value nature. WCS envisions a world where wildlife thrives in healthy lands and seas, valued by societies that embrace and benefit from the diversity and integrity of life on earth. WCS has been collaborating with government and community partners in Bangladesh since 2004 to safeguard threatened wildlife and effectively manage protected areas.



**Shark  
Conservation  
Fund**

The **Shark Conservation Fund** is a collaboration of philanthropists dedicated to solving the global shark and ray crisis. Its goal is to halt the overexploitation of the world's sharks and rays, prevent extinctions, reverse population declines, and restore imperiled species through strategic and catalytic grantmaking.



The **PAUL G. ALLEN FAMILY FOUNDATION** supports critical work in the environment, arts, communities, and bioscience. The foundation invests to support the global portfolio of nonprofit partners working across science and technology solutions to protect wildlife, preserve ocean health, and create lasting change.

## Table of Content

Executive Summary	1
1. Background	2
2. Seminar proceedings	3
2.1 Opening session	4
Welcome address	4
Thematic introduction	4
2.2 Presentations	5
What is CITES and how does it work?	5
Efforts and achievements in strengthening CITES compliance for Bangladesh	6
Remaining gaps, barriers, and compliance concerns for Bangladesh	8
2.3 Next steps to improve CITES compliance	9
Remarks and recommendations from seminar participants	9
Remarks and recommendations from special guests	12
<b>Appendix 1.</b> Participants of the 5 <sup>th</sup> national CITES seminar	16
<b>Appendix 2.</b> Agenda of the 5 <sup>th</sup> national CITES seminar	17

## List of Figures

<b>Figure 1.</b> The Conservator of Forests Imran Ahmed opened the event by welcoming participants (left). WCS Bangladesh Country Director Dr. Md. Zahangir Alom provided an introductory presentation on the context and efforts to stop international wildlife trafficking to, from, and through Bangladesh (right).	4
<b>Figure 2.</b> Mr. Luke Warwick (left) introduced CITES and its modalities, while Mrs. Elisabeth Fahrni Mansur (right) reviewed efforts and progress made to date in strengthening CITES compliance in Bangladesh.	7
<b>Figure 3.</b> BFD Wildlife and Biodiversity Officer Ms. Fa-Tu-Zo Khaleque Mila presented challenges of the national CITES MA (left). Dr. Syed Arif Azad and Mr. Md. Tariqul Islam, Senior Advisors to WCS Bangladesh, facilitated a participatory discussion on the necessary steps to overcome them (right).	9
<b>Figure 4.</b> Discussants included Divisional Forest Officer Mrs. Sharmin Aktar, (top - left), Police Superintendent Mr. Md. Ahaduzzaman Mia (top - right), WCCU Director Mr. Sanaullah Patwary and JICA Senior Fisheries Advisor Mr. Hasan Ahmmed Chowdhury (second row - left), BFDC Chairman Mr. Sayeed Mahmood Belal Haider	10

(second row - right), Joint Commissioner of Customs Intelligence and Investigation Directorate Mr. JD Adip Billah (third - left), Bangladesh Navy Commodore Mr. Md. Masudur Rohman (third row - right), Deputy Director DoF Marine Fisheries Office Dr. Md. Khaled Kanak (bottom - left), and Prof. Dr. Md. Niamul Naser from Dhaka University (bottom row).

**Figure 5.** Special Guest Dr. S.M. Zobaidul Kabir, Joint Secretary, MoFL (top left) and Special Guest S.M. Rezaul Mostafa Kamal, Additional Secretary, PSD of MoHA (top right), and Chief Guest Mr. Iqbal Abdullah Harun, Additional Secretary, MoEFCC (bottom left) presented their remarks and recommendations. CITES MA, CCF and Chair Mr. Md Amir Hosain Chowdhury (bottom right) gave the closing remarks of the seminar. 13

## Acronyms

BCG	Bangladesh Coast Guard	INL	Bureau of International Narcotics and Law Enforcement Affairs
BFD	Bangladesh Forest Department		
BFDC	Bangladesh Fisheries Development Corporation	IUCN	International Union for Conservation of Nature
BFRI	Bangladesh Fisheries Research Institute	JICA	Japan International Cooperation Agency
BGB	Border Guard Bangladesh	MA	Management Authority
CF	Conservator of Forests	MoEFCC	Ministry of Environment, Forest and Climate Change
CCF	Chief Conservator of Forests		
CIID	Customs Intelligence and Investigation Directorate	MoFL	Ministry of Fisheries and Livestock
		MoHA	Ministry of Home Affairs
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora	MPA	Marine Protected Area
		NCS/NPOA	National Conservation Strategy and Plan of Action
CoP	Conference of the Parties	NDF	Non-Detriment Finding
CWT	Counter Wildlife Trafficking or Combatting Wildlife Trade	NGO	Non-Governmental Organization
		PSD	Public Security Division
DoF	Department of Fisheries	SA	Scientific Authority
DU	Dhaka University	SC	Standing Committee
FIQC	Fish Inspection and Quality Control	WCCU	Wildlife Crime Control Unit
GoB	Government of Bangladesh	WCS	Wildlife Conservation Society

Media reports on the 5<sup>th</sup> National CITES Seminar in Bangladesh can be found here:

[The Daily Star](#), [The Business Standard](#), [bdnews24.com](#), [Samakal](#)

## **Executive summary**

Unsustainable or illegal trade is pushing many of Bangladesh's charismatic wildlife species towards extinction, including tigers, bears, small cats, as well as lesser-known sharks, rays, pangolins, freshwater turtles, and birds. The impacts of wildlife trafficking also threaten our national security, economic development, human health, and ecosystem integrity.

The *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) is an international agreement among governments that requires countries to adapt policies and processes for ensuring that international trade in wild animals and plants does not threaten their survival. The Bangladesh Forest Department is the national CITES management authority. Achieving CITES compliance requires strong collaborations across government sectors and agencies. Annual seminars held in Bangladesh since 2018 aim to strengthen these collaborations and CITES compliance.

The fifth national CITES Seminar held on 12 October 2023 was attended by 37 representatives from four ministries, ten government agencies, and five national institutions and international non-governmental organizations. Technical presentations and facilitated discussions resulted in increasing their understanding of CITES, recognizing progress made towards CITES compliance, and agreement on next steps for addressing remaining gaps and challenges.

Seminar participants acknowledged policy developments and multi-agency trainings and consultations as achievements catalyzed by the legally binding CITES. Recognizing the urgency of closing remaining gaps for reducing threats to wildlife populations from unsustainable and illegal trade, participants agreed on the following actions to be prioritized in the coming period:

1. Establish a national task force for countering wildlife trafficking;
2. Close legal loopholes by amending national legislation to recognize wildlife crime as a cognizable offence with deterrent punishments for offenders, and harmonizing national wildlife, fisheries, and trade regulations, mandates and procedures, across government sectors and with international obligations;
3. Enable better compliance with wildlife protection and trade regulations by disseminating contextually appropriate guidance on applicable rules, procedures, and the identification of protected wildlife species or derivatives among law enforcers, private entrepreneurs, and local trade associations;
4. Improve the monitoring, reporting, and enforcement of wildlife trade as per CITES requirements by formalizing collaborations, institutionalizing trainings, mandating species- and product-specific trade records, and centralizing wildlife crime reporting.



## 1. Background

Illegal wildlife trade is the fourth most lucrative international crime, valued at up to US\$ 20 billion per year, following human trafficking, firearms, and drugs. International trade in wildlife or their parts and derivatives threaten not only iconic as well as lesser-known wildlife species, it also poses threats to the lives and livelihoods of local community members.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora, in short CITES, is an international agreement among governments that aims to ensure that international trade in wild animals and plants does not threaten their survival. CITES provides a legally binding framework for regulating international trade in animal and plant species threatened or potentially threatened by transboundary trade. CITES has strong compliance processes based on a system whereby permits and certificates are issued for international trade in species listed in one of three [Appendices](#) with different degrees of regulation for protection from over-exploitation. Species on Appendix I are threatened with extinction and CITES prohibits their international trade. Appendix II lists species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled. It also includes species whose specimens in trade look like those of species listed for conservation reasons, so-called "look-alike species". To enable the trade of CITES Appendix II listed species, parties need to conduct Non-Detriment Finding (NDF) to ensure that the trade is sustainable.

Parties are legally bound to adopt domestic legislation for implementing CITES decisions made by the Conference of Parties (CoP). The designated management authority ([MA](#)) for each of the currently [184 Parties to CITES](#), including Bangladesh, is responsible for issuing permits and submitting [annual reports](#) on their [international trade in CITES-listed species](#) for inclusion in the [CITES Trade Database](#). Parties with significant discrepancies in reported trade or other evidence of non-compliance enter the *Review of Significant Trade in specimens of Appendix-II species* or are notified under CITES Article XIII on compliance. Non-compliance can result in trade suspension on some or all CITES species for Parties. In November 2023, CITES applied Article XIII to Bangladesh with a [suspension of trade for CITES-listed birds and other recommendations](#) for improving the monitoring, management and compliance, particularly of exotic birds, sharks and rays.

The Chief Conservator of Forests (CCF) of the Bangladesh Forest Department (BFD) serves as the national CITES MA responsible for CITES implementation in Bangladesh. The study '[Combating Wildlife Trade in Bangladesh – Current Understanding and Next Steps](#)' published by WCS Bangladesh in 2018 based on (i) national and international media surveys; (ii) interviews of Government of Bangladesh (GoB) officials involved in combatting wildlife trade, representatives of conservation NGOs, and shark and ray traders; (iii) local markets, fish landing sites, and restaurants visits where wildlife trade/consumption was suspected to occur; and (iv) examination of wildlife trade records from GoB and NGO sources, revealed that illegal trade of globally threatened and CITES listed species were a major problem in Bangladesh. The report identified major information gaps on wildlife trade chains hampering the ability of the GoB to combat it.

To stop illegal wildlife trade and ensure vital support from multiple government sectors and agencies for CITES-compliant trade of wildlife from and through Bangladesh, the annual national CITES seminars were initiated. The first seminar in May 2018 concluded with recommendations for technical trainings, species identification guidance, a central wildlife crime database, legislative amendments, and public awareness campaigns. Recommendations from the second seminar held in May 2019 included amendments to the Wildlife (Conservation and Security) Act, 2012, NDF assessment – particularly for sharks and rays, and improved coordination and sharing of logistics and skills across agencies, including at airports. Participants in the third national CITES seminar held in November 2021 emphasized the need for improving the awareness about CITES, including among government ministry and department leads, developing [National Conservation Strategies and Action Plans](#) for CITES species/species groups and NDFs for commonly traded CITES Appendix II listed species, and continuing interagency trainings to CWT. In June 2022, the jointly developed *National Conservation Strategy and Plan of Action for Sharks and Rays of Bangladesh (NCS/NPOA-Sharks & Rays)* as well as the first [NDFs for four species/species groups of CITES Appendix II listed sharks and rays](#) were endorsed for implementation, signaling strong commitment for collaborative and coordinated efforts to combat illegal wildlife trade, enhance protection of threatened species and their habitats, and harmonize trade regulations.

## **2. Seminar proceedings**

On 12 October 2023, the Ministry of Environment, Forest and Climate Change (MoEFCC) hosted the fifth national CITES seminar at the Radisson Blu Water Garden hotel in Dhaka. The event was organized by WCS Bangladesh in close coordination with the BFD and with financial support from the Shark Conservation Fund and the Paul G. Allen Family Foundation. The objectives of this seminar were to (1) increase understanding of CITES, CoP19 decisions, and their implications for Bangladesh; (2) recognize progress made toward CITES compliance through improved national policies, collaborations, capacity, and public support for combating illegal wildlife trade in Bangladesh; and (3) identify challenges and gaps and agree on the next steps for further improving CITES compliance.

The 37 participants, including two Additional Secretaries, one Joint Secretary, and four Deputy Secretaries, represented four ministries, namely the MoEFCC, Ministry of Fisheries and Livestock (MoFL), Ministry of Finance, Ministry of Home Affairs (MoHA), and twelve government agencies and institutions: BFD, Customs, Bangladesh Coast Guard (BCG), Bangladesh Police, DoF, Border Guard Bangladesh (BGB), Bangladesh Navy, Bangladesh Fisheries Research Institute (BFRI), Bangladesh Fisheries Development Corporation (BFDC), Public Security Division (PSD) of MoHA, Bangladesh National Zoo, and Dhaka University (DU). Three international NGOs - Japan International Cooperation Agency (JICA), International Union for Conservation of Nature (IUCN), and the WCS - were also represented. Participant details are provided in Appendix 1. The detailed event agenda is included as Appendix 2.

## 2.1 Opening session

### Welcome address

In his opening speech, Mr. Imran Ahmed, BFD Conservator of Forests (Wildlife Management and Nature Conservation Circle), welcomed all participants by conveying the gratitude of the BFD for the active involvement of all law enforcement agencies in combating wildlife trade (Figure 1, left). The Conservator of Forests (CF) emphasized the need to further enhance the coordination and collaboration across government agencies for [addressing compliance concerns](#) raised by the CITES Secretariat and to address [recommendations](#) from the upcoming 77<sup>th</sup> meeting of the Standing Committee (CITES SC77) in November 2023. He urged seminar participants to contribute actively to the development of a roadmap to enable Bangladesh to achieve full CITES compliance.

### Thematic introduction

As an introduction to international wildlife trade, Dr. Md. Zahangir Alom, WCS Bangladesh Country Director and Manager of the Terrestrial and CWT programs (Figure 1, right), presented the value of the annual illegal wildlife trade along with the impacts it causes on exotic species as well as the livelihood of local communities. Asia is a global hotspot for wildlife crime with rich biodiversity and high consumer demand. Bangladesh is a major transit, source, and consumer country for wildlife due to its connectivity with other Asian countries, ranking among the top ten countries in the world for illegal trade in turtles and tortoises, and among the top twenty shark fin exporting countries. Thirty-three wildlife species have already gone extinct in Bangladesh. According to media reports, one-third of the species seized in Bangladesh between 2012 and 2022 are listed on CITES Appendix I, and slightly more than a third on CITES Appendix II. The most frequently traded animals according to specimens reported in the media are birds, followed by turtles and tortoises.



**Figure 1.** The Conservator of Forests Imran Ahmed opened the event by welcoming participants (left). WCS Bangladesh Country Director Dr. Md. Zahangir Alom provided an introductory presentation on the context and efforts to stop international wildlife trafficking to, from, and through Bangladesh (right).

WCS has been actively working to save wildlife and wild places in Bangladesh since 2004, with dedicated efforts on CWT to prevent the extinction of species at risk from illegal trade starting in 2017. The Bangladesh program is a part of the global WCS network with long-term presence in over 50 countries and experience helping to establish, expand or manage over 550 protected areas across the globe. Since the first national CITES seminar initiated by WCS in 2018, media reports have shown a three-fold increase in arrests, seizures, and convictions of illegal wildlife trade in Bangladesh.

Dr. Alom explained that a key goal of the 5<sup>th</sup> national CITES seminar was to discuss effective ways for safeguarding Bangladesh's natural heritage and the livelihoods that depend on healthy, productive ecosystems, and to collectively decide on and commit to priority next steps for combatting illegal wildlife trade. After providing a brief overview of the meeting agenda, he expressed his gratitude to all attendees for their participation and engagement.

## **2.2 Presentations**

### **What is CITES and how does it work?**

Mr. Luke Warwick, Director of the WCS Global Shark and Ray Conservation Program, presented key points about CITES and its implications for Bangladesh (Figure 2, left). This multilateral agreement with 184 parties, drafted in 1963 and active since 1975, operates through an intergovernmental process as a legally binding instrument regulating the international trade of more than 36,000 species to achieve wildlife conservation and sustainable use objectives.

The objective of CITES is to ensure that wild fauna and flora are not exploited unsustainably by ensuring legality, sustainability, and traceability of their international trade. Unlike other conventions, CITES has robust compliance mechanisms and monitoring in place to determine if its objectives are being met.

Remarking the rapid increase in the number of shark and ray species listed under CITES between 2016 and 2022, he applauded Bangladesh's supportive role in regulating more than 90% of the global shark fin trade through CITES Appendix II listings. From November 2023, when the latest listing comes into action, it is highly probable that in any pile of shark fins encountered there are CITES Appendix II listed ones that require a positive NDF from the national CITES Scientific Authority for permissible trade across international borders. Guidance tools for NDF assessments and CITES implementation are available, and Bangladesh has already adapted some. WCS is committed to continue its support in Bangladesh for strengthening CITES compliance, particularly in shark and ray trade. For example, WCS provides technical assistance to the CITES Management and Scientific Authorities, enabled the Bangladesh delegation to attend the CITES CoP19, supported preparations for the upcoming CITES SC77, and will support implementing the recommendations agreed on. With grants secured from the Paul G. Allen Family Foundation, Shark Conservation Fund, and the U.S. Department of State Bureau of International Narcotics and Law Enforcement Affairs (INL), WCS will further strengthen technical capacity and collaborations across government agencies and institutions to enable systematic monitoring, reporting, and

enforcement of CITES regulations, harmonizing national legislation and processes, and investigate trade in other marine species harvested from the Bay of Bengal region.

### **Efforts and achievements in strengthening CITES compliance for Bangladesh**

In her progress review, the Senior Manager of the WCS Bangladesh Marine Conservation Program, Mrs. Elisabeth Fahrni Mansur (Figure 2, right), reflected on the many positive changes catalyzed by the legally binding CITES in Bangladesh for sustaining wildlife populations threatened by unsustainable trade.

Some of the key achievements that reflect an improved political will for collaboratively and strategically addressing wildlife trade issues following previous national CITES seminars that she highlighted include -

- Amendment of shark and ray species/species groups listed under the Wildlife (Conservation and Security) Act, 2012, in 2021;
- Co-sponsorship of successful CITES listings at the last three CoPs (2016, 2019, 2022);
- Active participation in pre-CoP workshops, CoPs, and SC meetings since 2018 and timely responses submitted to requests and technical missions from the CITES Secretariat;
- Nearly 1,000 law enforcement officers trained on CITES and stopping wildlife trafficking between 2018 - 2023, with post-training mentoring support provided to at least 120 officers;
- 232 journalists trained in improved reporting of wildlife crime and trade incidents;
- 45 judges and magistrates consulted on improving wildlife crime prosecution rates;
- Over 10,000 coastal fishing community members engaged in educational exhibitions on protected marine animals and Marine Protected Areas (MPAs), including identification and safe release procedures for nationally protected and CITES regulated marine wildlife;
- Next steps for harmonizing fish and fish product inspection and trade rules and procedures with CITES and Wildlife Act regulations for implementing NCS/NPOA recommendations defined in two consultative workshops with inspectors from DoF, Customs, and BFD;
- Feasible approaches for stopping illegal trade in sharks and rays with Myanmar identified in two consultative training workshops with law enforcement officers from BGB, BCG, Bangladesh Navy, and representatives from BFD and DoF conducted in Teknaf;
- Three marine data models reconfigured for the Spatial Monitoring and Reporting Tool (SMART), with community-led monitoring of marine wildlife catches and shark and ray landings from artisanal fisheries initiated, and MPA monitoring and law enforcement patrols with Bangladesh Navy, BCG, BFD, and DoF officers scheduled to commence in 2024;
- Wildlife Offence Reporting Tool application introduced by the BFD for central reporting of wildlife offences by law enforcement agencies and improved CITES reporting;

- Species identification guidance on freshwater turtles and tortoises, sharks and rays, and other commonly traded wildlife species widely disseminated;
- Three multi-use MPAs covering 5.5% of Bangladesh’s Exclusive Economic Zone declared for improved protection of marine wildlife threatened by unsustainable take and trade;
- Government-endorsed NCS/NPOA-Sharks & Rays in Bangladesh developed through an inclusive and collaborative process;
- Six CITES NDFs for shark and ray species/species groups developed by national and international experts for Bangladesh, four of which have been endorsed by the national CITES Scientific Authority and published on the CITES website;
- Standard Operating Procedures for species-specific reporting of shark and ray landings introduced during technical trainings for field-level DoF, BFD, and Customs officers.

Mrs. Fahrni Mansur mentioned a new project on *Countering the Trafficking of CITES-listed Marine Species in South Asia* supported by the U.S. Department of State International Bureau of International Narcotics and Law Enforcement Affairs (INL). This regional project implemented by WCS from October 2023 – September 2025 aims to identify barriers and solutions to improve national protection and regional collaborations for reducing unsustainable or illegal extraction and trade of CITES-listed marine species, including sharks, rays, seahorses, and sea cucumbers, in Bangladesh, India, the Maldives, and Sri Lanka.

In conclusion, Mrs. Elisabeth Fahrni Mansur commended Bangladesh’s collaborative effort for implementing CITES and evidence-based processes to effectively combat wildlife trafficking through a strong commitment and active engagement from government and NGO partners.



**Figure 2.** Mr. Luke Warwick (left) introduced CITES and its modalities, while Mrs. Elisabeth Fahrni Mansur (right) reviewed efforts and progress made to date in strengthening CITES compliance in Bangladesh.

## **Remaining gaps, barriers, and compliance concerns for Bangladesh**

Ms. Fa-Tu-Zo Khaleque Mila, BFD Wildlife and Biodiversity Officer, presented some of the challenges of implementing CITES and gaps that remain to be addressed (Figure 3, left).

CITES permitting procedures in Bangladesh are currently paper-based for Appendix I listed species, and digital and paper-based for Appendix II and III listed species of fauna and flora. Permits for Appendix I listed species, mainly applied for research samples or zoo exhibits, involve national CITES Management and Scientific authorities review and approval. Export or import permits of Appendix II and III listed species, including for artificially propagated plants, research samples, commercially traded cagebirds, and zoo exhibits, are administered by the MA. Recognizing the increasingly important role of a multi-sectoral national CITES Scientific Authority, reformations of this requirement currently handled by a BFD Advisory Committee are underway.

To address challenges with the identification of CITES-listed species, verifying sources and permits, assigned BFD officers routinely request verifications of export permits via emails and communicate via WhatsApp with CITES parties. Anomalous trade is reported to the CITES Secretariat for enabling actions by international authorities (e.g., Interpol). These processes require considerable time, which could be reduced by issuing trade permits online (e.g., eCITES).

The BFD has taken strong initiatives to control the bird trade in compliance with CITES. This involves the registration of 64 bird importers and farms, conducting inspection visits, and processing bird farm licenses that are issued annually based on a review of sales and inspection reports. For commercial bird trade, the BFD maintains all records online for full transparency. In recent years, the bird trade permit and no-objection certificate process has been improved through technical guidance and trainings with supporting tools. The BFD restricts trade in 16 raptor species and is not permitting any exports or re-exports of birds from Bangladesh.

For addressing the challenges with shark trade and CITES compliance, Ms. Mila emphasized the importance of communicating, monitoring, and enforcing Wildlife Act and CITES regulations with supporting tools for species identification and procedural guidance, as well as harmonizing trade inspection and approval processes across BFD, Customs, and DoF. She highlighted the priority recommendations from the NCS/NPOA-Sharks & Rays to (i) align Fish Inspection and Quality Control (FIQC) processes of the DoF for fish and fish product exports with Wildlife Act and CITES requirements, (ii) designate a limited number of ports of entry and exit for wildlife products, (iii) publish species-specific information on catch, landing, and trade in government statistics, and (iv) amend the Wildlife Act by (a) categorizing wildlife trafficking as a serious crime, (b) defining scheduled-based penalties, (c) updating species listings, (d) providing arresting power to BFD officers, (e) increasing the number of mobile courts, and (f) empowering the Wildlife Crime Control Unit (WCCU) to lead coordinated efforts for CITES compliance.

In closing, Ms. Mila informed the participants that Bangladesh was one of nine CITES parties identified under CITES Article XIII on compliance concerns. She encouraged participants to support the BFD in addressing recommendations by the CITES SC77 to strengthen CITES compliance and combat illegal wildlife trade.



**Figure 3.** BFD Wildlife and Biodiversity Officer Ms. Fa-Tu-Zo Khaleque Mila presented challenges of the national CITES MA (left). Dr. Syed Arif Azad and Mr. Md. Tariqul Islam, Senior Advisors to WCS Bangladesh, facilitated a participatory discussion on the necessary steps to overcome them (right).

### 2.3 Next steps to improve CITES compliance

#### *Remarks and recommendations from seminar participants*

In an engaged discussion facilitated by WCS Senior Advisors Dr. Syed Arif Azad and Mr. Md. Tariqul Islam (Figure 3, right), seminar participants shared their views on priorities and next steps for achieving CITES compliance (Figure 4). The facilitators raised questions about strategic interventions necessary for enabling the enforcement of the Wildlife Act, harmonization of national legislation and policies, international reporting obligations, and interagency and transborder collaborations.

Additional Superintendent of the **Bangladesh Police** Mr. Mahbubur Rahman BPM, noted that wildlife offences, particularly in transit, are often detected at night when magistrates are not available and mobile courts not possible. Since wildlife crimes are non-cognizable, except when involving tigers or elephants, the Police often cannot make arrests and offenders obtain bail. This should be changed, along with increasing the awareness among front-line police officers about protected species and wildlife crimes. Police Superintendent Mr. Md. Ahaduzzaman Mia emphasized the importance of preventing criminals from committing crimes (proactive policing) rather than taking actions after the crime has occurred (reactive policing). He proposed stricter monitoring of protected and forested areas and increased awareness about protected wildlife species and trade regulations, particularly among fishers, to curb wildlife crime.





**Figure 4.** Discussants included Divisional Forest Officer Mrs. Sharmin Aktar, (top - left), Police Superintendent Mr. Md. Ahaduzzaman Mia (top - right), WCCU Director Mr. Sanaullah Patwary and JICA Senior Fisheries Advisor Mr. Hasan Ahmmed Chowdhury (second row - left), BFDC Chairman Mr. Sayeed Mahmood Belal Haider (second row - right), Joint Commissioner of Customs Intelligence and Investigation Directorate Mr. JD Adip Billah (third - left), Bangladesh Navy Commodore Mr. Md. Masudur Rohman (third row - right), Deputy Director DoF Marine Fisheries Office Dr. Md. Khaled Kanak (bottom - left), and Prof. Dr. Md. Niamul Naser from Dhaka University (bottom row).

The Chairman of the **Bangladesh Fisheries Development Corporation** (BFDC) Mr. Sayeed Mahmood Belal Haider expressed his concern about illegal trade of protected marine species under the cover of 'dry fish'. He mentioned horseshoe crab populations being destroyed by fisheries. As a solution, he suggested displaying information about protected marine wildlife species on billboards and posters at the 19 landing stations, especially in Cox's Bazar, where sharks and rays are landed, as well as additional activities to raise awareness about fisheries regulations, for example allowable net types, preferably conducted during fish ban periods, could be effective measures to increase compliance with national and international marine wildlife regulations. He proposed that a Memorandum of Understanding signed by the relevant agencies might be useful for improving interagency collaborations.

**Bangladesh Navy** Commodore Abu Hasnat Md. Mahfuzer Rahman PSC, asked policy makers to consider the perspective of the implementers at sea, pointing out that smuggling via sea routes may increase if export and import regulations are more strictly enforced. Therefore, he suggested focusing on the prevention of CITES-listed species capture in marine fisheries. Since wildlife crime falls at the very end of their operations task list, he proposed prioritizing it in the task list through interventions from the Naval headquarters. Appreciating the identification guide for protected sharks and rays of Bangladesh provided to all seminar participants, he suggested the integration of a short training module on marine wildlife identification and regulations for all frontline officers in Bangladesh Navy training programs.

**Dhaka University** Professor of Zoology and member of the Wildlife Scientific Committee, Dr. Md. Niamul Naser, drew attention to the uncontrolled import of aquarium species, which is likely to result in the introduction of predatory fishes and non-native species that can negatively impact aquatic biodiversity in Bangladesh.

Joint Commissioner of **Customs Intelligence and Investigation Directorate** (CIID) Mr. JD Adip Billah explained that since wildlife trafficking results in money laundering, the import-export authority must also be involved in efforts to combat illegal wildlife trade.

Deputy Director of the DoF **Marine Fisheries Office** Dr. Md. Khaled Kanak pointed out that the Fish Act of 1950, revised in 1985, defines aquatic wildlife as fish and the Wildlife Act of 2012 defines fish as wildlife. A strong collaboration between the BFD and DoF is therefore required to agree on these definitions and jurisdictions. CITES listings and regulations must be communicated clearly to all concerned agencies and officers. Similarly, Marine Fisheries Rules and Wildlife Act regulations should be communicated to all commercial fishing operations and fishers. He noted that the DoF lacks a patrolling system and relies on the Bangladesh Navy and BCG for enforcement at sea.

Senior Assistant Director of the DoF **Fisheries Inspection and Quality Control** (FIQC) office Mr. Md. Miganur Rahman said that to combat illegal trade in aquatic wildlife, relevant policies, laws, and rules need to be aligned with the Wildlife Act and CITES. His specific recommendations were to conduct periodic training seminars for front-line DoF/FIQC/BFD staff to keep them updated and strengthen coordination, and to require the declaration of species-specific shipments, including the scientific species names and details on body parts (e.g., fins, skin, maws, etc.) for certification.

Senior Fisheries Advisor to the **Japan International Cooperation Agency** (JICA) Hasan Ahmmed Chowdhury said that usually the BFD handles CITES reporting, but - according to him – the department cannot report alone on aquatic or marine species. He noted that formal and informal landings of marine fisheries catches are not reaching the DoF, and on-boat observers are absent. He emphasized the importance of reporting by all agencies to the BFD for effectively monitoring wildlife trade and reporting to CITES.

In response to the question of how to improve interagency collaborations, representatives from the **Bangladesh Forest Department** (BFD) recognizing wildlife offences as a cognizable crime would enhance interest from the Police to tackle wildlife cases. For the monitoring of export shipments, Customs should involve inspectors from the BFD, as is currently done for imports.

Director of the BFD **Wildlife Crime Control Unit** (WCCU) Mr. Sanaullah Patwary proposed prioritizing the harmonization of nationally protected species with CITES listings, explaining that all wildlife species in Schedule I and Schedule II of the Bangladesh Wildlife (Conservation and Security) Act, 2012 are protected. He suggested including a compulsory training module on the ecological importance of wildlife and applicable regulations for wildlife protection and trade in routine courses at the Public Administration Training Center, the Bangladesh Military Academy, the Police Academy, and other agency training institutions. Since international reporting requires significant resources and support, the WCCU Director suggested the adoption of a centralized species-specific database and reporting system.

#### *Remarks and recommendations from special guests*

Joint Secretary of the **Ministry of Fisheries and Livestock** (MoFL) and Special Guest Dr. S.M. Zobaidul Kabir (Figure 5, top left) pointed out that the challenges of working at sea create gaps in aquatic ecosystem management. While Bangladesh has made commendable progress in terrestrial ecosystem and wildlife conservation, marine fisheries and marine resource management are lagging. Vast areas of the Bay of Bengal secured as Bangladesh's territory under the leadership of the Honorable Prime Minister remain mostly unexplored and its resources unknown. Despite shortcomings in the implementation of the [Bangladesh Sustainable Coastal and Marine Fisheries](#) project, making illegal fisheries traceable is one of the anticipated outcomes. To ensure compliance with CITES, he suggested preparing national strategic guidelines (not just for sharks and rays) that detail the requirements and provisions of CITES. However, he also cautioned that local context matters, with Bangladesh's unique situation perhaps not aligned with the situations in other countries, and global guidelines (e.g., Food and Agriculture Organization of the United Nations) therefore not universally applicable. His second recommendation was to establish a common, collaborative platform for ensuring the cooperation of all key stakeholders and encouraging agencies to fully perform their mandates for enabling CITES compliant reporting and trade management. He suggested that the MoHA could play a more significant role in the surveillance of marine fisheries catches and trade and combatting illegal trade, since Bangladesh is often used as a transit country. In his closing words, the Joint Secretary thanked the MoEFCC, BFD, and WCS for arranging this meeting and ensured MoFL commitment to enable CITES compliance.

Additional Secretary of the **Public Security Division (PSD)** of the **Ministry of Home Affairs (MoHA)** and Special Guest Mr. S.M. Rezaul Mostafa Kamal (Figure 5, top right), thanked the MoEFCC for hosting and the BFD and WCS for organizing this informative event and bringing all involved agencies together under one roof, and facilitating such an interactive discussion. The PSD of MoHA supports efforts to combat human trafficking as per Sustainable Development Goal (SDG) 16 Section 16.2.2. Institutional collaborations established to enable these efforts, including with the Bangladesh Police, BGB, and BCG, could certainly be expanded to combat wildlife trafficking and achieve CITES compliance. To improve the monitoring of illegal shark and ray transshipments to Myanmar, he said that in addition to engaging the full capacity of the PSD of MoHA, which includes sufficient vessels, training, and equipment for monitoring, controlling, and surveillance of illegal at-sea activities, strengthening intelligence networks is key to combatting illegal transboundary trade. The Additional Secretary expressed his appreciation to all the participating agencies for their collaborative contributions and assured the MoHA commitment to collaborating for improving CITES compliance.



**Figure 5.** Special Guest Dr. S.M. Zobaidul Kabir, Joint Secretary, MoFL (top left) and Special Guest S.M. Rezaul Mostafa Kamal, Additional Secretary, PSD of MoHA (top right), and Chief Guest Mr. Iqbal Abdullah Harun, Additional Secretary, MoEFCC (bottom left) presented their remarks and recommendations. CITES MA, CCF and Chair Mr. Md Amir Hosain Chowdhury (bottom right) gave the closing remarks of the seminar.

Additional Secretary of the **Ministry of Environment, Forest and Climate Change** (MoEFCC) and Chief Guest Mr. Iqbal Abdullah Harun (Figure 5, bottom left) expressed his gratitude to the BFD and WCS for bringing all relevant agencies together in one room to discuss critical issues around illegal wildlife trade in Bangladesh and recognizing its impact on current and future generations. He noted that wildlife trade often goes unnoticed and is not considered significant in our daily lives. Mr. Harun emphasized the need for mutual support to combat this issue, acknowledging the diverse roles of different agencies, that wildlife occurs in inaccessible places and with species other than those visible in cities, and that human development often harms wildlife or their habitats. The Chief Guest encouraged agencies to consider various perspectives, to think differently, and to identify novel strategies and solutions that enable them to stay ahead of illegal traders, identify trade routes, and combat illegal trade effectively in priority locations identified, including Cox's Bazar, Sundarbans, and Chittagong – each with a unique context. International commodity codes need to be applied, and training and tools are required to facilitate the identification of illegally traded species and their processed parts. Delays or weakening in court verdicts due to lack of evidence and low levels of awareness or priority for wildlife crimes are limiting the effectiveness of court proceedings and aiding criminals. The Additional Secretary stressed the need for a dedicated wing or task force to focus on wildlife crimes and recommended strengthening the CITES Scientific Authority with law enforcement professionals, CWT experts, and wildlife conservation practitioners. He advocated for capacity building beyond classrooms by providing hands-on trainings to front-line officers across government sectors and agencies. He concluded with the request that discussion outcomes be included in the seminar proceedings to guide collaborative efforts across all agencies towards improved CITES compliance.

In his closing remarks, CCF of the **Bangladesh Forest Department** (BFD), CITES MA and Chair Mr. Md. Amir Hosain Chowdhury (Figure 5, bottom right), noted that while Bangladesh imports some CITES listed animals, it is not a large exporter of CITES products, with official exports consisting primarily of CITES Appendix II listed Agarwood (*Aquilaria spp.*) to the Middle East.

He summarized the next steps prioritized by seminar participants to implement CITES regulations and ensure interagency collaboration to combat illegal wildlife trade as follows:

1. Synchronize laws and rules of different agencies with CITES regulations by -
  - a) Making wildlife-related crimes cognizable for effective enforcement and appropriate punishments for the perpetrators;
  - b) Collaborating across different ministries and agencies to ensure alignment and harmonization of necessary amendments.
2. Ensure the sustainability of trade in wildlife species or their parts by -
  - a) Prioritizing the protection of threatened species and improving their numbers through conservation management. Only if there is measurable improvement in their population status, should trade be considered.
  - b) Conducting and updating NDF assessments to determine whether trade is sustainable or not.

3. Reform and implement national laws (e.g., Marine Fisheries Act and Rules, Wildlife Act and Rules) and strategies (e.g., National Shark and Ray Conservation Strategy and Plan of Action, National Fisheries Strategy) collaboratively with all relevant sectors, departments and agencies that share the responsibility of protecting our countries wildlife as mandated by the Constitution of Bangladesh.

The Chair concluded the fifth national CITES seminar by thanking all guests and participants for joining the event and contributing to its successful completion.

## Appendix 1. Participants of the 5<sup>th</sup> national CITES seminar

Agency	Name	Position Title
Ministry of Environment, Forest and Climate Change	Iqbal Abdullah Harun	Additional Secretary
	A. K. M. Showkat Alam Mozumder	Deputy Secretary
	Md. Abu Nasar Uddin	Deputy Secretary
	Mst. Mohsina Akter Banu	Deputy Secretary
Ministry of Finance	Milia Sharmin	Deputy Secretary (Finance Division)
Ministry of Home Affairs and Public Security Division	S. M. Rezaul Mostafa Kamal	Additional Secretary
	Ashraf Ahmed Rasel	Senior Assistant Secretary
Ministry of Fisheries and Livestock	Dr. SM Zobaidul Kabir	Joint Secretary (Fisheries)
Department of Fisheries	Dr. Md. Khaled Kanak	Deputy Director (Marine)
	Md. Mizanur Rahman	Senior Assistant Director, FIQC
	Mst. Shamima Yesmin	Assistant Director (Reserve)
	Sanjay Kumar Mohanta	Marine Fisheries Officer
Bangladesh Forest Department	Md Amir Hosain Chowdhury	CCF, CITES MA
	Imran Ahmed	CF Wildlife Circle
	Sanaullah Patwary	Director WCCU
	Gobinda Roy	DCCF, SUFAL Project Director
	Nargis Sultana	Wildlife Inspector, WCCU
	M Sharmin Aktar	DFO Wildlife (Dhaka)
	Mahmudul Hasan	ACCF, BFD Dhaka
	Md. Masudur Rohman	Wildlife R.O.
	S M Munirul Islam	CF Social Forestry (Dhaka)
	Md Subedar Islam	Director Wildlife Center Gazipur
Fa-Tu-Zo Khaleque Mila	Wildlife and Biodiversity Conservation Officer (Dhaka)	
Bangladesh Fisheries Development Corporation	Sayeed Mahmood Belal Haider	Chairman
Bangladesh Fisheries Research Institute	Dr. Md. Amirul Islam	Chief Scientific Officer
Customs	JD Adip Billah	Joint Commissioner, CIID
	Syed Mukaddes Hossain	Deputy Commissioner, Customs House Dhaka
Bangladesh Navy	Mohammad Shaiqul Alam PCGM	Captain
	Abu Hasnat Md Mahfuzer Rahman PSC	Commodore
Bangladesh Police	Mahbubur Rahman BPM	Additional Superintendent
	Md Ahaduzzaman Mia	Superintendent (River) (Crime)
Bangladesh Coast Guard	Md Shahidul Haque PSC	Captain
Border Guard Bangladesh	Major Roman Al Asif	
Dhaka University	Prof. M Niamul Naser	Former Chairman, Department of Zoology, Member of CITES SA
Bangladesh National Zoo	Dr. Md. Rafiqul Islam Talukder	Director, Member of CITES SA
International Union for Conservation of Nature	Sakib Ahmed	Bangladesh Country office, Member of CITES SA
Japan International Cooperation Agency	Hasan Ahmmmed Chowdhury	Senior Advisor, FDA, JICA

## Appendix 2. Agenda of the 5<sup>th</sup> national CITES seminar

### Agenda

- 09:30 • Registration of participants
- 10:00 • Welcome address  
Mr. Imran Ahmed, Conservator of Forests, BFD
- 10:05 • Thematic introduction to international wildlife trade and seminar overview  
Dr. Md. Zahangir Alam, Country Representative, WCS Bangladesh
- 10:15 • **What is CITES and how does it work?**  
Mr. Luke Warwick, Director, Global WCS Shark & Ray Conservation Program
- 10:30 • **Progress Review: Efforts and achievements in strengthening CITES compliance for Bangladesh**  
Ms. Elisabeth Fahmi Mansur, Senior Manager, Marine Conservation Program, WCS Bangladesh
- 10:45 • Refreshments, group photo
- 11:15 • **Challenges and Gaps: Remaining gaps, barriers, and compliance concerns for Bangladesh**  
Ms Fa-Tu-Zo Khaleque Mila, Wildlife and Biodiversity Officer, BFD
- 11:25 • **Next step to improve CITES compliance: What needs to be done and how?**  
Facilitators: WCS Senior Advisors Dr. Syed Arif Azad and Mr. Tariqul Islam
- 12:15 • Remarks by Special Guest  
**Dr. S. M. Zubayedul Kabir**, Joint Secretary, MoFL
- 12:25 • Remarks by Special Guest  
**Mr. S. M. Rezaul Mostafa Kamal**, Additional Secretary, MoHAPSD
- 12:35 • Remarks by Special Guest  
**Mr. Iqbal Abdullah Harun**, Additional Secretary, MoEFCC
- 12:45 • Remarks by Chief Guest  
**Dr. Farhina Ahmed**, Secretary, MoEFCC
- 13:00 • **Summary of agreed next steps and closing remarks by the Chair**  
**Mr. Amir Hosain Chowdhury**, Chief Conservator of Forests, BFD  
National CITES Management Authority
- 13:15 • Lunch, end of the seminar

### National Seminar on Strengthening Compliance with CITES in Bangladesh

An annual event hosted by the Bangladesh Forest Department (BFD) of the Ministry of Environment, Forest and Climate Change (MoEFCC), with support from the Wildlife Conservation Society (WCS), for senior representatives from the MoEFCC, Ministry of Fisheries and Livestock (MoFL), Ministry of Home Affairs (MHA), BFD, Department of Fisheries (DoF), Police, Coast Guard, Navy, Customs Intelligence, and Border Guard Bangladesh, and members of the National CITES Scientific Authority.

**Thursday, 12 October 2023 from 9:30am – 2pm at Radisson Blu Water Garden on Airport Road, Dhaka**

The objectives of the seminar are to -

1. Increase understanding of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), CoP19 decisions, and their implications for Bangladesh.
2. Recognize progress made towards CITES compliance through improved national policies, collaborations, capacity, and public support for combating illegal wildlife trade in Bangladesh.
3. Identify challenges and gaps, and agree on next steps for further improving CITES compliance.





**Canadian Response to [CITES Notification 2024/004](#)****New Information on the Conservation and Management of Sharks and rays  
(Elasmobranchii spp.)**Domestic Measures and Activities

There are no directed fisheries for pelagic sharks in Canada. Harvesting of pelagic sharks in Pacific waters is largely prohibited through conditions of licence. The retention of some species of pelagic shark as bycatch is permitted in some fisheries in the Atlantic Ocean. In the Pacific, there is a directed fishery for Spiny Dogfish which is managed as a groundfish, and in the Atlantic, Spiny Dogfish is landed as bycatch with no directed fishery.

In 2019, Canada introduced new provisions to its federal *Fisheries Act* explicitly prohibiting the practice of shark finning, and prohibiting the import and export of shark fins or parts of shark fins that are not naturally attached to the carcass. However, the government may authorize the import or export of shark fins or parts of shark fins that are not attached to a shark carcass for purposes related to scientific research. More information on this can be found at the following link:

<https://www.dfo-mpo.gc.ca/about-notre-sujet/publications/policy-politiques/shark-requin/permits-research-permis-recherche-eng.html>

International Measures and Activities

Building off increased domestic shark conservation regulations, Canada proposed a conservation and management measure to the International Commission for the Conservation of Atlantic Tunas (ICCAT) which included increased data reporting requirements, safe handling guidelines, and a retention ban on North Atlantic shortfin mako sharks. With the support of other countries, this proposal was adopted in 2021. In 2022, ICCAT also adopted catch limits for the endangered South Atlantic shortfin mako shark.

Specific to Greenland sharks, in 2022, the Northwest Atlantic Fisheries Organization agreed to ban retention of incidental catches, building on an existing 2018 ban on directed fishing for this species. Canada co-sponsored the proposal with the United States (US) and worked actively with other countries to gain support.

In 2022, Canada co-sponsored a proposal with the US to increase shark conservation, including a prohibition on shark finning, requirements for safe handling, and increased gear restrictions to reduce bycatch of shark, which was adopted by the Western and Central Pacific Fisheries Commission (WCPFC). In 2023, Canada championed the consolidation and strengthening of existing shark measures at the Inter-American Tropical Tuna Commission (IATTC). This proposal was eventually co-sponsored by Central American countries, the European Union, France, and the US. The North Pacific Fisheries Commission (NPFC) also adopted a joint Canada-US proposal to ban shark finning and increase reporting requirements in 2023.

In May 2023, Canada and Mexico hosted the second edition of the Comprehensive and Progressive Agreement for the Trans-Pacific Partnership (CPTPP) Workshop on Combating Illegal Trade of Wildlife Species, with a focus on sharks and rays. The workshop highlighted the importance of these species to the marine environment; current status of illegal trade of sharks and stingrays in the Trans-Pacific region; trade policy approaches in support of shark conservation; and science-based tools for the identification of illegal trade and related species. The overall objective was to inform scientific, legal and policy experts to draw on lessons to continue developing effective public policy to protect these species where needed.

#### Reporting on Trade in Sharks and Rays

In conjunction with changes to Canada's *Fisheries Act* in 2019, Canada submitted a quantitative restriction notice to the World Trade Organization (WTO). The quantitative restriction relates to the conditional prohibition on the import or export of shark fins that are not attached to a shark carcass. Related tariff line codes are included in the notification which can be found at the following link:

<https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/MAQRN/CAN4.pdf&Open=True>

#### Non-Detriment Findings

The export of CITES-listed shark products from Canada is limited. On average over the last five years (2018-2022), Canada has issued 1-2 export permits annually for biological samples of *Carcharodon carcharias*, *Lamna nasus* or *Alopias* species for scientific purposes. The Scientific Authority issues non-detriment finding reports on a case-by-case basis for each CITES permit application.

## CONVENCIÓN SOBRE EL COMERCIO INTERNACIONAL DE ESPECIES AMENAZADAS DE FAUNA Y FLORA SILVESTRES (CITES)

*Notificación No. 2024/004 Ginebra, 04 de enero de 2024*

ASUNTO:

*Solicitud de información sobre tiburones y rayas (Elasmobranchii spp.)*

### Antecedentes

1. En su 19ª reunión (CoP19, Ciudad de Panamá, 2022), la Conferencia de las Partes adoptó las Decisiones [19.222 a 19.227 sobre Tiburones y rayas \(Elasmobranchii spp.\)](#) en las que se alienta a las Partes a proporcionar información relacionada con la gestión de la conservación de tiburones y rayas.
2. En su 32ª reunión, el Comité de Fauna pidió a la Secretaría que publicara una nueva notificación dando seguimiento a la [Notificación a las Partes No. 2023/027](#) emitida el 16 de marzo de 2024 (véase el acta resumida [AC32 SR](#)), a fin de recopilar nueva información para la 33ª reunión del Comité de Fauna (AC33).
3. De conformidad con la Decisión 19.222 párrafo a), la Secretaría invita a las Partes por medio de la presente a proporcionar, con arreglo a la [Resolución Conf. 12.6 \(Rev. CoP18\)](#), información breve (en un resumen ejecutivo que no supere las 200 palabras si el informe tiene más de cuatro páginas) con nuevas informaciones acerca de sus actividades de gestión de la conservación de tiburones y rayas, en particular sobre cualquier medida nacional de gestión que prohíba la captura comercial o el comercio, centrándose en los siguientes temas:
  - A. la formulación de dictámenes de extracción no perjudicial (DENP);
  - B. la formulación de dictámenes de adquisición legal (DAL);
  - C. la identificación y el control en aquellas Partes que son países de origen, tránsito y consumo de los productos de tiburones incluidos en los Apéndices de la CITES que son objeto de comercio;
  - D. el registro de las existencias de partes y derivados de tiburón comerciales y/o preconvención de especies de elasmobranchios incluidas en el Apéndice II de la CITES y el control de la entrada de esas existencias en el comercio; y
  - E. las necesidades de fomento de capacidad para ayudar a los países en desarrollo y los pequeños Estados insulares en desarrollo a cumplir los requisitos de presentación de informes.

#### 4. Respuesta Colombia

- De acuerdo con normatividad vigente, en Colombia a partir de la Resolución 0380 del 5 de marzo de 2021 (expedida por la Autoridad Nacional de Acuicultura y Pesca - AUNAP), los tiburones, rayas marinas y quimeras cambiaron su categoría de recursos pesqueros para ser considerados como recurso hidrobiológico.
- Seguidamente, por competencias, el Ministerio de Ambiente mediante el Decreto 281 del 18 de marzo de 2021 ordenó crear el “Plan Ambiental para la Protección y Conservación de Tiburones, Rayas marinas y Quimeras”, el cual fue adoptado a través de la Resolución 0854 del 5 de agosto de 2022.
- Los lineamientos del Plan Ambiental (capítulo 5.2) establecen:
  - a) Explotación dirigida. Está prohibido en todo el territorio nacional la explotación, captura, aprehensión o pesca dirigida a tiburones, rayas marinas y quimeras, tanto a escala artesanal como industrial, con fines comerciales, deportivos o recreativos.
  - b) Aleteo. Se mantiene la prohibición, en todo el territorio nacional, de la práctica del aleteo consistente en el cercenamiento y retención de las aletas de tiburón, y el descarte del resto del cuerpo al mar durante las faenas de pesca de cualquier pesquería por embarcaciones de bandera nacional y/o extranjera. Así mismo, se prohíbe el embarque, transbordo y desembarco de aletas de tiburón separadas del tronco producto de las capturas incidentales.
  - c) Comercialización y movilización. Está prohibido en todo el territorio nacional la comercialización, incluyendo la exportación, reexportación e importación, de productos de tiburones, rayas marinas y quimeras, y de cualquier subproducto derivado de los mismos. Así mismo, el transporte y tenencia de productos o subproductos como carga, menaje personal o equipaje acompañante en medios de transporte terrestre, marítimo, fluvial o aéreo.
- La normatividad expuesta en la notificación No. 2023/098 sigue vigente, sin embargo durante el primer trimestre de 2024 se han realizado algunos cambios, con la expedición por parte de la Autoridad Nacional de Acuicultura y Pesca – AUNAP de la Resolución 0119 del 24 de enero de 2024 *“Por medio de la cual se adiciona al artículo 2° de la Resolución 380 del 5 de marzo de 2021, algunas especies de tiburones y rayas marinas, como recursos pesqueros y se prohíbe la pesca dirigida de tiburones y rayas marinas en todo en todo el territorio nacional”*. En la expedición de esta norma se consideró pertinente y adecuado devolver la condición de recursos pesqueros a once (11) especies de tiburones y cuatro (04) especies de rayas marinas para proteger la salud de las poblaciones de dichos organismos, así como la salvaguarda del derecho humano a la alimentación, subsistencia, diversidad y riqueza cultural de las comunidades costeras de Colombia.

- Las especies categorizadas como recurso pesquero son las siguientes:

	<b>Lista tiburones</b>	<b>Lista rayas marinas</b>
<b>1</b>	<i>Alopias pelagicus</i>	<i>Hypanus longus</i>
<b>2</b>	<i>Alopias superciliosus</i>	<i>Hypanus americanus</i>
<b>3</b>	<i>Carcharhinus falciformis</i>	<i>Rhinoptera bonasus</i>
<b>4</b>	<i>Carcharhinus leucas</i>	<i>Hypanus guttatus</i>
<b>5</b>	<i>Carcharhinus limbatus</i>	
<b>6</b>	<i>Galeocerdo Cuvier</i>	
<b>7</b>	<i>Mustelus henlei</i>	
<b>8</b>	<i>Mustelus lunulatus</i>	
<b>9</b>	<i>Sphyrna corona</i>	
<b>10</b>	<i>Sphyrna tiburo</i>	
<b>11</b>	<i>Rhizoprionodon porosus</i>	

- La Resolución 0119 de 2024 en su artículo 2 mantiene la prohibición en todo el territorio marítimo nacional el ejercicio de cualquier modalidad de pesca dirigida a tiburones y rayas marinas y menciona en el parágrafo 1 que se adoptarán las medidas de manejo pesqueras necesarias para gestionar la reducción al máximo posible de las capturas incidentales de tiburones y rayas marinas; así como para el aprovechamiento sostenible de productos y subproductos de estas, por parte de las comunidades locales y pescadores asentados en las zonas costeras del país
- También indica en el artículo 3 que las especies de tiburones y rayas marinas, que no son incluidas en esta resolución siguen siendo consideradas como recurso hidrobiológico y su gestión se desarrollará enmarcado en las disposiciones ambientales vigentes y aplicables en la materia, las cuales son el Decreto 281 del 18 de marzo de 2021 y la Resolución 0854 del 5 de agosto de 2022.
- En relación con la normatividad actual en Colombia para tiburones y rayas marinas se puede informar que sigue vigente la prohibición de la comercialización en todo el territorio nacional, incluyendo la exportación, reexportación e importación, de productos de tiburones, rayas marinas y quimeras, y de cualquier subproducto para Elasmobranchii spp., por lo tanto, no aplica para Colombia los numerales A, B, C y D, los cuales no se responden en relación a lo anteriormente expuesto y solo se da respuesta al numeral E.

**E. Las necesidades de fomento de capacidad para ayudar a los países en desarrollo y los pequeños Estados insulares en desarrollo a cumplir los requisitos de presentación de informes.**

Teniendo en cuenta la normatividad actual se requiere por parte de CITES apoyo en fortalecimiento de capacidades al talento humano de las entidades relacionadas, en este caso autoridades ambientales y pesqueras, frente al manejo de los sistemas existentes de información, registro y monitoreo que permita controlar, prevenir y evitar el tráfico ilegal de estas especies en el territorio nacional y cumplir los requisitos de presentación de informes CITES.

## European Union

With regard to Notification 2024/004 on identification and monitoring of CITES-listed shark products and on capacity building, I would like to inform you that the EU does not have any new elements to be reported in addition to what we had already indicated in our reply to notification 2023/027 requesting parties to provide information related to shark and ray (*Elasmobranchii* spp.) conservation management. Nevertheless, you may have received individual replies from the EU Member States.

## Finland

### **Finland's answer to Notification No 2024/004, Request for information on sharks and rays (Elasmobranchii spp.)**

Sharks do not occur in Finland's territorial waters because of the low salinity of the northern Baltic Sea. Only some vagrants of Spiny dogfish (*Squalus acanthias*) have very rarely been observed. Therefore, there is no fishing of CITES-listed shark species nor any other sharks in Finnish waters. Furthermore, Finnish vessels are not involved in fishing on the high seas, and there are no landings of sharks in Finnish ports. Hence, no introduction from the sea.

As an EU Member State Finland complies with the provisions of EU Wildlife Trade Regulations as well as other relevant EU legislation. For the reasons mentioned above, there are no additional national management measures or prohibitions related to commercial take or trade of shark species in Finland.

We are not aware of any stockpiles of shark parts and derivatives for CITES Appendix II Elasmobranch species in Finland. However, we are aware that there are highly processed products on the market such as medicines and cosmetics that contain shark but without any further information about which species of shark. There are not enough tools to solve this issue at national level as it requires considerable improvements in traceability worldwide.



## Indonesia

### Response to Notification No. 2024/004 Request for information on sharks and rays (Elasmobranchii spp.)

#### Request for information on shark and ray conservation management

##### 1. The making of non-detriment findings (NDFs)

Indonesia developed NDF documents for silky sharks (*Carcharhinus falciformis*) in 2018, wedgefishes (Rhinidae) in 2020, hammerhead sharks (Sphyrnidae), and mako sharks (*Isurus* spp.) in 2022. As an update to our report last year, all of the documents have been submitted to the CITES Secretariat and published on the CITES website. New NDF documents have been developed for 17 species of the family Carcharhinidae using the CITES electronic Non-Detriment Finding (e-NDF) portal for sharks and rays, developed by Blue Resources Trust and following a guideline by Mundy-Taylor et al. (2014). However, the document has yet to be formally submitted to the CITES Secretariat. We are implementing an enumeration program in several locations to record shark and ray populations in support of the development of NDFs. Although the e-NDF portal provides an easier process in NDF formulation, we still find challenges in developing NDFs in general due to the difficulty of estimating shark and ray populations in Indonesia, limited catch data at the species level in several regions, especially in eastern Indonesia due to remote and inaccessible locations, and limited financial resources for data collection.

##### 2. The making of legal acquisition findings (LAFs)

LAFs in Indonesia include stock recording, data collection at fishing ports (including species-specific data collection in several locations), fishing gear regulations, reporting on harvest and stock by business actors, and annual harvest and export quotas. Business actors must hold a Fish Utilization Permit (SIPJI), get a quota, and have a Fish Transport Permit (SAJI) for domestic and international trade. To formalize the implementation, the following regulations regarding the legality of CITES-listed sharks and rays acquisition are imposed:

- Government Regulation 27/2021 on The Implementation of Marine Affairs and Fisheries Sector
- Regulation of the Minister of Marine Affairs and Fisheries 8/2012 on Fishing Ports
- Regulation of the Minister of Marine Affairs and Fisheries 61/2018 on the Utilization of Protected and/or CITES-listed Fish Species
- Regulation of the Minister of Marine Affairs and Fisheries 10/2021 on the Standards for Business Activities and Products in Risk-Based Business Licensing in the Marine and Fisheries Sector

- Regulation of the Minister of Marine Affairs and Fisheries 33/2021 on Fishing Logbook, Onboard Monitoring, Fishing Vessel Inspection, Assessment, and Marking, and the Management of Fishing Vessel Manning
- Decree of the Director General for Marine Spatial Management 67/2022 on The Technical Guidelines for Data Collection on Protected and CITES-listed Fish Species

The challenge is the vast ocean and the difficulty of direct data collection, especially if the catch is not intact.

### **3. Identification and monitoring of CITES-listed shark products in trade in source, transit and consumer Parties**

Indonesia enacted:

- Regulation of the Minister of Marine Affairs and Fisheries 61/2018 on the Utilization of Protected and/or CITES-listed Fish Species
- Regulation of the Minister of Marine Affairs and Fisheries 10/2021 on the Standards for Business Activities and Products in the Implementation of Risk-Based Business Licensing for the Maritime and Fisheries Sector

These two regulations administer utilization permits, including the obligation to have a Fish Utilization Permit (SIPJI) and a Fish Transport Permit (SAJI) as a prerequisite for international transport of shark and ray products. The implementation results in a central record of the transport of shark and ray products in e-SAJI containing species names, product volumes, product forms, and the status of quota fulfilment of each business actor.

In addition, shark and ray products are included in the commodities that must be inspected prior to transport by the Fisheries Quarantine Agency based on:

- Regulation of the Minister of Marine Affairs and Fisheries 8/2022 on the Types of Commodities Required to be Inspected
- Decree of the Minister of Finance 26/2022 on the List of Restricted Goods Based on the Regulation of the Minister of Marine Affairs and Fisheries 8/2022
- Regulation of the Minister of Marine Affairs and Fisheries 38/2019 on the Export of Disease Carriers and/or Fishery Products
- Regulation of the Minister of Marine Affairs and Fisheries 11/2019 on the Import of Disease Carriers and/or Fishery Products
- Regulation of the Director General for Surveillance for Marine and Fisheries Resources 7/2022 on the Technical Instructions for Supervising the Use of Protected and/or CITES-listed Fish Species

Compliance can be measured from the issued permits.

**4. Recording of stockpiles of commercial and/or pre-Convention shark parts and derivatives for CITES Appendix-II elasmobranch species and controlling the entry of these stocks into trade**

Based on recent policy contained in the Regulation of the Minister of Marine Affairs and Fisheries 61/2018 on the Utilization of Protected and/or CITES-listed Fish Species and the Regulation of the Minister of Marine Affairs and Fisheries 10/2021 on the Standards for Business Activities and Products in the Implementation of Risk-Based Business Licensing for the Maritime and Fisheries Sector, the control mechanism for export quotas is getting tighter because all transport data is recorded in e-SAJI. Export quota is given annually at the beginning of the year, and business actors report their use of quota every month to the Management Authority. Stock recording is carried out every time the business actors ship the products and the Management Authority validates the record. This is the standard operating procedure for stock recording enacted by the Director for Marine Conservation and Biodiversity. At the end of the year, business actors are inspected to see the remaining stock from the quota.

**5. Capacity building needs to assist developing countries and small island developing states with reporting requirements**

Indonesia has a National Competency Standards for Managing and Utilizing Sharks and Rays, issued on March 6, 2023 through the Decree of the Minister of Manpower and Transmigration No. 26/2023. In addition, Indonesia has conducted training and technical assistance to increase capacity in the identification of sharks and rays as well as the licensing process, which was carried out at the national and regional levels, with the main participants being government officials and business actors. Several government officials have also completed Training of Trainers to be certified as instructors in future training. Fishers are also equipped with the capacity to use the fishing logbook to record the catch, trained by MMAF. On-board observers are also trained and upgraded annually, particularly when new CITES listings exist.

The current needs for capacity building are training or technical assistance in identifying sharks and rays post-CoP19, in which 40 new species have been uplisted since, with the target of training being surveillance officials, enumerators at ports, license verifiers, business actors, fishers, and on-board observers. The coverage of the area to be covered by enumerators or observers also needs to be expanded. In addition to identifying intact catches, capacity building is also needed to identify body parts and derivative products such as oil or flour, as well as population stock estimation/assessment. Along with the non-technological capacity mentioned above, there is also a need to improve the technology in species identification and the capacity to use the technology itself. Regarding management, a comparative study needs to be conducted with the management authorities of other countries.

## **Request for non-detriment findings and conversion factors**

Indonesia developed NDF documents for silky sharks (*Carcharhinus falciformis*) in 2018, wedgefishes (Rhinidae) in 2020, hammerhead sharks (Sphyrnidae), and mako sharks (*Isurus* spp.) in 2022. As an update to our report last year, all of the documents have been submitted to the CITES Secretariat and published on the CITES website. New NDF documents have been developed for 17 species of the family Carcharhinidae using the CITES electronic Non-Detriment Finding (e-NDF) portal for sharks and rays, developed by Blue Resources Trust and following a guideline by Mundy-Taylor et al. (2014). However, the document has yet to be formally submitted to the CITES Secretariat.

After the development of NDFs, the Management Authority decided the conversion factor used in Indonesia, which is contained in the Decree of the Director General for Marine Spatial and Ocean Management No. 51/2023 on the Technical Guidelines for Determining Export Quotas of Protected and/or CITES-listed Fish Species. The approach used is the ratio of each body part (fin, skin, meat, bone, other) to the total weight.

## **Reporting on trade in sharks and rays**

The challenges faced in collecting data on shark and ray trade include:

- Limited human resources capable of identifying sharks and rays down to the species level
- Difficulty of collecting catch data because not all catches are landed at fishing ports
- Remote and hardly accessible landing ports at some locations
- The long supply chain, from fishers to exporters
- Difficulty in implementing size limit for trade

## **Request for information on oceanic whitetip shark (*Carcharhinus longimanus*)**

### **1. All Parties that catch pelagic sharks to submit information on their national level implementation efforts and regulations for implementing the listing of *C. longimanus***

Indonesia is a contracting party to the Western and Central Pacific Fisheries Commission (WCPFC) and the Indian Ocean Tuna Commission (IOTC). Following the ratification of the two RFMOs<sup>1,2</sup>, the oceanic whitetip sharks are included as sharks that are prohibited from being retained at all and fishers must document and report the release to the Port Authority, as ordered in the Regulation of the Minister of Marine Affairs and Fisheries No. 58/2020 on Capture Fisheries Business. However, if the fish is dead upon catching, fishers must document and land the fish intact. The Port Authority will then dispose of the fish.

---

<sup>1</sup> The Presidential Regulation No. 9/2007 on the Ratification of the Agreement for the Establishment of the Indian Ocean Tuna Commission and

<sup>2</sup> the Presidential Regulation No. 61/2013 on the Ratification of the Convention on The Conservation And Management Of Highly Migratory Fish Stocks In The Western And Central Pacific Ocean

**2. All Parties who are encountering difficulties implementing the listing of *C. longimanus* to submit information detailing the difficulties and any other relevant information**

Since RFMO resolutions<sup>3,4</sup> prohibit the retaining of oceanic whitetip sharks, harvest data is limited even though the species is listed in Appendix II. Moreover, the habitat is mainly in high seas.

---

<sup>3</sup> IOTC Resolution 13/06 on A Scientific and Management Framework on The Conservation of Sharks Species Caught in Association with IOTC Managed Fisheries

<sup>4</sup> WCPFC Resolution CMM 2022-04 on Conservation and Management Measure for Sharks

**Information from Japan in response to CITES Notification 2024/004  
regarding the request for new information  
on shark and ray conservation management activities**

In response to CITES Notification 2024/004 regarding the request for new information on sharks and rays, Japan hereby submits the following:

1. Japan recognizes that sharks are important fishery resources and play an important role in the marine ecosystem as higher-level predators. Japan aims to achieve sustainable and effective utilization of sharks. As sharks are subjected to catch in various types of fisheries in many countries, Japan is aware of the need for appropriate management of shark fishing based on the results of stock assessment on a species by species and stock by stock basis so that negative impact on the resources can be averted. In addition, Japan shares the concern that sharks are made subject to illegal, unregulated and unreported (IUU) fishing activities and recognizes the importance of ensuring trade that is legally appropriate under CITES regulations.
2. Japan made reservations to the listings of some shark species in Appendix II primarily due to the fact that these species do not meet the criteria for inclusion thereof in Appendix II. However, upon exporting the above-mentioned shark species including pre-Convention shark parts and derivatives, to all countries including those which are not parties to CITES, Japan voluntarily conducts procedures related to export permits that are required under CITES regulations, notwithstanding paragraph 3 of Article XV of CITES.
3. In response to the listing of blue shark in Appendix II at COP19, Japan has developed the Non-detriment findings (NDF) thereof for this species (see Annex) and the scheme of legal acquisition findings (LAF) including checking the fishing permits of the vessels through the cooperation among relevant authorities. Japan has issued export permits along with the LAF and NDF.
4. With regard to legal acquisition findings (LAF) of blue shark landed in Japan, at the port site where blue sharks are landed, relevant information are recorded including the names of fishing vessels which caught them, quantity of catch, date of landing and selling, and name of retailer or processor to whom sharks are sold. This scheme enables management authorities to trace a unit of export products back to the origin, i.e. fishing vessels, and also to check whether or not those vessels have

complied with relevant regulations.

5. Japan uses a conversion factor of 2.1 which is used to convert recorded processed body weight of blue shark caught by longline vessels to live (round) body weight for reporting to Regional Fisheries Management Organizations (RFMOs) as annual catch. The conversion factor was estimated using the body weight data collected by the International Commission for the Conservation of Atlantic Tunas (ICCAT) observers.

6. Japan has also issued export permits for mako sharks caught by longline fishers in the northwestern Pacific, where the population is assessed good and healthy by the Western and Central Pacific Fisheries Commission (WCPFC). For the details on NDF and LAF for mako sharks, please refer to Japan's response to CITES Notification 2023/027 submitted in 2023.

7. Regarding information on oceanic whitetip shark (*Carcharhinus longimanus*), for which Japan made a reservation, Japan introduced the prohibition of the retention of this species for Japan's tuna longline vessels by the domestic laws and regulations based on the decisions of tuna RFMOs in each area from 2011 to 2013. Therefore, there has been no catch of this species by the Japanese vessels after 2013, including in Japan's EEZ.

8. Japan is continuously committed to conservation and management of sharks through domestic regulations and/or cooperation with other countries and organizations such as relevant RFMOs. However, Japan would like to reiterate to note that a large number of shark species were listed as "look-alike" species without sufficient justification, including those are sustainably managed and commercially used, and to express its serious concern over the unnecessary enforcement burden resulting from the listing.

Summary of making non-detriment findings

Species: Blue shark (*Prionace glauca*), North Pacific Population

2 NDF can be made when the specimen is:		
(1)	The specimen is collected before the listing in Appendix.	N/A
(2)	The specimen is not a nature origin such as: ① Bred from parents collected before listing in Appendix. ② Bred from parents which were imported under the CITES procedures. ③ Bred from parents which met the requirement of NDF. ④ Others (Bred under a robust technique which was proved to be able to make F2.)	N/A
(3)	The specimen is collected from a part of an individual by a method without affecting the survival of the individual (such as a specimen of biopsy sampling, an embryo, spermatozoa and so on).	N/A
(4)	The specimen is collected from a dead individual and it is reasonably considered that the death is not attributable to the specimen collector, e.g., a stranded whale. (A by-caught individual is excluded from this category.)	N/A
3 When a specimen does not meet any criterion of paragraph 2 above, NDF should be basically considered, taking into account the following information:		
(1)	Biological characteristic and life history of the species	Life span of blue shark in the Pacific Ocean is generally estimated to be over 20 years old. The reproductive system is placental viviparity with mean litter size is 35.5 (range: 15-112), and the reproductive cycle is estimated as one year (annual). The precaudal length at maturity is between 140-160 cm for both sexes, and it corresponds to 6 years old for females and 5 years old for males.
(2)	Distribution range of the species (historical and present)	Blue shark is distributed from tropical to temperate waters globally. In particular, high abundance is observed in temperate waters.
(3)	Stock structure, status and trend of the species	Productivity of blue shark is higher than that of other pelagic sharks. The intrinsic rate of population increases (median) estimated from matrix population model with consideration of sex and age is 0.384. This estimate implies that the stock size can increase approximately 1.5 fold within one year in absence of fishing impacts.
(8)	Monitoring of the species status	
(9)	Conservation of the species	In 2022, stock assessment was conducted using an integrated model (Stock Synthesis : SS) . The results shows that the median of the annual spawning stock biomass (SSB) had a steadily decreasing trend until 1992 and slightly increased until recent years. The median of the annual age-0 recruitment is estimated to be relatively stable around 10 million individuals except for 1988. Median female SSB in 2020 is estimated to be 1.170 of SSBMSY (80% confidence interval : 0.570-1.776) . This indicates that the current stock status is likely (63.5% probability) not in an overfished condition relative to Maximum Sustainable Yield (MSY)-based reference points. Recent annual fishing mortality rate (F) (F2017-2019) (median) was estimated to be below FMSY and overfishing of the stock is very likely (91.9% probability) not occurring relative to MSY-based reference points. As a conclusion of stock assessment, there is a 61.9% joint probability that this stock is not in an overfished condition and that overfishing is not occurring relative to MSY based reference points.
(4)	Threats to the species	Bycatch by tuna longline fishery etc.
(5)	Historical and present fishing situation and mortality rate of the species	A large number of blue sharks are mainly caught by tuna longline fishery as bycatch, but Japanese offshore shallow-set longline fishery targets this species seasonally. The total annual landings at main fishing ports in Japan range 5,100-16,000 tons (mean: 10,251 tons) from 1992 to 2021. Currently, all tuna Regional Fishery Management Organizations (RFMOs) obligate the full utilization of sharks caught by fisheries and submission of those fishery data. Under Western and Central Pacific Fisheries Commission (WCPFC), Commission Members, Cooperating Non-Members and Participating Territories (CCMs) shall require their vessels to land sharks with fins naturally attached to the carcass or CCMs may take alternative measures such as keeping the removed fin and carcass within the same bag. In addition, it was agreed that 1) CCMs shall ensure that their vessels comply with not to use or carry wire trace as branch lines or leaders; or not to use the shark lines, and 2) CCMs shall develop and report their management plans including the measures to limit the fishing at the level for longline fisheries targeting sharks. Under this regulation, offshore fishery in Kesennuma has implemented the management plan which established the upper limit of landing of blue shark as 600 tons etc. since January 2021.
(6)	Introduced and proposed management measures for the species	
(7)	Compliance situation of the management measures	
(10)	Continuity of the role of the species in the ecosystem	Generally, it is assumed to be one of the top predators.
(11)	Effects of illegal trade on the survival of the species	Unknown.
5 When NDF is considered based on the information in paragraph 3 above, as a first step, items iii), v) and vi) of paragraph 3 should be considered in accordance with the following criteria in order. If these three items meet requirements in the criteria, the other items in paragraph 3 also should be considered to judge whether NDF can be made.		
(1)	When a TAC of the species is established or calculated on scientific bases, the present total catch of the species including the export is less than the amount of the TAC.	
(2)	In case that establishment or calculation of a TAC of the species on scientific bases is difficult, but the stock trend can be estimated for a certain period based on catch or other data, the stock does not show a decreasing trend and the present total catch of the species including the export is less than the average past catch amount of the species. (The length of the period depends on biological characteristic of the species.)	
(3)	In case that establishment or calculation of a TAC of the species on scientific bases is difficult and 5. ii) above is not applicable, the stock is considered to be maintained through the management measures which have been introduced or will be introduced in the near future. In making judgment of the effect of the management measures, the following information should be considered: a) Protected areas are effectively established. b) Time closure is effectively established. c) It is estimated that the fishing pressure has been decreased substantially because the number of fishermen to catch the species is regulated and the number has been substantially decreased over a long period. d) Regulation of fishing gear is effectively established. e) Individuals smaller than a certain size are protected. f) Other effective management measures (such as release of females, prohibition of bottom trawl, restriction of power of light and so on) are established. g) Combination of above mentioned measures brings the same conservation effect.	
(4)	In case that establishment or calculation of a TAC of the species on scientific bases is difficult and neither 5. ii) nor iii) is applicable, the annual catch amount of the species is considered negligible against the estimated stock size. In estimating the stock size, the minimum stock size should be estimated, taking into account, inter alia, the past catch record, the area of distribution, the stock size and productivity of look-alike species as well as the catch amount and the maximum fishing efficiency. The "negligible level" should in principle follow the table below, depending on the productivity of the species. When any parameter of the species falls under a less productivity category, the species shall be regarded as belonging to the category.	
(5)	The species is considered to be maintained under the present fishing activities because of the stock enhancement activities for the species	
7	For a specific aquatic species, NDF prior to trades within a certain period (hereinafter referred to as comprehensive NDF) can be made when identification of look-alike species is clearly possible or the species meets at least one of the criteria 2(i), 5(i)-(iv), and is considered to be able to make NDF for a certain period. However, when a scientific stock assessment shows that the stock of the species becomes worse etc., the comprehensive NDF may be suspended.	Yes. Blue shark was decided to be listed in Appendix II as look-alike species at the CITES COP19 in 2022. Identification of specimens is clearly possible because they are clearly possible to be identified at the time of catch and/or landing, etc., and copies of all documentation to the transaction of the specimens from the catch or landing to export are provided. In addition, as described in 3(3), there is a 61.9% joint probability that this stock is not in an overfished condition and that overfishing is not occurring relative to MSY based reference points.
Conclusion		NDF can be made.

Parameters	Productivity		
	Low	Middle	High
Natural mortality rate (M)	$M < 0.2$	$0.2 \leq M \leq 0.5$	$0.5 < M$
Intrinsic rate of Natural increase (R)	$R < 0.14$	$0.14 \leq R \leq 0.35$	$0.35 < R$
von Bertalanffy growth rate (K)	$K < 0.15$	$0.15 \leq K \leq 0.33$	$0.33 < K$
Age at maturity (t mat)	$8 < t \text{ mat}$	$3.3 \leq t \text{ mat} \leq 8$	$t \text{ mat} < 3.3$
Maximum age (t max)	$25 < t \text{ max}$	$14 \leq t \text{ max} \leq 25$	$t \text{ max} < 14$
Generation interval (G)	$10 < G$	$5 \leq G \leq 10$	$G < 5$
Negligible level 1 (Recovery Index (Fr) =0.1)	0.7%	1.2% <sup>2</sup>	1.8% <sup>3</sup>

1 "negligible level" can be calculated as  $R \cdot Fr / 2$  by the method of Wade 1998.  
2 Median value of R is used as there are ranges.  
3 0.35 is used as R



Summary of making non-detriment findings

Species: Blue shark (*Prionace glauca*), South Pacific Population

2 NDF can be made when the specimen is:		
(1)	The specimen is collected before the listing in Appendix.	N/A
(2)	The specimen is not a nature origin such as: ① Bred from parents collected before listing in Appendix. ② Bred from parents which were imported under the CITES procedures. ③ Bred from parents which met the requirement of NDF. ④ Others (Bred under a robust technique which was proved to be able to make F2.)	N/A
(3)	The specimen is collected from a part of an individual by a method without affecting the survival of the individual (such as a specimen of biopsy sampling, an embryo, spermatozoa and so on).	N/A
(4)	The specimen is collected from a dead individual and it is reasonably considered that the death is not attributable to the specimen collector, e.g., a stranded whale. (A by-caught individual is excluded from this category.)	N/A
3 When a specimen does not meet any criterion of paragraph 2 above, NDF should be basically considered, taking into account the following information:		
(1)	Biological characteristic and life history of the species	Life span of blue shark in the Pacific Ocean is generally estimated to be over 20 years old. The reproductive system is placental viviparity with mean litter size is 35.5 (range: 15-112) and the reproductive cycle is estimated as one year (annual). The precaudal length at maturity is estimated to be 170-190 cm for females and 190-195 cm for males.
(2)	Distribution range of the species (historical and present)	Blue shark is distributed from tropical to temperate waters globally. In particular, high abundance is observed in the temperate water.
(3)	Stock structure, status and trend of the species	Productivity of blue shark is higher than that of other pelagic sharks. The intrinsic rate of population increase (median) estimated from matrix population model with consideration of sex and age was 0.384. This estimate implies that the stock size can increase approximately 1.5 fold within one year in absence of fishing impacts.
(8)	Monitoring of the species status	In 2021, stock assessments were conducted using an integrated model (Stock Synthesis : SS) and a surplus production model based on the logbook data provided by Japan, Taiwan and EU etc. between 1995 and 2020. Both models showed similar results. Based on the results and their associated information, the stock biomass in recent years has been highly likely increased and the fishing pressure in recent 10 years has decreased. The Scientific Committee of WCPFC advised that this stock is unlikely to be overfished and it is unlikely that overfishing is occurring when considered against MSY.
(9)	Conservation of the species	
(4)	Threats to the species	Bycatch by tuna longline fishery etc.
(5)	Historical and present fishing situation and mortality rate of the species	A large number of blue sharks are mainly caught by tuna longline fishery as bycatch, but Japanese offshore shallow-set longline fishery targets this species seasonally. The total landings at main fishing ports in Japan ranges 5,100-16,000 tons (mean: 10,251 tons) from 1992 to 2021.
(6)	Introduced and proposed management measures for the species	Currently, all tuna Regional Fishery Management Organizations (RFMOs) obligate the full utilization of sharks caught by fisheries and submission of those fishery data. Western and Central Pacific Fisheries Commission (WCPFC), Commission Members, Cooperating Non-Members and Participating Territories (CCMs) shall require their vessels to land sharks with fins naturally attached to the carcass or CCMs may take alternative measures such as keeping the removed fin and carcass within the same bag. In addition, it was agreed that 1) CCMs shall ensure that their vessels comply with not to use or carry wire trace as branch lines or leaders; or not to use the shark lines, and 2) CCMs shall develop and report their management plans including the measures to limit the fishing at the level for longline fisheries targeting sharks.
(7)	Compliance situation of the management measures	Generally, it is assumed to be one of the top predators.
(10)	Continuity of the role of the species in the ecosystem	Unknown.
(11)	Effects of illegal trade on the survival of the species	Unknown.
5 When NDF is considered based on the information in paragraph 3 above, as a first step, items (iii), (v) and (vi) of paragraph 3 should be considered in accordance with the following criteria in order. If these three items meet requirements in the criteria, the other items in paragraph 3 also should be considered to judge whether NDF can be made.		
(1)	When a TAC of the species is established or calculated on scientific bases, the present total catch of the species including the export is less than the amount of the TAC.	/
(2)	In case that establishment or calculation of a TAC of the species on scientific bases is difficult, but the stock trend can be estimated for a certain period based on catch or other data, the stock does not show a decreasing trend and the present total catch of the species including the export is less than the average past catch amount of the species. (The length of the period depends on biological characteristic of the species.)	
(3)	In case that establishment or calculation of a TAC of the species on scientific bases is difficult and 5. ii) above is not applicable, the stock is considered to be maintained through the management measures which have been introduced or will be introduced in the near future. In making judgment of the effect of the management measures, the following information should be considered: a) Protected areas are effectively established. b) Time closure is effectively established. c) It is estimated that the fishing pressure has been decreased substantially because the number of fishermen to catch the species is regulated and the number has been substantially decreased over a long period. d) Regulation of fishing gear is effectively established. e) Individuals smaller than a certain size are protected. f) Other effective management measures (such as release of females, prohibition of bottom trawl, restriction of power of light and so on) are established. g) Combination of above mentioned measures brings the same conservation effect.	
(4)	In case that establishment or calculation of a TAC of the species on scientific bases is difficult and neither 5. ii) nor iii) is applicable, the annual catch amount of the species is considered negligible against the estimated stock size. In estimating the stock size, the minimum stock size should be estimated, taking into account, inter alia, the past catch record, the area of distribution, the stock size and productivity of look-alike species as well as the catch amount and the maximum fishing efficiency. The "negligible level" should in principle follow the table below, depending on the productivity of the species. When any parameter of the species falls under a less productivity category, the species shall be regarded as belonging to the category.	
(5)	The species is considered to be maintained under the present fishing activities because of the stock enhancement activities for the species	
7	For a specific aquatic species, NDF prior to trades within a certain period (hereinafter referred to as comprehensive NDF) can be made when identification of look-alike species is clearly possible or the species meets at least one of the criteria 2(i), 5(i)-(iv), and is considered to be able to make NDF for a certain period. However, when a scientific stock assessment shows that the stock of the species becomes worse etc., the comprehensive NDF may be suspended.	Yes. Blue shark was decided to be listed in Appendix II as look-alike species at the CITES COP19 in 2022. Identification of specimens is clearly possible because they are clearly possible to be identified at the time of catch and/or landing, etc., and copies of all documentation to the transaction of the specimens from the catch or landing to export are provided. In addition, as described above 3(3), the Scientific Committee of WCPFC advised that the Southwest Pacific blue shark is unlikely to be overfished and it is unlikely that overfishing is occurring when considered against MSY.
Conclusion		NDF can be made.

Parameters	Productivity		
	Low	Middle	High
Natural mortality rate (M)	$M < 0.2$	$0.2 \leq M \leq 0.5$	$0.5 < M$
Intrinsic rate of Natural increase (R)	$R < 0.14$	$0.14 \leq R \leq 0.35$	$0.35 < R$
von Bertalanffy growth rate (K)	$K < 0.15$	$0.15 \leq K \leq 0.33$	$0.33 < K$
Age at maturity (t mat)	$8 < t \text{ mat}$	$3.3 \leq t \text{ mat} \leq 8$	$t \text{ mat} < 3.3$
Maximum age (t max)	$25 < t \text{ max}$	$14 \leq t \text{ max} \leq 25$	$t \text{ max} < 14$
Generation interval (G)	$10 < G$	$5 \leq G \leq 10$	$G < 5$
Negligible level 1 (Recovery Index (Fr)=0.1)	0.7%	1.2% <sup>2</sup>	1.8% <sup>3</sup>

1 "negligible level" can be calculated as  $R * Fr / 2$  by the method of Wade 1998.  
2 Median value of R is used as there are ranges.  
3 0.35 is used as R

## Summary of making non-detriment findings

Species: Blue shark (*Prionace glauca*), Indian Ocean Population

2 NDF can be made when the specimen is:		
(1) The specimen is collected before the listing in Appendix.		N/A
(2) The specimen is not a nature origin such as: ① Bred from parents collected before listing in Appendix. ② Bred from parents which were imported under the CITES procedures. ③ Bred from parents which met the requirement of NDF. ④ Others (Bred under a robust technique which was proved to be able to make F2.)		N/A
(3) The specimen is collected from a part of an individual by a method without affecting the survival of the individual (such as a specimen of biopsy sampling, an embryo, spermatozoa and so on).		N/A
(4) The specimen is collected from a dead individual and it is reasonably considered that the death is not attributable to the specimen collector, e.g., a stranded whale. (A by-caught individual is excluded from this category.)		N/A
3 When a specimen does not meet any criterion of paragraph 2 above, NDF should be basically considered, taking into account the following information:		
(1) Biological characteristic and life history of the species		Mean generation time is estimated to be 8 to 10 years old. Reproductive system is placental viviparity with mean litter size is 38 (range: 4–135). Length at 50% maturity (total length) is estimated as 201 cm for males and 194 cm for females. Age at 50% maturity is estimated as 7 years old for males and 6 years old for females.
(2) Distribution range of the species (historical and present)		Blue shark is distributed from tropical to temperate waters globally, including the Indian Ocean.
(3) Stock structure, status and trend of the species		In the Indian Ocean Tuna Commission (IOTC) Working Party of Bycatch and Ecosystem in 2021, stock assessment was conducted using a length-based integrated model (Stock Synthesis: SS) with data from 1950 to 2019. Six annual abundance indices (EU-Spain, EU-Portugal, Japan, Taiwan, South Africa, and Réunion) were used for the assessment. Some indices showed inconsistent trends, but the overall annual trends were flat and relatively stable. Japanese CPUE showed a large annual fluctuation, but the long-term trend was flat and relatively stable, which was the same as the overall annual trends. The results of stock assessment showed that current stock status is not overfished and not overfishing relative to MSY based reference points. From the result of the 10-year future projection, the probability that the level of stock (median of biomass) is above BMSY (41,988 tons) is high under the continuation of the catch level in 2019 (41,988 tons).
(8) Monitoring of the species status		
(9) Conservation of the species		
(4) Threats to the species		Bycatch by tuna longline fishery etc.
(5) Historical and present fishing situation and mortality rate of the species		A large number of blue sharks are mainly caught by tuna longline fishery as bycatch, but this species is frequently caught as a target species by semi-industrial fishery other than industrial longline and purse seine fishery, and artisanal fishery in the Indian Ocean. Japanese deep-set longline fishery targeting bigeye tuna in tropical waters and Japanese shallow-set longline fishery targeting southern bluefin tuna in temperate waters catch blue sharks as bycatch. Annual Japan's catch of blue shark calculated from logbook data of longline fishery ranges from 310 to 2,700 tons for 1994-2021.
(6) Introduced and proposed management measures for the species		Currently, all tuna Regional Fishery Management Organizations (RFMOs) obligate the full utilization of sharks caught by fishery and submission of fishery data. In relation to this resolution, IOTC adopted conservation and management measures for blue sharks in the Indian Ocean, including 1) for frozen product, retain of shark fin weighing over 5% of the total weight of sharks on board is prohibited and in case shark fin and carcass are not landed simultaneously, it is necessary to take measures to ensure that shark fin weight is not over 5% of the total weight of sharks on board, and 2) for fresh product, the removal of shark fin from the body of sharks is prohibited.
(7) Compliance situation of the management measures		
(10) Continuity of the role of the species in the ecosystem		Generally, it is assumed to be one of the top predators.
(11) Effects of illegal trade on the survival of the species		Unknown.
5 When NDF is considered based on the information in paragraph 3 above, as a first step, items iii), v) and vi) of paragraph 3 should be considered in accordance with the following criteria in order. If these three items meet requirements in the criteria, the other items in paragraph 3 also should be considered to judge whether NDF can be made.		
(1) When a TAC of the species is established or calculated on scientific bases, the present total catch of the species including the export is less than the amount of the TAC.		
(2) In case that establishment or calculation of a TAC of the species on scientific bases is difficult, but the stock trend can be estimated for a certain period based on catch or other data, the stock does not show a decreasing trend and the present total catch of the species including the export is less than the average past catch amount of the species. (The length of the period depends on biological characteristic of the species.)		
(3) In case that establishment or calculation of a TAC of the species on scientific bases is difficult and 5. ii) above is not applicable, the stock is considered to be maintained through the management measures which have been introduced or will be introduced in the near future. In making judgment of the effect of the management measures, the following information should be considered: a) Protected areas are effectively established. b) Time closure is effectively established. c) It is estimated that the fishing pressure has been decreased substantially because the number of fishermen to catch the species is regulated and the number has been substantially decreased over a long period. d) Regulation of fishing gear is effectively established. e) Individuals smaller than a certain size are protected. f) Other effective management measures (such as release of females, prohibition of bottom trawl, restriction of power of light and so on) are established.		
(4) In case that establishment or calculation of a TAC of the species on scientific bases is difficult and neither 5. ii) nor iii) is applicable, the annual catch amount of the species is considered negligible against the estimated stock size. In estimating the stock size, the minimum stock size should be estimated, taking into account, inter alia, the past catch record, the area of distribution, the stock size and productivity of look-alike species as well as the catch amount and the maximum fishing efficiency. The "negligible level" should in principle follow the table below, depending on the productivity of the species. When any parameter of the species falls under a less productivity category, the species shall be regarded as belonging to the category.		
(5) The species is considered to be maintained under the present fishing activities because of the stock enhancement activities for the species		
7 For a specific aquatic species, NDF prior to trades within a certain period (hereinafter referred to as comprehensive NDF) can be made when identification of look-alike species is clearly possible or the species meets at least one of the criteria 2(i), 5(i)-(iv) and is considered to be able to make NDF for a certain period. However, when a scientific stock assessment shows that the stock of the species becomes worse etc., the comprehensive NDF may be suspended.		Yes. Blue shark was decided to be listed in Appendix II as look-alike species at the CITES COP19 in 2022. Identification of specimens is clearly possible because they are clearly possible to be identified at the time of catch and/or landing, etc., and copies of all documentation to the transaction of the specimens from the catch or landing to export are provided. In addition, as described above 3(3), the results of stock assessment in the IOTC Working Party of Bycatch and Ecosystem showed that current stock status is not overfished and not overfishing.
Conclusion		NDF can be made.

Parameters	Productivity		
	Low	Middle	High
Natural mortality rate (M)	$M < 0.2$	$0.2 \leq M \leq 0.5$	$0.5 < M$
Intrinsic rate of Natural increase (R)	$R < 0.14$	$0.14 \leq R \leq 0.35$	$0.35 < R$
von Bertalanffy growth rate (K)	$K < 0.15$	$0.15 \leq K \leq 0.33$	$0.33 < K$
Age at maturity (t mat)	$8 < T \text{ mat}$	$3.3 \leq t \text{ mat} \leq 8$	$t \text{ mat} < 3.3$
Maximum age (t max)	$25 < T \text{ max}$	$14 \leq t \text{ max} \leq 25$	$t \text{ max} < 14$
Generation interval (G)	$10 < G$	$5 \leq G \leq 10$	$G < 5$
Negligible level 1 (Recovery Index (Fr)=0.1)	0.7%	1.2-6%	1.8-6%

1 "negligible level" can be calculated as  $R \cdot Fr / 2$  by the method of Wade 1998.

2 Median value of R is used as there are ranges.

3 0.35 is used as R

## Summary of making non-detriment findings

Species: Blue shark (*Prionace glauca*), North Atlantic Population

2 NDF can be made when the specimen is:		
(1) The specimen is collected before the listing in Appendix.		N/A
(2) The specimen is not a nature origin such as: ① Bred from parents collected before listing in Appendix. ② Bred from parents which were imported under the CITES procedures. ③ Bred from parents which met the requirement of NDF. ④ Others (Bred under a robust technique which was proved to be able to make F2.)		N/A
(3) The specimen is collected from a part of an individual by a method without affecting the survival of the individual (such as a specimen of biopsy sampling, an embryo, spermatozoa and so on).		N/A
(4) The specimen is collected from a dead individual and it is reasonably considered that the death is not attributable to the specimen collector, e.g., a stranded whale. (A by-caught individual is excluded from this category.)		N/A
3 When a specimen does not meet any criterion of paragraph 2 above, NDF should be basically considered, taking into account the following information:		
(1) Biological characteristic and life history of the species		Life span of blue shark is estimated to be over 20 years old. Reproductive system is placental viviparity with mean litter size is 37 for the North Atlantic stock. Length at 50% maturity (fork length) is estimated to be 180.2 cm for males and 171.2 cm for females. Age at maturity is estimated to be in the range between 4-7 years old.
(2) Distribution range of the species (historical and present)		Blue shark is distributed from tropical to temperate waters globally. In particular, high abundance is observed in temperate waters.
(3) Stock structure, status and trend of the species (8) Monitoring of the species status (9) Conservation of the species		Productivity of blue shark is higher than that of other pelagic sharks. The female intrinsic rate of population increase estimated from the Monte Carlo simulation based on matrix population model with consideration of age and uncertainties in the biological parameters (age at maturity, life span, litter size, growth and natural mortality) was 0.31-0.44 per year. This estimate implies that the stock size can increase approximately 1.36-1.55 fold within one year in absence of fishing impacts. In the ICCAT stock assessment meeting in 2015, stock assessments were conducted by Bayesian Surplus Production Model (BSP) and integrated model (Stock Synthesis : SS), using catch and CPUE (Catch per Unit Effort) data. BSP and SS showed that this stock is not likely in overfished condition and overfishing is not occurring. Standing Committee on Research and Statistics (SCRS) evaluated that the stock is not in overfished condition and overfishing is not occurring, but it also pointed out the result of assessments include high uncertainty due to high uncertainty of the input data as well as assumptions of their model structures.
(4) Threats to the species		Bycatch by tuna longline fishery etc.
(5) Historical and present fishing situation and mortality rate of the species (6) Introduced and proposed management measures for the species (7) Compliance situation of the management measures		Japanese deep-set longline fishery targeting bigeye tuna in tropical waters and Japanese shallow-set longline fishery targeting Atlantic bluefin tuna and swordfish in temperate waters catch blue shark as bycatch. Landings of blue shark by Japanese longline vessel calculated from logbook data from 1994 to 2021 range from 270 to 4,500 tons in the North Atlantic. Currently, all tuna Regional Fishery Management Organizations (RFMOs) obligate the full utilization of sharks caught by fishery and submission of fishery data. ICCAT adopted management measures such as Total Allowable Catch (TAC) in the North Atlantic at 39,102 ton (mean catch between 2011 and 2015) including national allocations to main fishing countries (Japan's allocation: 4,010 tons). This catch limit has been implemented since 2020.
(10) Continuity of the role of the species in the ecosystem (11) Effects of illegal trade on the survival of the species		Generally, it is assumed to be one of the top predators. Unknown.
5 When NDF is considered based on the information in paragraph 3 above, as a first step, items (ii), (v) and (vi) of paragraph 3 should be considered in accordance with the following criteria in order. If these three items meet requirements in the criteria, the other items in paragraph 3 also should be considered to judge whether NDF can be made.		
(1) When a TAC of the species is established or calculated on scientific bases, the present total catch of the species including the export is less than the amount of the TAC.		/
(2) In case that establishment or calculation of a TAC of the species on scientific bases is difficult, but the stock trend can be estimated for a certain period based on catch or other data, the stock does not show a decreasing trend and the present total catch of the species including the export is less than the average past catch amount of the species. (The length of the period depends on biological characteristic of the species.)		
(3) In case that establishment or calculation of a TAC of the species on scientific bases is difficult and 5. ii) above is not applicable, the stock is considered to be maintained through the management measures which have been introduced or will be introduced in the near future. In making judgment of the effect of the management measures, the following information should be considered: a) Protected areas are effectively established. b) Time closure is effectively established. c) It is estimated that the fishing pressure has been decreased substantially because the number of fishermen to catch the species is regulated and the number has been substantially decreased over a long period. d) Regulation of fishing gear is effectively established. e) Individuals smaller than a certain size are protected. f) Other effective management measures (such as release of females, prohibition of bottom trawl, restriction of power of light and so on) are established. g) Combination of above mentioned measures brings the same conservation effect.		
(4) In case that establishment or calculation of a TAC of the species on scientific bases is difficult and neither 5. ii) nor iii) is applicable, the annual catch amount of the species is considered negligible against the estimated stock size. In estimating the stock size, the minimum stock size should be estimated, taking into account, inter alia, the past catch record, the area of distribution, the stock size and productivity of look-alike species as well as the catch amount and the maximum fishing efficiency. The "negligible level" should in principle follow the table below, depending on the productivity of the species. When any parameter of the species falls under a less productivity category, the species shall be regarded as belonging to the category.		
(5) The species is considered to be maintained under the present fishing activities because of the stock enhancement activities for the species		
7 For a specific aquatic species, NDF prior to trades within a certain period (hereinafter referred to as comprehensive NDF) can be made when identification of look-alike species is clearly possible or the species meets at least one of the criteria 2(i), 5(i)-(iv), and is considered to be able to make NDF for a certain period. However, when a scientific stock assessment shows that the stock of the species becomes worse etc., the comprehensive NDF may be suspended.		Yes. Blue shark was decided to be listed in Appendix II as look-alike species at the CITES COP19 in 2022. Identification of specimens is clearly possible because they are clearly possible to be identified at the time of catch and/or landing, etc., and copies of all documentation to the transaction of the specimens from the catch or landing to export are provided. In addition, as described above 3(3), SCRS evaluated that this stock was not overfished and that overfishing was not occurring.
Conclusion		NDF can be made.

Parameters	Productivity		
	Low	Middle	High
Natural mortality rate (M)	$M < 0.2$	$0.2 \leq M \leq 0.5$	$0.5 < M$
Intrinsic rate of Natural increase (R)	$R < 0.14$	$0.14 \leq R \leq 0.35$	$0.35 < R$
von Bertalanffy growth rate (K)	$K < 0.15$	$0.15 \leq K \leq 0.33$	$0.33 < K$
Age at maturity (t mat)	$8 < T \text{ mat}$	$3.3 \leq t \text{ mat} \leq 8$	$t \text{ mat} < 3.3$
Maximum age (t max)	$25 < T \text{ max}$	$14 \leq t \text{ max} \leq 25$	$t \text{ max} < 14$
Generation interval (G)	$10 < G$	$5 \leq G \leq 10$	$G < 5$
Negligible level 1 (Recovery Index (Fr)=0.1)	0.7%	1.2% <sup>2</sup>	1.8% <sup>3</sup>

1 "negligible level" can be calculated as  $R \cdot Fr / 2$  by the method of Wade 1998.

2 Median value of R is used as there are ranges.

3 0.35 is used as R

## Summary of making non-detriment findings

Species: Blue shark (*Prionace glauca*), South Atlantic Population

2 NDF can be made when the specimen is:		
(1) The specimen is collected before the listing in Appendix.		N/A
(2) The specimen is not a nature origin such as: ① Bred from parents collected before listing in Appendix. ② Bred from parents which were imported under the CITES procedures. ③ Bred from parents which met the requirement of NDF. ④ Others (Bred under a robust technique which was proved to be able to make F2.)		N/A
(3) The specimen is collected from a part of an individual by a method without affecting the survival of the individual (such as a specimen of biopsy sampling, an embryo, spermatozoa and so on).		N/A
(4) The specimen is collected from a dead individual and it is reasonably considered that the death is not attributable to the specimen collector, e.g., a stranded whale. (A by-caught individual is excluded from this category.)		N/A
3 When a specimen does not meet any criterion of paragraph 2 above, NDF should be basically considered, taking into account the following information:		
(1) Biological characteristic and life history of the species		Life span of blue shark is estimated to be over 20 years old. Reproductive system is placental viviparity with mean litter size is 37 for the North Atlantic stock. Length at 50% maturity (fork length) is estimated to be 180.2 cm for males and 171.2 cm for females. Age at maturity is estimated to be in the range between 4-7 years old.
(2) Distribution range of the species (historical and present)		Blue shark is distributed from tropical to temperate waters globally. In particular, high abundance is observed in temperate waters.
(3) Stock structure, status and trend of the species (8) Monitoring of the species status (9) Conservation of the species		Productivity of blue shark is higher than that of other pelagic sharks. The female intrinsic rate of population increase estimated from the Monte Carlo simulation based on matrix population model with consideration of age and uncertainties in the biological parameters (age at maturity, life span, litter size, growth, and natural mortality) was 0.22-0.34 per year. This estimate implies that the stock size can increase approximately 1.25-1.40 fold within one year in absence of fishing impacts. In the ICCAT stock assessment meeting in 2015, stock assessments were conducted by Bayesian Surplus Production Model (BSP) and Bayesian State-Space Surplus Production Model (SS-BSP), using catch and CPUE (Catch per Unit Effort) data. BSP showed that this stock is not likely in overfished condition and overfishing is not occurring (multiple points are located in the green zone of Kobe plot), but SS-BSP provided the opposite results (two points are located in the red zone of Kobe plot). Stock assessment was conducted for the southern stock based on 6 types of CPUE time-series data of fishing countries. The trends of CPUEs are increasing. Standing Committee on Research and Statistics (SCRS) concluded that the stock status is uncertain, though it also acknowledged that this stock is not in overfished condition, and overfishing is not likely occurring, noting the results of stock assessments include high uncertainty due to high uncertainty of the input data as well as assumptions of their model structure.
(4) Threats to the species		Bycatch by tuna longline fishery etc.
(5) Historical and present fishing situation and mortality rate of the species (6) Introduced and proposed management measures for the species (7) Compliance situation of the management measures		Japanese deep-set longline fishery targeting bigeye tuna in tropical waters and Japanese shallow-set longline fishery targeting Atlantic bluefin tuna in temperate waters catch blue shark as bycatch. Landings of blue shark by Japanese longline vessel calculated from logbook data from 1994 to 2021 range from 180 to 3,500 tons in the North Atlantic. Currently, all tuna Regional Fishery Management Organizations (RFMOs) obligate the full utilization of sharks caught by fishery and submission of fishery data. ICCAT adopted management measures such as Total Allowable Catch (TAC) in the whole South Atlantic stock at 28,923 tons (no allocations to each country). This catch limit has been implemented since 2020.
(10) Continuity of the role of the species in the ecosystem (11) Effects of illegal trade on the survival of the species		Generally, it is assumed to be one of the top predators. Unknown.
5 When NDF is considered based on the information in paragraph 3 above, as a first step, items iii), v) and vi) of paragraph 3 should be considered in accordance with the following criteria in order. If these three items meet requirements in the criteria, the other items in paragraph 3 also should be considered to judge whether NDF can be made.		
(1) When a TAC of the species is established or calculated on scientific bases, the present total catch of the species including the export is less than the amount of the TAC.		/
(2) In case that establishment or calculation of a TAC of the species on scientific bases is difficult, but the stock trend can be estimated for a certain period based on catch or other data, the stock does not show a decreasing trend and the present total catch of the species including the export is less than the average past catch amount of the species. (The length of the period depends on biological characteristic of the species.)		
(3) In case that establishment or calculation of a TAC of the species on scientific bases is difficult and 5. ii) above is not applicable, the stock is considered to be maintained through the management measures which have been introduced or will be introduced in the near future. In making judgment of the effect of the management measures, the following information should be considered: a) Protected areas are effectively established. b) Time closure is effectively established. c) It is estimated that the fishing pressure has been decreased substantially because the number of fishermen to catch the species is regulated and the number has been substantially decreased over a long period. d) Regulation of fishing gear is effectively established. e) Individuals smaller than a certain size are protected. f) Other effective management measures (such as release of females, prohibition of bottom trawl, restriction of power of light and so on) are established.		
(4) In case that establishment or calculation of a TAC of the species on scientific bases is difficult and neither 5. ii) nor iii) is applicable, the annual catch amount of the species is considered negligible against the estimated stock size. In estimating the stock size, the minimum stock size should be estimated, taking into account, inter alia, the past catch record, the area of distribution, the stock size and productivity of look-alike species as well as the catch amount and the maximum fishing efficiency. The "negligible level" should in principle follow the table below, depending on the productivity of the species. When any parameter of the species falls under a less productivity category, the species shall be regarded as belonging to the category.		
(5) The species is considered to be maintained under the present fishing activities because of the stock enhancement activities for the species		
7 For a specific aquatic species, NDF prior to trades within a certain period (hereinafter referred to as comprehensive NDF) can be made when identification of look-alike species is clearly possible or the species meets at least one of the criteria 2(i), 5(i)-(iv), and is considered to be able to make NDF for a certain period. However, when a scientific stock assessment shows that the stock of the species becomes worse etc., the comprehensive NDF may be suspended.		Yes. Blue shark was decided to be listed in Appendix II as look-alike species at the CITES COP19 in 2022. Identification of specimens is clearly possible because they are clearly possible to be identified at the time of catch and/or landing, etc., and copies of all documentation to the transaction of the specimens from the catch or landing to export are provided. In addition, as described above 3(3), SCRS acknowledged that this stock was not overfished and overfishing was not likely occurring, noting that the stock status is uncertain.
<b>Conclusion</b>		<b>NDF can be made.</b>

Parameters	Productivity		
	Low	Middle	High
Natural mortality rate (M)	$M < 0.2$	$0.2 \leq M \leq 0.5$	$0.5 < M$
Intrinsic rate of Natural increase (R)	$R < 0.14$	$0.14 \leq R \leq 0.35$	$0.35 < R$
von Bertalanffy growth rate (K)	$K < 0.15$	$0.15 \leq K \leq 0.33$	$0.33 < K$
Age at maturity (t mat)	$8 < t \text{ mat}$	$3.3 \leq t \text{ mat} \leq 8$	$t \text{ mat} < 3.3$
Maximum age (t max)	$25 < t \text{ max}$	$14 \leq t \text{ max} \leq 25$	$t \text{ max} < 14$
Generation interval (G)	$10 < G$	$5 \leq G \leq 10$	$G < 5$
Negligible level 1 (Recovery Index (Fr)=0.1)	0.7%	1.2% <sup>2</sup>	1.8% <sup>3</sup>

1 "negligible level" can be calculated as  $R \cdot Fr/2$  by the method of Wade 1998.

2 Median value of R is used as there are ranges.

3 0.35 is used as R

## Respuesta a la Notificación a las Partes 004/2024 sobre Tiburones y rayas (Elasmobranchii)

Resumen ejecutivo:

México informa sobre la emisión de NDF para especies listadas en la CoP19 con base en el enfoque presentado en el Taller de NDF (Nairobi, 2023) el análisis de reconstrucción de capturas, rendimiento máximo sostenible, evaluaciones formales del stock, índices históricos de abundancia y vulnerabilidad; así como los factores de conversión para dichas especies. También se informa sobre las regulaciones nacionales e internacionales que México aplica para el aprovechamiento y comercio internacional de tiburones, así como la elaboración de dictámenes de adquisición legal (LAF)

### A. La elaboración de dictámenes de extracción no perjudicial (DENP o NDF)

Actualmente, la Autoridad Científica CITES de México (CONABIO) emite dictámenes para cada solicitud de permiso de exportación por parte de la Autoridad Administrativa. Entre el 2 de mayo de 2023 y el 1 de marzo de 2024 se han emitido 72 NDF para tiburones, de los cuales 70 fueron positivos o positivos parciales y 2 negativos.

El marco conceptual y la información base para la emisión de NDF, así como un estudio de caso de *Sphyrna lewini* se encuentran en los posters que fueron presentados por México en el pasado 2º Taller Internacional de Expertos en Dictámenes de Extracción no Perjudicial (Nairobi, Kenia; 4-8 de diciembre de 2023) y pueden ser consultados en las siguientes ligas:

- [Marco conceptual e información base](#)
- [Estudio de caso sobre tiburón martillo \(\*S. lewini\*\)](#)

En el caso de las especies listadas en los Apéndices antes de la CoP19, los dictámenes se han emitido con base en los Volúmenes de Exportación Sustentable (VES), mismos que para *Isurus oxyrinchus* fueron estimados a partir del *stock assessment* de ISC-SWG (2018) y para las demás especies a partir de la estimación de Rendimiento Máximo Sostenible con las metodologías de reconstrucción de capturas de Saldaña-Ruiz (2017) y Catch-MSY (Martel y Forese, 2013).

Los VES disponibles por año, especie y litoral se encuentran en la siguiente liga: [bit.ly/mitiburon](https://bit.ly/mitiburon)

Para las especies listadas en la CoP19 se utiliza como base el *stock assessment* de SSG-ICCAT (2023) e ISC (2017) para *Prionace glauca*, y para las demás especies se emplean evaluaciones de: Rendimiento Máximo Sostenible y vulnerabilidad realizadas por el IMIPAS (antes INAPESCA, DOF: 09-06-2022), evaluaciones del stock (SEDAR, 2013), índices de abundancia históricos (Carlson *et al.*, 2012; Froeschke *et al.*, 2012; Pacoreau *et al.*, 2023) y riesgo (Mundy-Taylor *et al.*, 2014). La Autoridad Científica CITES, en coordinación con el IMIPAS y la Academia (CICESE y ECOSUR) están realizando reconstrucciones de capturas y evaluaciones de Rendimiento Máximo Sostenible con base en las metodologías de Saldaña-Ruiz (2017) y Catch-MSY (Martel y Forese, 2013) para la estimación de los VES de estas especies.

Ver referencias en el **Anexo 1**.

## **B. La formulación de dictámenes de adquisición legal (DAL o LAF)**

Al tratarse de especies marinas, de acuerdo con el artículo 31 del Reglamento de la Ley General de Pesca y Acuacultura Sustentable, para realizar las actividades de pesca se requiere lo siguiente:

*...II. Permiso, para:*

*a) Pesca comercial...*

Por otro lado, la forma de comprobar la legal procedencia de las especies sujetas de aprovechamiento tiene fundamento en la Ley General de Pesca y Acuacultura Sustentable, específicamente en el artículo 75, el cual señala:

*“La legal procedencia de los productos pesqueros y acuícolas, se acreditará con los **avisos de arribo**, de cosecha, de producción, de recolección, permiso de importación y con la **guía de pesca**, según corresponda, en los términos y con los requisitos que establezca esta Ley y su reglamento. Para las especies obtenidas al amparo de permisos de pesca deportiva recreativa, la legal procedencia se comprobará con el **permiso respectivo***

*Para la comercialización de los productos de pesca y de la acuacultura, los **comprobantes fiscales** que emitan deberán incluir el número de permiso o concesión respectiva”*

Para tal efecto, el artículo 10 del Reglamento de la Ley General de Pesca y Acuacultura Sustentable, dicta el procedimiento como sigue:

*“La legal procedencia de los productos pesqueros se comprobará:*

*“I. Desde el momento de desembarque o cosecha, hasta su enajenación a terceros por cualquier título, con el **aviso de arribo**, cosecha, producción o recolección...”*

Por último, en acuerdo con el trámite SEMARNAT-08-009, toda solicitud de exportación de estas especies requiere que el exportador presente los siguientes 4 documentos:

1. Permiso de Pesca
2. Aviso de arribo
3. Guía de pesca
4. Factura

## **C. La identificación y el control en aquellas Partes que son países de origen, tránsito y consumo de los productos de tiburones incluidos en los Apéndices de la CITES que son objeto de comercio;**

La clasificación de los productos que son objeto de comercio, en cuanto a mercancías, la realiza la autoridad reguladora (Autoridad Administrativa CITES) en conjunto con la Secretaría de Economía estableciendo la clasificación y codificación de esas mercancías, así como la regulaciones y restricciones no arancelarias pertinentes

El control del comercio internacional de esos productos lo realizan de forma concurrente y con base en las atribuciones señaladas en diversos reglamentos interiores las siguientes autoridades: Secretaría de Economía, Agencia Nacional de Aduanas de México, Autoridad Administrativa CITES y Punto Focal de Aplicación de la Ley CITES; en el caso de las dos últimas, el Reglamento de la Ley General de Vida Silvestre establece que debe existir una base de datos electrónica sobre las importaciones, exportaciones y reexportaciones autorizadas y realizadas.

La PROFEPA realiza la verificación de embarques de exportación, con la finalidad de que el actor de comercio exterior cumpla con lo dispuesto en el artículo 36-A de la Ley Aduanera y promocióne el despacho de sus mercancías en algún régimen aduanero como la importación o exportación, temporal o definitiva. En este caso, se realiza la verificación documental y la revisión física de la mercancía conforme a un Manual de Procedimientos publicado en el Diario Oficial de la Federación (Manual de procedimientos para la importación y exportación de vida silvestre, productos y subproductos forestales, y materiales y residuos peligrosos, sujetos a regulación por parte de la Secretaría de Medio Ambiente y Recursos Naturales. DOF 29/01/2004) y, en caso de cumplimiento de los requisitos legales, se emite una constancia para uso en el despacho aduanero y se descargan los permisos CITES emitidos por la Autoridad Administrativa mexicana.

La identificación de las especies de tiburón en aguas de jurisdicción federal mexicana está basada en la diagnosis de las características morfológicas, por lo que se han puesto a disposición de la plantilla de inspectores que operan las verificaciones de embarques de exportación de estas especies, guías de identificación de ejemplares, aletas y tronchos de tiburones mexicanos, en un sitio compartido en la nube.

Asimismo, los registros de captura permiten a la CONAPESCA identificar qué especies se pescan a diario en México. Los avisos de arribo llenados por los pescadores son los documentos en los que se reporta a la autoridad competente el volumen de captura obtenido por especie, así como la especie (nombre científico y común) durante una jornada o viaje de pesca y su llenado es obligatorio (Art. 4, fracc. VI de la Ley General de Pesca y Acuacultura Sustentables - LGPAS). Este eslabón de la cadena productiva se encuentra en constante refuerzo a través de cursos de capacitación impartidos por la CONAPESCA, el INAPESCA y CONABIO en conjunto con ONG como WWF-México y SOMEPEC, A.C. donde también se utilizan y comparten materiales de identificación (algunos de ellos pueden ser encontrados en la liga [bit.ly/mitiburon](http://bit.ly/mitiburon)).

#### **D. El registro de las existencias de partes y derivados de tiburón comerciales y/o preconvencción de especies de elasmobranquios incluidos en el Apéndice II de la CITES y controlar la entrada de esas existencias en el comercio;**

El registro de existencias e inventarios es una función de la Autoridad Administrativa CITES; en el caso de México, la Ley General de Vida Silvestre establece que la SEMARNAT tiene las facultades para hacer visita de supervisión técnica con la finalidad de verificar, entre otras cosas, los informes o inventarios, sin que esa visita sea un acto de inspección.

Otra forma de verificar el registro de existencias o inventarios es mediante actos de inspección (con molestia jurídica) ejecutados por el Punto Focal de Aplicación de la Ley CITES, motivados por una queja / denuncia / solicitud de otra unidad administrativa o contemplados en un programa operativo anual de inspecciones programadas.

#### **E. Las necesidades de creación de capacidad para ayudar a los países en desarrollo y los pequeños Estados insulares en desarrollo a cumplir los requisitos de presentación de informes**

Es necesario ampliar la infraestructura de asistencia a la planta productiva involucrada en el aprovechamiento de especies de elasmobranchios, se debe contar con personal de campo capacitado y suficiente para servir de enlace con las comunidades pesqueras para promover el aprovechamiento sustentable, el comercio legal, la evaluación /dictaminación de solicitudes de aprovechamiento y la emisión de los permisos respectivos.

Es necesario ampliar la infraestructura de verificación de aprovechamientos tanto en puntos de arribo de embarcaciones como en centros de acopio comercialización, poniendo especial énfasis en el personal que verifica exportaciones en los puntos de salida de las Partes.

Es necesario crear capacidades para uso de tecnología de punta para la identificación de productos, tal como el uso de código de barras genético, isótopos estables y comparación de patrones por fotografía de alta resolución.

Difusión sobre la gestión de las estimaciones de los Volúmenes de Exportación Sustentable (VES) para especies de tiburones que se aprovechan en México, regulados por la CITES, para cada especie y litoral.

Sobre los puntos anteriormente descritos, se cuenta con elementos que contribuyen al constante desarrollo de capacidades, sin embargo, se requiere el fortalecimiento continuo sobre algunos de estos elementos

## **F. Factores de conversión**

Con el fin de facilitar la estimación de equivalencias entre los volúmenes de exportación (principalmente aleta seca) y los volúmenes de captura desembarcados (tiburón entero, troncho, aletas frescas), la Autoridad Científica CITES de México en coordinación con el IMIPAS, implementó una metodología para seleccionar los factores de conversión más precisos para México (Rivera-Téllez *et al.*, en preparación) que fue reportada en el Módulo 5 del Taller Internacional de Expertos en Dictámenes de Extracción no Perjudicial (Kenia, 4-8 Dic, 2023): <https://cites.org/eng/node/138336>.

Los factores utilizados para las especies de tiburones listadas en la CITES de relevancia comercial para México se encuentran en el **Cuadro 1 (Anexo 2)** y también pueden consultarse en la siguiente liga: [bit.ly/mitiburon](http://bit.ly/mitiburon)

En cuanto al rendimiento de piel respecto al peso y tamaño de un ejemplar adulto de *Carcharhinus falciformis*, Corro-Espinosa y Rivera-Velázquez (2019) realizaron un análisis del cálculo del área y peso de pieles de la especie en muestras secas de ejemplares capturados en el Golfo de México en el año 2018, indicando que la Longitud Total (LT) promedio de piel de individuos más comunes en la captura es de 90 cm, con un peso promedio de piel fresca por individuo estimada de 2.1 kg y aproximadamente 1.47 kg de piel seca (considerando un 30% de diferencia entre la piel fresca y la seca), y un área aproximada de 0.33m<sup>2</sup> por ejemplar.

## **G. información sobre el tiburón oceánico (*Carcharhinus longimanus*): dificultades para aplicar la inclusión de *C. longimanus***

A la fecha, México no ha emitido permisos CITES para esta especie.



Para otras especies en comercio, el reto en la identificación al verificar embarques grandes y en los cuales se mezclan especies reguladas con especies no reguladas.

Por último, después de realizar una búsqueda exhaustiva en los sistemas de información de la PROFEPA, les informo que no se cuenta con registros de aseguramientos de elasmobranquios.

Con base en el numeral 3 de la presente Notificación que establece "*cualquier medida nacional de gestión que prohíba la captura comercial o el comercio*" de tiburones y rayas se incluye en **Anexo (3)** información relevante

## Referencias

- An, D.-H., Kwon, Y.-J., Moon, D.-Y., Hwang, S.-J., Kim, S.-S., 2009. Estimation of the Ratio of Fin Weight to Body Weight of Sharks for the Korean Tuna Longline Fishery in the Eastern Pacific Ocean. *Korean Journal of Fisheries and Aquatic Sciences* 42, 157–164.
- Benítez, H., López, G. y Rivera-Téllez, E. (Comps.). 2015. Taller de Evaluación de Productividad, Susceptibilidad y Manejo de tiburones mexicanos listados en el Apéndice II de la CITES. Informe de Resultados - Comisión Nacional Para el Conocimiento y Uso de la Biodiversidad (CONABIO), México, D.F.
- Biery, L., Pauly, D., 2012. A global review of species-specific shark-fin-to-body-mass ratios and relevant legislation. *Journal of Fish Biology* 80, 1643–1677. <https://doi.org/10.1111/j.1095-8649.2011.03215.x>
- Biery, L.E., 2012. Using Shark Catch Data to Estimate the Magnitude and Global Distribution of the Shark Fin Trade (Master of Science). University of Brithis Columbia. Vancouver.
- Carlson, J.K., Hale, L.F., Morgan, A. and Burgess, G. 2012. Relative abundance and size of coastal sharks derived from commercial shark longline catch and effort data. *Journal of Fish Biology* 80: 1749-1764.
- Corro, D., Rivera, K., 2019. Cálculo del área y peso de pieles de *Carcharhinus falciformis*, tiburón sedoso en los litorales de México (Nota técnica para responder a la consulta de la Autoridad Científica CITES (CONABIO)). INAPESCA.
- Cortes, E., Neer, J. a, 2006. Preliminary reassessment of the validity of the 5% fin to carcass weight ratio for sharks. Col. Vol. Sci. Pap. ICCAT 59, 1025–1036.
- DOF:09-06-2022. Acuerdo por el que se da a conocer el Plan de Manejo Pesquero de Tiburones y Rayas del Golfo de México y Mar Caribe. Disponible en: [https://www.dof.gob.mx/nota\\_detalle.php?codigo=5654592&fecha=09/06/2022&print=true](https://www.dof.gob.mx/nota_detalle.php?codigo=5654592&fecha=09/06/2022&print=true)
- Froeschke, J.T., Froeschke, B.F., Stinson, C.M. and Hilborn, R. 2012. Long-term trends of bull shark (*Carcharhinus leucas*) in estuarine waters of Texas, USA. *Canadian Journal of Fisheries and Aquatic Sciences* 70(1): 13–21.
- International Scientific Committee for Tuna and Tuna-like species in the North Pacific Ocean (ISC), 2017. Stock Assessment and Future Projections of Blue Shark in the North Pacific Ocean through 2015 (Report of the Shark Working Group No. WCPFC-SC13-2017/SA-WP-10), Scientific Committee Thirteenth Regular Session. Western Central Pacific Fisheries Commission, FAO, Rarotonga, Cook Islands.
- ISC SWG, 2018. Stock Assessment of Shortfin Mako Shark in the North Pacific Ocean Through 2016. International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean 120.
- Martell, S., Froese, R., 2013. A simple method for estimating MSY from catch and resilience. *Fish Fish* 14, 504–514. <https://doi.org/10.1111/j.1467-2979.2012.00485.x>
- Mejuto, J., García-Cortés, B. and Ortiz de Urbina, J. (2009). Ratios between the wet fin weight and body weights of blues shark (*Prionace glauca*) in the Spanish surface longline fleet during the period 1993-2006 and their impact on the ratio of shark's species combined. *Collect. Vol. Sci. Pap. ICCAT*, 64(5): 1492-1508.
- Mejuto, J., García-Cortés, B., 2004. Preliminary relationships between the wet fin weight and body weight of some large pelagic sharks caught by the Spanish surface longline fleet. *Collect. Vol. Sci. Pap. ICCAT* 56, 243–253.
- Mejuto, J., García-Cortés, B., de Urbina, J.O., 2009. Ratios between the wet fin weight and body weights of blue shark (*Prionace glauca*) in the spanish surface longline fleet during the period 1993-2006 and their impact on the ratio of sharks species combined.
- Mejuto, J., Ramos-Cardelle, A., Quintans, M., González, F., Carroceda, A., 2008. Length-weight relationships and morphometric conversion factors between weights for the blue shark (*Prionace glauca*) and shortfin mako (*Isurus oxyrinchus*) caught by the Spanish surface longline fleet in the Atlantic Ocean. *Collect. Vol. Sci. Pap. ICCAT* 62, 1494–1507.

- Mundy-Taylor, V., Crook, V., Foster, S., Fowler, S., Sant, G., Rice, J., 2014. CITES Non-detriment Findings Guidance for Shark Species A Framework to assist Authorities in making Non-detriment Findings ( NDFs ) for species listed in CITES Appendix II. Report prepared for the Germany Federal Agency for Nature Conservation (Bundesamt für Naturschutz, BfN), Alemania.
- National Marine Fisheries Service, 1993. Fishery Management Plan for Sharks of the Atlantic Ocean.
- Neves dos Santos, M., García, A., 2008. New Data on the Ratio Between Fin and Body Weights for Shark Species Caught by the Portuguese. Col. Vol. Sci. Pap. ICCAT 62, 1592–1601.
- Pacoureau, N., Carlson, J.K., Kindsvater, H.K., Rigby, C.L., Winker, H., Simpfendorfer, C.A., Charvet, P., Pollom, R.A., Barreto, R., Sherman, C.S., 2023. Conservation successes and challenges for wide-ranging sharks and rays. *Proceedings of the National Academy of Sciences* 120, e2216891120.
- Rivera-Télez, E., Noguez-Lugo J, López-Segurajáuregui, G., Benítez, H., Fernández T., García, M., Gómez S., en preparación. Factores de conversión entre especímenes de tiburones mexicanos listados en la CITES.
- Saldaña-Ruiz, L.E., 2017. The artisanal shark fishery in the Gulf of California: Historical catch reconstruction and vulnerability of shark species to the fishery (PhD Thesis). CICESE, Baja California, México.
- Shark Specialist Group, ICCAT, 2023. Report of the 2023 ICCAT Blue Shark Stock Assessment Meeting. ICCAT, Madrid, Spain.
- Southeast Data, Assessment, and Review (SEDAR). 2013. SEDAR 34 Stock Assessment Report: HMS Bonnethead Shark. NOAA Fisheries, North Charleston, South Carolina, USA.

**Cuadro 1.** Factores de conversión en porcentaje que representa el peso de aletas secas (AS), frescas (AF), tiburón completo (TC), troncho de tiburón (TT) y piel (m<sup>2</sup>).

Especie	%AF:TT	%AF:TC	%AF:AS	%TC:TT	Piel (m <sup>2</sup> ) por individuo	Referencia
<i>Sphyrna lewini</i>	2.85	1.66	40 (NMFS, 1993)*			Cortés y Neer (2006)
<i>Sphyrna zygaena</i>	8.79	5.77				Neves dos Santos y García (2008)
<i>Sphyrna mokarran</i>	2.94	1.96				Cortés y Neer (2006); Biery y Pauly (2012)
<i>Carcharhinus longimanus</i>	16.52	7.34				Biery y Pauly (2012); Neves dos Santos y García (2008)
<i>Carcharhinus falciiformis</i>	2.53	1.45			0.33**	Cortés y Neer (2006)
<i>Alopias vulpinus</i>	6.26	2.06			68.6	Mejuto <i>et al.</i> (2004) y Cortés y Neer (2006)
<i>Alopias pelagicus</i>	6.26	4.31				Mejuto <i>et al.</i> (2004)
<i>Alopias superciliosus</i>	6.26	3.7				Mejuto <i>et al.</i> (2004) y An <i>et al.</i> (2009)
<i>Isurus oxyrinchus</i>	2.99	1.76				Cortés y Neer (2006); Mejuto, <i>et al.</i> (2008)
<i>Isurus paucus</i>	6.26	4.38				Mejuto <i>et al.</i> (2009)
<i>Carcharhinus acronotus</i>	3.4	1.75				NMFS 1993; Baremore 2005 en Cortes y Neer 2006
<i>Carcharhinus isodon</i>	3.4	1.75				NMFS 1993; Baremore 2005 en Cortes y Neer 2006
<i>Nasolamia velox</i>	3.4	1.75			NMFS 1993	
<i>Carcharhinus albimarginatus</i>	1.89	6.4			Cortés y Neer, 2006; INAPESCA 2023. Pesca en Veracruz.; Anderson y Ahmed 1993	
<i>Carcharhinus altimus</i>	4.16	1.79			NMFS 1993	
<i>Carcharhinus plumbeus</i>	5.34	2.87			Baremore 2005 en Cortes y Neer 2006; INAPESCA, 2023	
<i>Carcharhinus limbatus</i>	1.4	2.24			Baremore 2005 en Cortes y Neer 2006	
<i>Carcharhinus brachyurus</i>	4.53	5.1			Baremore 2005 en Cortes y Neer 2006; Gordievskaya, 1973	

						en Biery y Pauly, 2012
<i>Carcharhinus brevipinna</i>	4.53	1.61				Baremore 2005 en Cortes y Neer 2006; INAPESCA 2023.
<i>Carcharhinus leucas</i>	3.25142857 142857	2.38				PRM
<i>Carcharhinus galapagensis</i>	3.55	1.745				Baremore 2005 en Cortes y Neer 2006; INAPESCA 2023.
<i>Carcharhinus obscurus</i>	3.55	2.12				Baremore 2005 en Cortes y Neer 2006; INAPESCA 2023.
<i>Carcharhinus perezii</i>	3.55	1.37				Baremore 2005 en Cortes y Neer 2006; NMFS 1993
<i>Triacodon obesus</i>	3.27	3.169285714 28571				PRM
<i>Carcharhinus cerdale</i>	3.27	3.169285714 28571				PRM
<i>Carcharhinus porosus</i>	3.27	3.169285714 28571				PRM
<i>Negaprion brevirostris</i>	3.27	2.3				NMFS 1993
<i>Rhizoprionodon longurio</i>	1.47	1.82				Baremore 2005 en Cortes y Neer 2006; NMFS 1993
<i>Rhizoprionodon porosus</i>	1.47	1.82				Baremore 2005 en Cortes y Neer 2006; NMFS 1993
<i>Rhizoprionodon terraenovae</i>	1.47	1.82				Baremore 2005 en Cortes y Neer 2006; NMFS 1993
<i>Galeocerdo cuvier</i>	3.74	1.66				Baremore 2005 en Cortes y Neer 2006; INAPESCA, 2023
<i>Carcharhinus signatus</i>	2.64	1.4				NMFS 1993; INAPESCA 2023. Pesca en Veracruz.
<i>Sphyrna corona</i>	4.91	2.46				Baremore 2005 en Cortes y Neer 2006
<i>Sphyrna tiburo</i>	4.91	2.46				Baremore 2005 en Cortes y Neer 2006
<i>Sphyrna media</i>	4.91	2.46				Baremore 2005 en Cortes y Neer 2006
<i>Sphyrna gilberti</i>	2.85	1.66				Cortés y Neer, 2006

PRM: Promedio de valores de especies taxonómicamente más cercanas

\*De acuerdo a lo estimado por Biery (2012).

\*\*Acorde a lo estimado por Corro-Espinosa y Rivera-Velázquez (2019).

### **Información relevante con base en medidas nacionales de gestión que prohíben la captura comercial o el comercio de tiburones y rayas.**

México es uno de los países que cuenta con una alta diversidad de especies de tiburones, y por lo cual nuestro país ha evolucionado en la elaboración y estructuración de un marco jurídico amplio para la regulación, el manejo y la conservación de los tiburones y rayas a nivel nacional e internacional. En este sentido se han llevado a cabo acciones para el desarrollo y actualización de diversos instrumentos de manejo con la finalidad de lograr un aprovechamiento sustentable de los recursos pesqueros nacionales, particularmente en el manejo de la pesca de tiburón.

Cabe mencionar que la citada Notificación hace hincapié en “*cualquier medida nacional de gestión que prohíba la captura comercial o el comercio*” de elasmobranchios, lo cual corresponde a la CONAPESCA, que tiene entre otras facultades, administrar el uso y aprovechamiento comercial de especies que se desarrollan parcial o totalmente en el medio acuático. En este sentido, se reitera que las regulaciones pesqueras tienen un enfoque ecosistémico con soporte en las investigaciones y evaluaciones que realiza el IMIPAS sobre artes, métodos y equipos de pesca, así como sobre especies sujetas al aprovechamiento o con potencial para el mismo.

Se debe señalar que la política pública para el aprovechamiento de elasmobranchios deriva de las recomendaciones contenidas en el Plan de Acción Nacional para el Manejo y Conservación de Tiburones, Rayas y Especies Afines en México (PANMCT) actualmente en actualización.

En este marco el gobierno mexicano ha emitido instrumentos de observancia obligatoria tales como la Norma Oficial Mexicana NOM-029-PESC-2006, Pesca responsable de tiburones y rayas. Especificaciones para su manejo (DOF, 14/02/2007), la cual regula el aprovechamiento de las diferentes especies de rayas y tiburones que se distribuyen en las aguas nacionales de jurisdicción federal, así como el Acuerdo por el que se modifica el Aviso por el que se da a conocer el establecimiento de épocas y zonas de veda para la pesca de diferentes especies de la fauna acuática en aguas de jurisdicción federal de los Estados Unidos Mexicanos, publicado el 16 de marzo de 1994 para establecer los periodos de veda de pulpo en el Sistema Arrecifal Veracruzano, jaiba en Sonora y Sinaloa, tiburones y rayas en el Océano Pacífico y tiburones en el Golfo de México (DOF, 11/06/2012); el Acuerdo por el que se establece veda permanente para la pesca de tiburón blanco (*Carcharodon carcharias*) en aguas de jurisdicción federal de los Estados Unidos Mexicanos (DOF, 27/01/2014) y el Acuerdo por el que se modifica el Aviso por el que se da a conocer el establecimiento de épocas y zonas de veda para la pesca de diferentes especies de la fauna acuática en aguas de jurisdicción federal de los Estados Unidos Mexicanos, publicado el 16 de marzo de 1994 para modificar el periodo y zonas de veda de tiburones en el Golfo de México y Mar Caribe (DOF,

15/05/2014). Dirección General de Planeación, Programación y Evaluación N° de Oficio. DGPPE.-01241/120224

Cabe mencionar que las referidas disposiciones pesqueras se alinean con las disposiciones en materia de conservación emitidas por la Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT), a través de la Norma Oficial Mexicana NOM-059-SEMARNAT-2010, Protección ambiental –Especies nativas de México de flora y fauna silvestres-Categorías de riesgo y especificaciones para su inclusión o cambio-Lista de especies en riesgo (DOF 30/12/2010 y modificaciones posteriores) y prohíben el aprovechamiento de las siguientes especies de elasmobranquio considerados en riesgo:

Tiburón ballena (*Rhincodon typus*), tiburón peregrino (*Cetorhinus maximus*), tiburón blanco (*Carchadon carcharias*), pez sierra (*Pristis perotteti*, *Pristis pectinata* y *Pristis microdon*) y mantarraya gigante (*Manta birostris*, *Mobula japonica*, *Mobula thurtoni*, *Mobula munkiana*, *Mobula hypostomata* y *Mobula tarapacana*).

De igual forma otras regulaciones para el aprovechamiento de túnidos y pelágicos menores incorporan disposiciones para la liberación de esas y otras especies de tiburones, tales como el tiburón oceánico o puntas blancas (*Carcharhinus longimanus*). Asimismo, dentro de los instrumentos creados para apoyar la Política Nacional de Pesca y Acuacultura se encuentran los Planes de Manejo Pesquero (PMP) definidos como el conjunto de acciones encaminadas al desarrollo de la actividad pesquera de forma equilibrada, integral y sustentable; basadas en el conocimiento actualizado de los aspectos biológicos, pesqueros, ambientales, económicos, culturales y sociales que se tengan de ella. La Ley General de Pesca y Acuacultura Sustentables (LGPAS) señala que IMIPAS (antes INAPESCA) es el encargado de elaborar dichos planes, es por ello que recientemente a través de la Dirección de Investigación Pesquera en el Atlántico por conducto del Programa Regional de Investigación Pesquera de Elasmobranquios han elaborado y publicado el Plan de Manejo Pesquero de Tiburones y Rayas del Golfo de México y Mar Caribe (DOF, 09/06/2022) y que sin duda establece los mecanismos y estrategias para el manejo y conservación de estas especies. Así mismo, se encuentra en revisión y actualización la propuesta del Plan de Manejo de Tiburones y Rayas del Pacífico mexicano.

Por otra parte, la Carta Nacional Pesquera (CNP) es el instrumento vinculante para la toma de decisiones administrativas por parte de la autoridad pesquera en México, siendo un instrumento esencial en el que se presentan fichas técnicas de las pesquerías que se aprovechan en México. Estas fichas contienen el resumen del diagnóstico y evaluación de las pesquerías, dicha información permite conocer dónde, cuándo y cuánto se permite pescar sin alterar el equilibrio ecológico y la forma más adecuada para extraer especies susceptibles de aprovechamiento. Es decir, la CNP ayuda a identificar las estrategias y acciones que se deben cumplir para controlar el esfuerzo pesquero en México. Para el caso



específico de los tiburones, la última ficha técnica publicada para los tiburones del Golfo de México y Mar Caribe fue en el 2022 (DOF, 26/07/2022) en la que se establece que su estatus poblacional se encuentra en el Máximo Aprovechamiento Sustentable. Para el caso del Pacífico mexicano, la última actualización de la ficha de Tiburones fue en 2023 (DOF, 21/07/2023), en la que se señala que sus poblaciones se encuentran Aprovechadas al Máximo Sustentable.

Además de los instrumentos anteriormente citados que coadyuvan en el manejo y conservación de los tiburones en México, existe un Acuerdo de veda que los protege su periodo principal de reproducción y nacimiento. En el Golfo de México y Mar Caribe, actualmente la veda de tiburones es temporal y dividida en dos principales regiones, la primera comprende los Estados de Tamaulipas, Veracruz y Quintana Roo durante el periodo que abarca del 1 de mayo al 30 de junio de cada año; mientras que, para la región que comprende Tabasco, Campeche y Yucatán el periodo abarca a partir del 1 de mayo al 15 de junio y posteriormente del 1 al 29 de agosto de cada año, este último periodo fue establecido con la finalidad de proteger específicamente el principal pico reproductivo y alumbramiento de *S. tiburo* en la Sonda de Campeche donde la especie es más abundante, mientras que los otros periodos de veda están centrados en proteger el principal pico reproductivo y alumbramiento de la especie más abundante en el GDMMC que es *Rhizoprionodon terraenovae*, aunque esta también protege a otras especies como la *S. lewini* y *S. mokarran*. En el Pacífico mexicano la veda de tiburones y rayas abarca del 1 de mayo al 31 de julio de cada año (DOF, 11/06/2012). Dirección General de Planeación, Programación y Evaluación N° de Oficio. DGPPE.-01241/120224.

Se debe resaltar que a escala internacional, México se ha incorporado voluntariamente e implementa las recomendaciones y resoluciones del Código de Conducta para la Pesca Responsable (FAO, 1995); al Plan de Acción Internacional para la Conservación y Ordenación de Tiburones (PAI-TIBURONES) (FAO, 1999), la CITES (CITES, 1973), la Comisión Internacional para la Conservación del Atún Atlántico (CICAA), la Comisión Inter-Americana del Atún Tropical (CIAT) y el Comité Científico Internacional para el Atún y Especies Afines en el Pacífico Norte (ISC).

Rabat, le ..... 28 F.v. 2024.  
N° ..... 351 / ANEF/DPNAPPN/DPNAP/SECFF

**Objet :** Convention CITES/Demande d'informations sur les requins et les raies

**Réf :** Notification de la CITES N°.2024/004 du 04.01.2024

Madame,

Faisant suite à la publication de la notification de la CITES sous n° 2024/004, j'ai l'honneur de vous transmettre, ci-après, les principales mesures entreprises, au niveau national, pour la gestion et la conservation des requins et des raies. Il s'agit de :

- La publication de l'Arrêté du Ministre de l'Agriculture, de la Pêche Maritime, du Développement Rural et des Eaux et Forêts n° 464-23 du 30 rejev 1444 (21 février 2023), relatif à l'interdiction temporaire de la pêche des mammifères, des tortues et de certaines autres espèces marines. Cet arrêté a comme objectif d'améliorer la conservation des espèces marines menacées (cétacés, tortues de mer, requins, raies et oiseaux de mer, etc.) et encourager les pratiques de pêche durable et responsable, à travers la déclaration de ces espèces dans le journal de pêche.

Ce texte réglementaire concerne les espèces protégées et porte sur les pratiques de leurs manipulation et libération en cas de pêche accidentelle ainsi que la manière d'éviter leur encerclement intentionnel. Ces pratiques sont inspirées des guides de la FAO (<https://www.fao.org/documents/card/en/c/19152FR>) et des mesures des ORGP dont le Maroc est membre notamment CGPM et ICCAT.

- La publication de la Décision Ministérielle N°: SHK 01/24 du 02 janvier 2024, portant sur les mesures de gestion et de conservation du requin-peau bleue, suite à son inscription sur l'annexe II de la CITES ;
- La soumission de toutes les espèces marines à un système de déclaration obligatoire et à une traçabilité depuis leur capture jusqu'à leur destination finale ;
- L'application des dispositions de la loi 29.05, relative à la conservation de la flore et de la faune sauvages et au contrôle de leur commerce, aux espèces marines inscrites aux annexes de la CITES.

Veuillez agréer, Madame, l'expression de mes meilleures salutations. 

**Destinataire :**

MADAME HYEON JEONG KIM  
ASSOCIATE SCIENTIFIC SUPPORT OFFICER  
SECRETARIAT DE LA CITES, PALAIS DES NATIONS  
AVENUE DE LA PAIX 8-14, 1211 GENÈVE, SUISSE

AGENCE NATIONALE DES EAUX ET FORETS

Hamid BENSOUIBA

Directeur des Parcs Nationaux, des Aires Protégées et de la Protection de la Nature

## Namibia

The non-detriment finding received from Namibia on *Prionace glauca* is published on the CITES sharks and rays webpage.



Republic of the Philippines  
Department of Agriculture  
**BUREAU OF FISHERIES AND AQUATIC RESOURCES**  
Fisheries Building Complex, BPI Compound, Brgy. Vasra  
Visayas Ave., Quezon City  
| do@bfar.da.gov.ph | records@bfar.da.gov.ph |  
+63(2) 8539-5685

Philippines

15 March 2024

**THE SECRETARIAT**

Convention on International Trade in  
Endangered Species of Wild Fauna and Flora (CITES)

[info@cites.org](mailto:info@cites.org) ; [hyeon-jeong.kim@cites.org](mailto:hyeon-jeong.kim@cites.org)

**SUBJECT: New Information on the Shark Conservation Management Activities of the Philippines**

Dear **Sir/Madam**:

*Warmest greetings!*

This refers to the CITES Notification to Parties No. 2024/004 dated 04 January 2024 concerning the request for information on sharks and rays (Elasmobranchii spp.). In line with this, the Philippines through this Bureau would like to report the following new information on shark conservation management activities that prohibit commercial take or trade of this species:

- Fisheries Administrative Order (FAO) 272, Series of 2023: Rules and Regulations on the Conservation and Management of Sharks for Philippine Fishing Vessels – approved on 11 August 2023.
- FAO 271, Series of 2023: Rules and Regulations for the Protection of Cetaceans and Whale Sharks from Purse Seine and Ring Net Fishing Operations – approved on 23 May 2023.
- Amendment to FAO 208, Series of 2001 for the Conservation and Protection of Endangered, Rare, and/or Threatened Aquatic Species – for approval this year.

We have attached here copies of the approved FAOs for your reference. For any concerns, you may contact the Aquatic Wildlife Regulatory Section - Fisheries Regulatory and Licensing Division (AWRS-FRLD) through this email address: [frld.awrs@bfar.da.gov.ph](mailto:frld.awrs@bfar.da.gov.ph).

Please accept the assurances of our highest regards.

Very truly yours,

  
**ATTY. DEMOSTHENES R. ESCOTO**  
Director



Republic of the Philippines  
Department of Agriculture  
**OFFICE OF THE SECRETARY**  
Elliptical Road, Diliman  
Quezon City, 1100 Philippines

**FISHERIES ADMINISTRATIVE**  
**ORDER NO. 272**  
**Series of 2023**

**SUBJECT: RULES AND REGULATIONS FOR THE CONSERVATION AND MANAGEMENT  
OF SHARKS FOR PHILIPPINE FISHING VESSELS**

**WHEREAS**, Article 64 (1) of the United Nations Convention on the Law of the Sea (UNCLOS) specifically requires that coastal State and other States whose nationals fish in the region for the highly migratory species listed in Annex I shall cooperate directly or through appropriate international organizations with a view to ensuring conservation and promoting the objective of optimum utilization of such species throughout the region, both within and beyond the exclusive economic zone. In regions for which no appropriate international organization exists, the coastal State and other States whose nationals harvest these species in the region shall cooperate to establish such an organization and participate in its work;

**WHEREAS**, Article 194 (5) of the United Nations Convention on the Law of the Sea (UNCLOS) specifically requires that States, in taking measures to prevent, reduce and control pollution of marine environment, shall include measures necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other form of marine life;

**WHEREAS**, Section 11 of the Fisheries Code of 1998, as amended by Republic Act 10654, stated that "The Department shall declare closed seasons and take conservation and rehabilitation measures for rare, threatened and endangered species, as it may determine, and shall ban the fishing and/or taking of rare, threatened and/or endangered species, including their eggs/offspring as identified by existing laws in concurrence with concerned government agencies";

**WHEREAS**, the United Nations Food and Agriculture Organization (UN-FAO) International Plan of Action for the Conservation and Management of Sharks calls on UN-FAO members, within the framework of their respective competencies and consistent with international law, to cooperate through regional fisheries organizations with a view of ensuring the sustainability of shark stocks;

**WHEREAS**, the UN-FAO Code of Conduct for Responsible Fisheries (CCRF) addresses biodiversity issues and conservation of endangered species and calls for the catch of non-target species, both fish and non-fish species, to be minimized. Article 7.2.2d of the CCRF also calls for the sustainable use of aquatic ecosystems and requires that fishing be conducted with due regard for the environment. The CCRF further promotes the maintenance, safeguarding and conservation of biodiversity by minimizing fisheries impacts on non-target species and the ecosystem in general;

**WHEREAS**, the Philippines is a party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) which aims to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the CITES listed species;

**WHEREAS**, as a party to the CITES, the Philippines is bounded to adopt and implement its own domestic legislation to ensure that CITES is implemented at the national level;

**WHEREAS**, the Philippines is a contracting party to the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPO) and a member of the Western and Central Pacific Fisheries Commission (WCPFC) which is the Regional Fisheries Management Organization of the Western and Central Pacific Ocean mandated to manage straddling and highly migratory species, including tropical tunas, billfishes, sharks, marine mammal and sea turtles;

**WHEREAS**, as a party to the Convention and a member of the WCPFC, the Philippines is mandated to observe and implement Conservation and Management Measures (CMM) adopted by the Commission;

**WHEREAS**, Articles 5(d) and (e) of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, required to adopt management arrangements for non-target and associated or dependent species, as they are incidentally caught by various fisheries in the WCPO;

**WHEREAS**, the WCPFC adopted Conservation and Management Measure (CMM) 2022-04 on the Conservation and Management for Sharks with the objective of ensuring the long-term conservation and sustainable use of sharks through the application of the precautionary approach and an ecosystem approach to fisheries management;

**WHEREAS**, sharks are caught as bycatch in various fisheries in the country;

**WHEREAS**, the Philippines in 2009 prepared the National Plan of Action for the Conservation and Management of Sharks (NPOA-Sharks) which was harmonized and updated in 2017;

**NOW THEREFORE**, the following provisions of this Order are hereby adopted and implemented:

**SECTION 1. Definition.** The terms used herein shall be construed as follows:

- 1) **Bycatch** - in the fishing industry, is a fish or other marine species that is caught unintentionally while fishing for specific species or sizes of wildlife.
- 2) **Finning** - the act of removing and retaining all or some of a shark's fins and discarding its carcass at sea.
- 3) **Full utilization** - retention by the fishing vessel of all parts of the shark except its head, guts, vertebrae and skins, to the point of first landing or transshipment.

- 4) **Endangered, Threatened and Protected shark species** - shark species that are listed under CITES Appendices, species protected under Philippine Law (e.g. FAO) or species determined by the relevant Regional Fisheries Management Organizations (RFMOs) Conservation and Management Measure (CMM) as species with no retention rule.
- 5) **Shark** - generic term for all sharks and shark-like species under the Class Chondrichthyes, as applied by UN-FAO in International Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks);

**Section 2. Scope and Application.** This Administrative Order covers all Philippine commercial and municipal fishing vessels and all species of sharks.

### **SECTION 3. Sharks bycatch handling, retention, and utilization**

- 1) All live shark species that are caught incidentally shall be released;
- 2) Alive sharks shall be brought alongside the vessel to facilitate species identification, and shall do so in a manner that results in as little harm as possible, and shall be released as soon as possible following any applicable guidelines for these species (Attachment 1);
- 3) All dead sharks that are retained onboard shall be fully utilized or landed with fins naturally attached, except those provided for under Section 5.

**SECTION 4. Bycatch reporting.** All commercial fishing vessels shall record in their Catch Logsheets and submit to the BFAR as required by FAO 198-1 all bycatch of sharks species, whether released alive or dead, or retained. Municipal fishing vessel shall submit shark bycatch report to concerned Local Government Units (LGU).

**SECTION 5. Prohibitions.** All municipal fishing vessels and Philippine-flagged commercial operating in Philippine waters, in the high seas or in waters of other coastal states, are prohibited from committing the following acts:

- 1) Intentional fishing using any method or gear that is targeting any species of shark;
- 2) Finning or landing of sharks with removed or unattached fins;
- 3) Retaining on-board, utilizing, transshipping, storing on a vessel, or landing any Endangered, Threatened and Protected (ETP) shark species (as defined), live or dead, in whole or in part;

Provided further, that all Philippine-flagged commercial fishing vessels operating in the exclusive economic zone facing the Pacific Ocean, in the high seas or in waters of other

coastal states, are hereby prohibited from committing the following additional prohibited acts:

- 4) Using or carrying wire trace as branch lines or leaders and using branch lines running directly off the longline floats or drop lines, known as shark lines for longline fisheries targeting tuna and billfish.

#### **Section 6. Penalties**

- 1) Any fishing company that authorizes any individual to commit or any individual who commits violation of paragraphs 1, and 3 of Section 5 of this FAO shall be punished with the penalties provided under Section 102 of R.A. No. 8550, as amended by R.A. No. 10654.
- 2) Any fishing company that authorizes any individual to commit or any individual who commits violation of paragraphs 2 and 4 of Section 5 of this FAO shall be subject to a fine of One hundred thousand pesos (P100,000.00) to Five million pesos (P5,000,000.00), depending on the volume and value of the shark, and the habituality of the offender as main consideration as provided under Section 128 of R.A. No. 8550, as amended by R.A. No. 10654, provided further, that BFAR shall come up with the parameters for the purpose of evaluating the socioeconomic impact and seriousness of the violation as well as damage to environment due to the violation which shall be taken as part of the computation of the applicable penalties.
- 3) Any fishing vessel operator that fails to comply with Sections 3 or 4 of this FAO shall be subject to a fine of One hundred thousand pesos (P100,000.00) to Five million pesos (P5,000,000.00), depending on the volume and value of the shark, and the habituality of the offender as main consideration as provided under Section 128 of R.A. No. 8550, as amended by R.A. No. 10654, provided further, that BFAR shall come up with the parameters for the purpose of evaluating the socioeconomic impact and seriousness of the violation as well as damage to environment due to the violation which shall be taken as part of the computation of the applicable penalties.

**Section 7. Review.** This measure or any part thereof shall be subject to review as maybe necessary.

**Section 8. Separability Clause.** If any section or provision of this Order or part thereof, is declared unconstitutional or invalid, the other sections or provisions thereof which are not affected thereby shall continue to be in full force and effect.

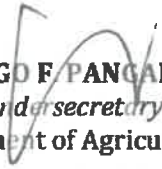
**Section 9. Repealing Clause.** All existing administrative orders, rules and regulations which are inconsistent with the provisions of this Order are hereby repealed or modified.



**Section 10. Effectivity.** This Order shall take effect fifteen (15) days after the publication in the Official Gazette and/or in two (2) newspapers of general circulation and upon registration with the National Administrative Register (ONAR).

Within one (1) year of effectivity, the BFAR shall conduct Information, Education, and Communication (IEC) Campaign.

ISSUED this 11<sup>th</sup> day of August 2023 at Quezon City, Metro Manila, Philippines

  
**DOMINGO F. PANGANIBAN**  
*Senior Undersecretary*  
Department of Agriculture



DA-CO-OSEC-AD20230717-00007

## Attachment 1

### **WCPFC BEST HANDLING PRACTICES FOR SAFE RELEASE OF SHARKS (other than Whale Sharks and Mantas/Mobulids)**

The following are recommended non-binding guidelines of best handling practices of sharks for both purse seine and longline fisheries:

**Safety First:** These guidelines should be considered in light of safety and practicability for crew. Crew safety should always come first. Crew should wear suitable gloves and avoid working around the jaws of sharks.

For all gear types, keep animals in the water if possible. If necessary to land on deck, minimize time and release shark to the water as soon as possible.

#### **Purse Seine**

##### **Do's**

**If in purse seine net:**

- ✓ Release sharks while they are still free-swimming whenever possible (e.g. back down procedure, submerging corks, cutting net)
- ✓ For sharks that cannot be released from the purse seine net, consider removing them using a hook and line.

**If in brail or on deck:**

- ✓ For sharks that are too large to be lifted safely by hand out of the brailer, it is preferable they are released using a purpose-built large-mesh cargo net or canvas sling or similar device. If the vessel layout allows, these sharks could also be released by emptying the brail directly on a ramp held up at an angle that connects to an opening on the top deck railing, without need to be lifted or handled by the crew.
- ✓ Generally, small sharks are fragile and need to be handled very carefully. If this can be done safely, it is best to handle and release them with two people, or one person using both hands.
- ✓ When entangled in netting, if safe to do so carefully cut the net away from the animal and release to the sea as quickly as possible with no netting attached.

##### **Don'ts**

- Do not wait until hauling is finished to release sharks. Return them to the sea as soon as possible.
- Do not cut or punch holes through the shark's body.
- Do not gaff or kick a shark and do not insert hands into the gill slits.

## **Longline**

### **Do's:**

- ✓ The preference is to release all sharks while they are still in the water, if possible. Use a dehooker to remove the hook or a long-handled line cutter to cut the gear as close to the hook as possible (ideally leaving less than 0.5 meters of line attached to the animal).
- ✓ If de-hooking in the water proves to be difficult, and the shark is small enough to be accommodated in a dip net, bring it on board and remove as much gear as possible by using a dehooker. If hooks are embedded, either cut the hook with bolt cutters or cut the line at the hook and gently return the animal to the sea.
- ✓ For all sharks that are brought on deck, minimize time before releasing to the water.

### **Don'ts:**

- Do not strike a shark against any surface to remove the animal from the line.
- Do not attempt to dislodge a hook that is deeply ingested and not visible.
- Do not try to remove a hook by pulling sharply on the branchline.
- Do not cut the tail or any other body part.
- Do not gaff or kick a shark, and do not insert hands into the gill slits.

### **Additional recommendation:**



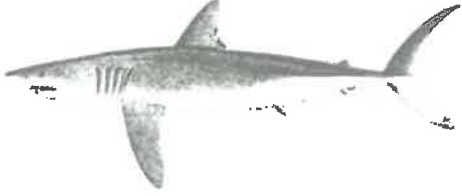



Knowing that any fishing operation may catch sharks, several tools can be prepared in advance (e.g. canvas or net slings or stretchers for carrying or lifting, large mesh net or grid to cover hatches/hoppers in purse seine fisheries, long handled cutters and dehookers in longline fisheries).



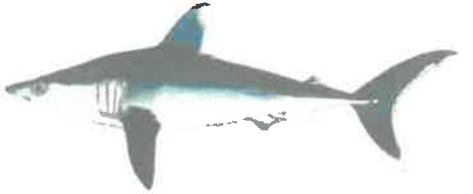



Source:



<https://www.wcpfc.int/doc/supplcmm-2010-07/best-handling-practices-safe-release-sharks-other-whale-sharks-and>

Attachment 2

**WCPFC Key Shark Species**

Scientific Name	English Name	Picture
<i>Carcharhinus longimanus</i>	Oceanic whitetip shark	 <p>© FAO</p>
<i>Carcharhinus falciformis</i>	Silky shark	 <p>© FAO</p>
<i>Isurus oxyrinchus</i>	Shorkfin mako shark	 <p>© FAO</p>
<i>Isurus paucus</i>	Longfin mako shark	 <p>© FAO</p>
<i>Prionace glauca</i>	Blue shark	 <p>© FAO</p>
<i>Alopias pelagicus</i>	Pelagic thresher shark	 <p>© FAO</p>

<i>Alopias superciliosus</i>	<b>Bigeye thresher shark</b>	 © FAO
<i>Alopias vulpinus</i>	<b>Common thresher shark</b>	 © FAO
<i>Lamna nasus</i>	<b>Porbeagle shark</b>	 ©FAO
<i>Sphyrna lewini</i>	<b>Scalloped hammerhead shark</b>	 ©FAO
<i>Sphyrna mokarran</i>	<b>Great hammerhead shark</b>	 ©FAO
<i>Sphyrna zygaena</i>	<b>Smooth hammerhead shark</b>	 ©FAO

<i>Eusphyra blochii</i>	<b>Winghead shark</b>	 ©FAO
<i>Rhincodon typus</i>	<b>Whale shark</b>	 ©FAO

Shark Species Listed in CITES Appendices<sup>1</sup>

## Requiem Sharks (Carcharhinidae spp.)

Scientific Name	English Name
<i>Carcharhinus falciformis</i>	Silky shark
<i>Carcharhinus longimanus</i>	Oceanic whitetip shark
<i>Carcharhinus acronotus</i>	Blacknose shark
<i>Carcharhinus altimus</i>	Bignose shark
<i>Carcharhinus albimarginatus</i>	Silvertip shark
<i>Carcharhinus amblyrhynchos</i>	Grey reef shark
<i>Carcharhinus amblyrhynchoides</i>	Graceful shark
<i>Carcharhinus amboinensis</i>	Pigeye shark
<i>Carcharhinus borneensis</i>	Borneo shark
<i>Carcharhinus caudatus</i>	Nervous shark
<i>Carcharhinus brachyurus</i>	Bronze whaler
<i>Carcharhinus brevipinna</i>	Spinner shark
<i>Carcharhinus cerdale</i>	Pacific smalltail shark
<i>Carcharhinus coatesi</i>	Coate's shark
<i>Carcharhinus dussumieri</i>	Whitecheek shark
<i>Carcharhinus fitzroyensis</i>	Creek whaler
<i>Carcharhinus galapagensis</i>	Galapagos shark
<i>Carcharhinus hemiodon</i>	Pondicherry shark
<i>Carcharhinus humani</i>	Human's whaler shark
<i>Carcharhinus isodon</i>	Finetooth shark
<i>Carcharhinus leiodon</i>	Smoothtooth blacktip shark
<i>Carcharhinus leucas</i>	Bull shark
<i>Carcharhinus limbatus</i>	Blacktip shark
<i>Carcharhinus macloti</i>	Hardnose shark
<i>Carcharhinus porosus</i>	Small-tail shark
<i>Carcharhinus melanopterus</i>	Blacktip reef shark
<i>Carcharhinus obsoletus</i>	Lost shark
<i>Carcharhinus obscurus</i>	Dusky shark
<i>Carcharhinus perezi</i>	Caribbean reef shark
<i>Carcharhinus plumbeus</i>	Sandbar shark
<i>Carcharhinus signatus</i>	Night shark
<i>Carcharhinus sealei</i>	Blackspot shark
<i>Carcharhinus sorrah</i>	Spot-tail shark
<i>Carcharhinus tilstoni</i>	Australian blacktip shark
<i>Carcharhinus tjtjt</i>	Indonesian whaler shark
<i>Glyphis gangeticus</i>	Ganges shark
<i>Glyphis garricki</i>	New guinea river shark
<i>Glyphis glyphis</i>	Speartooth shark
<i>Isogomphodon oxyrinchus</i>	Daggernose shark
<i>Lamiopsis temminckii</i>	Broadfin shark
<i>Lamiopsis thephrodes</i>	Borneo broadfin shark
<i>Loxodon macrorhinus</i>	Sliteye shark
<i>Nasolamia velox</i>	Whitenose shark

<sup>1</sup> As of 03 July 2023

Scientific Name	English Name
<i>Negaprion acutidens</i>	Sicklefin lemon shark
<i>Negaprion brevirostris</i>	Lemon shark
<i>Prionace glauca</i>	Blue shark
<i>Rhizoprionodon acutus</i>	Milk shark
<i>Rhizoprionodon lalandii</i>	Brazilian sharpnose shark
<i>Rhizoprionodon longurio</i>	Pacific sharpnose shark
<i>Rhizoprionodon oligolinx</i>	Grey sharpnose shark
<i>Rhizoprionodon porosus</i>	Caribbean sharpnose shark
<i>Rhizoprionodon taylori</i>	Australian sharpnose shark
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark
<i>Scoliodon laticaudus</i>	Spadenose shark
<i>Scoliodon macrorhynchus</i>	Pacific spadenose shark
<i>Triaenodon obesus</i>	Whitetip reef shark

### Hammerhead Sharks (Sphyrnidae spp.)

Scientific Name	English Name
<i>Sphyrna lewini</i>	Scalloped hammerhead shark
<i>Sphyrna mokarran</i>	Hammerhead shark
<i>Sphyrna zygaena</i>	Smooth hammerhead shark
<i>Sphyrna media</i>	Scoophead shark
<i>Sphyrna tudes</i>	Smalleye hammerhead shark
<i>Sphyrna corona</i>	Scalloped bonnethead shark
<i>Sphyrna gilberti</i>	Carolina hammerhead shark
<i>Eusphyrna blochii</i>	Winghead shark

### Basking, Thresher, and Mackerel Sharks

Scientific Name	English Name
<i>Alopias spp.</i>	Thresher shark
<i>Cetorhinus maximus</i>	Basking sharks
<i>Carcharodon carcharias</i>	Great white shark
<i>Isurus oxyrinchus</i>	Shortfin mako shark
<i>Isurus paucus</i>	Longfin mako shark
<i>Lamna nasus</i>	Porbeagle shark

### Guitarfish, Sawfishes, and Wedgefishes

Scientific Name	English Name
<i>Rhinidae spp.</i>	Wedgefishes
<i>Pristidae spp.</i>	Carpenter sharks
<i>Glaucostegus spp.</i>	Giant guitarfishes
<i>Acroteriobatus variegatus</i>	Stripenose guitarfish
<i>Pseudobatos horkelii</i>	Brazilian guitarfish
<i>Rhinobatos albomaculatus</i>	Whitespotted guitarfish
<i>Rhinobatos irvinei</i>	Spineback guitarfish
<i>Rhinobatos rhinobatos</i>	Common guitarfish
<i>Rhinobatos schlegelii</i>	Brown guitarfish





Republic of the Philippines  
Department of Agriculture  
OFFICE OF THE SECRETARY  
Elliptical Road, Diliman  
Quezon City, 1100 Philippines

**FISHERIES ADMINISTRATIVE  
ORDER NO. 271  
Series of 2023**

**SUBJECT: RULES AND REGULATIONS FOR THE PROTECTION OF CETACEANS AND  
WHALE SHARKS FROM PURSE SEINE AND RING NET FISHING  
OPERATIONS**

**WHEREAS**, the ecological and cultural significance of cetaceans and whale sharks are universally recognized;

**WHEREAS**, the United Nations Food and Agriculture Organization (UN-FAO) Code of Conduct for Responsible Fisheries (CCRF) specifically addresses biodiversity issues and conservation of endangered species and calls for the catch of non-target species, both fish and non-fish species, to be minimized. Article 7.2.2d of the CCRF also calls for the sustainable use of aquatic ecosystems and requires that fishing be conducted with due regard for the environment. The CCRF further promotes the maintenance, safeguarding and conservation of biodiversity by minimizing fisheries impacts on non-target species and the ecosystem in general;

**WHEREAS**, the Philippines is a party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) which aims to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the CITES listed species;

**WHEREAS**, as a party to the CITES, the Philippines is bounded to adopt and implement its own domestic legislation to ensure that CITES is implemented at the national level;

**WHEREAS**, cetaceans and whale sharks are particularly vulnerable to being encircled by purse seine and ring nets, due to the tendency of tuna to form schools around them, and cetaceans to be attracted to the same prey as tuna;

**WHEREAS**, Articles 5(d) and (e) of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPO), required the adoption of management arrangements for cetaceans as non-target and associated or dependent species, as they are incidentally caught by purse-seine fisheries in the WCPO.

**WHEREAS**, the Philippines is a contracting party to the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean and member of the Western and Central Pacific Fisheries Commission (WCPFC) which is the Regional Fisheries Management Organization of the Western and Central Pacific Ocean mandated to manage straddling and highly migratory species, including tropical tunas, billfishes, sharks, marine mammal and sea turtles;

**WHEREAS**, as a party to the Convention and a member of the WCPFC, the Philippines is mandated to observe and implement Conservation and Management Measures (CMM) adopted by the Commission;

**WHEREAS**, the WCPFC adopted CMM 2011-03 on the Conservation and Management Measure for Protection of Cetaceans from Purse Seine Fishing Operations which 1) prohibits setting a purse seine net on a school of tuna associated with a cetacean if such cetacean is sighted prior to commencement of the set and 2) requires the master of the vessel to release and report the unintentional encirclement of such cetacean;

**WHEREAS**, the WCPFC adopted CMM 2022-04 on the Conservation and Management Measure for Sharks which prohibits setting a purse seine on a school of tuna associated with a whale shark if such whale shark is sighted prior to the commencement of the set.

**NOW THEREFORE**, the following provisions of this Order are hereby adopted and implemented:

**SECTION 1. Definition** - The terms used herein shall be construed as follows:

- 1) **Cetacean** - a marine mammal of the order *Cetacea*; a whale, dolphin, or porpoise.
- 2) **Whale shark** - a large elasmobranch of the family Rhincodontidae, of the species *Rhincodon typus* characterized externally by a broad, flattened head, a very large and nearly terminal mouth, very large gill slits, three prominent longitudinal ridges on its upper flanks, a large first dorsal fin, a semi-lunate caudal fin and a unique 'checkerboard' pattern of light spots and stripes on a dark background.
- 3) **Ring Net** - a surrounding net used for catching pelagic fishes hauled manually or by winch.
- 4) **Purse Seine** - a surrounding net used for catching pelagic fishes characterized by a bag or bunt located on one end of the net hauled by pneumatic power block.

## **SECTION 2. Prohibitions**

All Philippine flagged fishing vessels operating in Philippine waters, in the high seas or in waters of other coastal states, are hereby prohibited from committing the following acts:

- 1) Setting a purse seine net or ring net on a school of fish associated with any species of cetacean and whale shark, if the animal is sighted prior to the commencement of the set; and
- 2) Retaining on board, transshipping, storing on a fishing vessel, or landing any cetacean or whale shark unintentionally caught or those that resulting from Section 2(1).

### **SECTION 3. Incident handling and reporting**

In case that a cetacean or whale shark is unintentionally encircled by a purse seine or ring net, the vessel captain or masterfisher of the fishing vessel shall:

- 1) Ensure that all reasonable steps are taken to ensure its safe release. This shall include stopping the net haul and not recommencing fishing operation until the animal has been released and is no longer at risk of recapture. A training for handling and release shall be required and provided by BFAR to the crew prior to the issuance of the fisherfolk permit;
- 2) Report the incident to BFAR, including details of the species (if known) and number of individuals, location and date of such encirclement, steps taken to ensure the safe release, and an assessment of the life status of the animal on release (including, if possible, whether the animal was released alive but subsequently died). Such incident must be reported in the appropriate data field of the logsheet and captain statement/report to provide more information including photos if available and shall be submitted to BFAR within seven (7) days upon arrival in Port.
- 3) In taking steps to ensure the safe release of cetacean and whale shark as required under Section 3 (1), the vessel captain or masterfisher shall follow the guidelines provided in Attachments 1 and 2.
- 4) In applying the steps under paragraphs 1 and 3, the safety of the crew shall remain the overriding consideration.

### **Section 4. Penalties**

- 1) Any commercial fishing company that authorizes an individual to commit or any individual who commits any of the prohibited acts in Section 2 of this FAO shall be subject to the penalties provided for in Section 102 of R.A. No. 8550 as amended by R.A. No. 10654.
- 2) The vessel captain or the masterfisher who fails to comply with Section 3 of this FAO shall be subject to a fine of One hundred thousand pesos (P100,000.00) to Five million pesos (P5,000,000.00), depending on the volume and value of the cetacean or whale shark, and the habituality of the offender as main consideration as provided under Section 128 of R.A. No. 8550, as amended by R.A. No. 10654, provided further, that BFAR shall come up with the parameters for the purpose of evaluating the socio economic impact and seriousness of the violation as well as damage to environment due to the violation which shall be taken as part of the computation of the applicable penalties.

**Section 5. Separability Clause.** If any section or provision of this Order or part thereof, is declared unconstitutional or invalid, the other sections or provisions thereof which are not affected thereby shall continue to be in full force and effect.

**Section 6. Repealing Clause.** All existing administrative orders, rules and regulations which are inconsistent with the provisions of this Order are hereby repealed or modified.

**Section 7. Effectivity.** This Order shall take effect fifteen (15) days after the publication in the Official Gazette and/or in two (2) newspapers of general circulation and upon registration with the Office of National Administrative Register (ONAR).

ISSUED this 2<sup>nd</sup> day of May, 2023 at Quezon City, Metro Manila, Philippines

  
**DOMINGO F. PANGANIBAN**  
*Senior Undersecretary*  
Department of Agriculture



11A-CO-OSEC-UC20230523-00055



Republic of the Philippines  
**OFFICE OF THE SECRETARY**  
Elliptical Road, Diliman  
1100 Quezon City

## **FISHERIES ADMINISTRATIVE ORDER**

No. \_\_\_\_\_  
Series of 2024

**SUBJECT: Amendment to Fisheries Administrative Order No. 208, Series of 2001 for the Conservation and Protection of Endangered, Rare, and/or Threatened Aquatic Species**

*WHEREAS*, Republic Act (RA) No. 9147, otherwise known as “The Wildlife Resources Conservation and Protection Act” provides for the conservation of wildlife resources and their habitats, appropriating funds therefor and for other purposes;

*WHEREAS*, RA No. 8550, as amended by RA No. 10654, otherwise known as “The Philippine Fisheries Code of 1998”, reiterates the compliance to the existing Philippine treaty obligations concerning aquatic wildlife under multilateral agreements, such as but not limited to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Biological Diversity (CBD), the Convention on Migratory Species (CMS), and International Union for Conservation of Nature (IUCN);

*WHEREAS*, RA No. 8550 as amended prohibits the fishing or taking, catching, gathering, selling, purchasing, possessing, transporting, exporting, forwarding or shipping out of live/dead, parts, and by-products and derivatives of CITES-listed aquatic species as well as the importation and/or the exportation of fishery products of whatever size, stage or form for any purpose without securing a permit from the Department;

*WHEREAS*, RA No. 8550 as amended requires the Bureau of Fisheries and Aquatic Resources (BFAR) to update the list of rare, endangered, and threatened aquatic species;

*WHEREAS*, Fisheries Administrative Order (FAO) No. 208, series of 2001 on the conservation and protection of endangered, rare, and/or threatened fishery/aquatic species applies only to certain species of gastropods, bivalves, crabs, whales, and dolphins, and sea snakes and has not been updated since 2001;

*WHEREFORE*, this Order, amending the rules and regulations of FAO No. 208 for the conservation and protection of endangered, rare, and/or threatened aquatic species and updating the listed species, is hereby issued for the information and guidance of all concerned.

**SECTION 1. Coverage.** This Order shall cover all endangered, rare, and/or threatened aquatic species, including those species listed under CITES Appendices and those determined by the Department.

**SECTION 2. Definition of Terms.** As used in this Order, the following terms shall be construed as:

- a. *“Aquatic species”* refers to species living in the aquatic environment including micro-organisms, its by-products and derivatives, and those in captivity or are being bred or farmed;
- b. *“BFAR”* refers to the Bureau of Fisheries and Aquatic Resources;
- c. *“By-product or derivative”* refers to any part taken or substance extracted from aquatic species, such as but not limited to bioactive compounds/molecules and genetic material whether raw or in processed form;
- d. *“Captive-bred species”* refers to individuals produced under controlled conditions or with human interventions;
- e. *“CBD”* refers to the Convention on Biological Diversity;
- f. *“CITES”* refers to the Convention on International Trade in Endangered Species of Wild Fauna and Flora;
- g. *“CITES Appendices”* refers to Appendix I, II, and III to the Convention which are lists of species afforded different levels or types of protection from over-exploitation:
  - i. *Appendix I* includes all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances.
  - ii. *Appendix II* includes the following:
    - (a) all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible with their survival; and
    - (b) other species which must be subject to regulation in order that trade in specimens of certain species referred to in sub-paragraph (a) of this paragraph may be brought under effective control.

- iii. *Appendix III* includes all species which any Party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation, and as needing the co-operation of other Parties in the control of trade.
- h. *"CMS or Bonn Convention"* refers to the Convention on the Conservation of Migratory Species of Wild Animals;
- i. *"DA or Department"* refers to the Department of Agriculture;
- j. *"DENR-BMB"* refers to the Biodiversity Management Bureau of the Department of Environment and Natural Resources;
- k. *"Endangered, Rare, and/or Threatened Species"* refers to aquatic animals and plants, including some varieties of corals and seashells in danger of extinction as provided in any of the following:
  - i. Existing fishery laws, rules, and regulations; and
  - ii. Biodiversity Management Bureau of the Department of Environment and Natural Resources (DENR-BMB) and in the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- l. *"Exportation"* refers to the act of bringing aquatic species, its by-products or derivatives out of the country;
- m. *"FAO"* refers to Fisheries Administrative Order;
- n. *"Importation"* refers to the act of bringing aquatic species, by-products or derivatives into the country;
- o. *"IUCN"* refers to the International Union for Conservation of Nature;
- p. *"PARLC"* refers to the Philippine Aquatic Red List Committee;
- q. *"Party or Parties"* refers to a State for which the CITES has entered into force; and
- r. *"RA"* refers to the Republic Act.

**SECTION 3. International trade of Endangered, Rare, and/or Threatened Species.** No person shall import and/or export fishery products of whatever size, stage or form for any purpose without securing a permit from the Department. Moreover, the importation of endangered, rare, and/or threatened species shall be governed by applicable legal and

procedural requirements provided under FAO No. 233, Series of 2010; FAO No. 221, Series of 2003; and other relevant laws, rules, and regulations, as may be applicable.

Further, the Parties of the CITES Convention shall not allow trade in specimens of species included in Appendices I, II, and III except under conditions in accordance with the provisions of the present Convention.

**SECTION 4. Prohibitions and Penalties.** It shall be unlawful for any person, natural or juridical, to fish or take, catch, gather, sell, purchase, possess, transport, export, forward, or ship out of live/dead, parts, and by-products and derivatives of aquatic species listed herewith and referred herein as "Annex A":

(a) It shall be unlawful to fish or take, catch, gather, sell, purchase, possess, transport, export, forward, or ship out aquatic species listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), or those categorized by the International Union for Conservation of Nature (IUCN) as threatened and determined by the Department as such.

Upon a summary finding of administrative liability, the Department shall penalize the offender with a fine equivalent to five times (5) times the value of the species or Five hundred thousand pesos (P500,000.00) to Five million pesos (P5,000,000.00), whichever is higher, and forfeiture of the species.

Upon conviction by a court of law, the offender shall be punished by imprisonment of twelve (12) years and one (1) day to twenty (20) years and a fine equivalent to twice the administrative fine, forfeiture of the species, and the cancellation of the fishing permit.

(b) It shall be unlawful to fish or take, catch, gather, sell, purchase, possess, transport, export, forward, or ship out aquatic species listed in CITES Appendix II and III if scientific assessments show that the population of the species in the wild cannot remain viable under pressure of collection and trade: *Provided*, That the taking or fishing of these species from the wild for scientific research, or conservation breeding simultaneous with commercial breeding may be allowed.

Upon a summary finding of administrative liability, the Department shall penalize the offender with a fine equivalent to three (3) times the value of the species or Three hundred thousand pesos (P300,000.00) to Three million pesos (P3,000,000.00), whichever is higher, and forfeiture of the species.

Upon conviction by a court of law, the offender shall be punished by imprisonment of five (5) to eight (8) years and a fine equivalent to twice the administrative fine and forfeiture of the species.



(c) It shall be unlawful to gather, take, possess, transport, or export, forward or ship out captive-bred species that have been transplanted to the wild.

Upon a summary finding of administrative liability, the offender shall be penalized with a fine equivalent to three (3) times the value of the species or Three hundred thousand pesos (P300,000.00) to Three million pesos (P3,000,000.00), whichever is higher, and forfeiture of the species.

Upon conviction by a court of law, the offender shall be punished by imprisonment of five (5) to eight (8) years, a fine equivalent to three (3) times the value of the species or Three million pesos (P3,000,000.00), whichever is higher, and forfeiture of the species.

Should the violation be committed by a vessel manned by more than two (2) persons, the captain, master, and two highest-ranking officers of the vessel involved in the fishing or taking of such protected marine life shall be presumed to have committed the prohibited act.

**Section 5. Exception.** The above-mentioned penalties shall not apply when the aquatic species covered by this Order are unintentionally caught or as bycatch in the conduct of a fishing operation targeting other species, provided that the vessel owner or captain and vessel operator shall surrender the same to the BFAR at the first point of landing, with the corresponding documentation as contained in the catch logsheet such as vessel name, vessel owner, vessel captain, coordinates, date of fishing operation, species name, number of individuals, and circumstances surrounding the catch of species. Provided further that they shall not be sold or bartered but may be used for research purposes only.

**Section 6. Updating the Annex A: List of Endangered, Rare, and/or Threatened Aquatic Species.** The BFAR shall regularly update Annex A of this Order based on the CITES and the Philippine Aquatic Red List Committee (PARLC) new listing Resolutions. Prior to the actual updating, consultation shall be conducted in all affected regions. The stakeholders shall be given notice of the date and venue of the consultation including the proposed update of Annex A, which shall be published in a newspaper of general circulation in the region and the BFAR website. Further, the updated list of Annex A, after the conduct of the said consultation and the approval by the BFAR Director, shall be published in one (1) newspaper of general circulation in the Philippines and shall be thereafter effective 15 days after its publication.

**SECTION 7. Repeal.** Fisheries Administrative Order (FAO) No. 208, series of 2001, is hereby repealed and all issuances, orders, rules, and regulations or parts thereof which are inconsistent with this Order are hereby repealed or modified accordingly.

**SECTION 8. Effectivity.** This Order shall take effect fifteen (15) days after its publication in the Official Gazette and/or one (1) newspaper of general circulation and fifteen (15) days after its registration with the Office of the National Administrative Register.

Issued this \_\_\_\_\_ day of \_\_\_\_\_, 2024 at Quezon City, Metro Manila, Philippines.

**FRANCISCO P. TIU LAUREL JR.**

*Secretary*

Recommended by:

**ATTY. DEMOSTHENES R. ESCOTO**

*Director*

**DRUSILA ESTHER E. BAYATE**

*Undersecretary for Fisheries*

## “ANNEX A”

### List of Endangered, Rare, and/or Threatened Aquatic Species

#### A. ENDANGERED SPECIES (CITES-LISTED)

##### A.1. Mollusks

Family/Genus/Scientific Name	Common Name	CITES Appendix No.
<i>Aliger gigas</i>	Queen conch, Pink conch	II
NAUTILIDAE spp. <sup>1</sup>	Nautilus, Chambered nautilus	II
TRIDACNIDAE spp. <sup>1</sup>	Giant clams	II

##### A.2. Corals

Family/Genus/Scientific Name	Common Name	CITES Appendix No.
HELIOPORIDAE spp. <sup>1</sup>	Blue corals	II
MILLEPORIDAE spp. <sup>1</sup>	Fire corals	II
STYLASTERIDAE spp. <sup>1</sup>	Lace corals	II
TUBIPORIDAE spp. <sup>1</sup>	Organ-pipe corals	II
ANTIPATHARIA spp. <sup>1</sup>	Black corals	II
SCLERACTINIA spp. <sup>1</sup>	Stony corals, Hard corals	II
<i>Pleurocorallium elatius</i> <sup>2</sup>	Red and pink corals	III (China)

##### A.3. Dolphins, Porpoises, and Whales

Family/Genus/Scientific Name	Common Name	CITES Appendix No.
<i>Balaenoptera edeni</i>	Bryde's whale	I
<i>Balaenoptera musculus</i>	Blue whale	I
<i>Balaenoptera omurai</i>	Omura's whale	I
<i>Megaptera novaeangliae</i>	Humpback whale	I
<i>Orcaella brevirostris</i>	Irrawaddy dolphin	I
<i>Physeter macrocephalus</i>	Sperm whale	I
CETACEA spp. <sup>1</sup>	Dolphins, Porpoises, Whales	II (Except the species included in Appendix I)

<sup>1</sup> - Refers to all species under a specific Family or Order

<sup>2</sup> - Refers to species that is/are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade

#### A.4. Fishes

Family/Genus/Scientific Name	Common Name	CITES Appendix No.
<i>Scleropages formosus</i>	Asian arowana	I
<i>Arapaima gigas</i>	Arapaima, Pirarucu	II
<i>Cheilinus undulatus</i>	Napoleon wrasse, Humphead wrasse	II
<i>Hippocampus spp.</i>	Seahorses	II

#### A.5. Sea Cucumbers and Teatfishes

Family/Genus/Scientific Name	Common Name	CITES Appendix No.
<i>Holothuria fuscogilva</i>	White teatfish or white teeth	II
<i>Holothuria nobilis</i>	Black teatfish	II
<i>Holothuria whitmaei</i>	Black teatfish	II
<i>Thelanota ananas</i> <sup>2</sup>	Prickly redfish, Pineapple sea cucumber	II
<i>Thelanota anax</i> <sup>2</sup>	Amberfish, Giant sea cucumber, Giant beche-de-mer	II
<i>Thelanota rubralineata</i> <sup>2</sup>	Red-lined sea cucumber, Lemonfish, Candy cane sea cucumber	II

#### A.6. Sea snakes

Family/Genus/Scientific Name	Common Name	CITES Appendix No.
<i>Cerberus rhynchops</i> <sup>1</sup>	South-Asian bockadam, Bockadam snake, Dog-faced water snake, New Guinea Bockadam	III (India)

1 - Refers to species that is/are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade

2 - Entry into effect delayed by 18 months, i.e. until 25 May 2024

### A.7. Sharks

Family/Genus/Scientific Name	Common Name	CITES Appendix No.
<i>Alopias spp.</i>	Thresher sharks	II
CARCHARINIDAE spp. <sup>1</sup>	Requiem sharks, Silky shark, Oceanic whitetip shark, White-tipped shark, Whitetip oceanic shark, Whitetip Shark	II
<i>Carcharodon carcharias</i>	White shark, Great white shark	II
<i>Cetorhinus maximus</i>	Basking shark	II
<i>Isurus oxyrinchus</i>	Shortfin mako shark	II
<i>Isurus paucus</i>	Longfin mako shark	II
<i>Lamna nasus</i>	Porbeagle shark	II
<i>Rhincodon typus</i>	Whale shark	II
SPHYRNIDAE spp. <sup>1</sup>	Hammerhead sharks	II

### A.8. Guitarfishes, Sawfishes, and Wedgefishes

Family/Genus/Scientific Name	Common Name	CITES Appendix No.
PRISTIDAE spp. <sup>1</sup>	Sawfishes	I
RHINIDAE spp. <sup>1</sup>	Wedgefishes	II
RHINOBATIDAE spp. <sup>1</sup>	Guitarfishes	II
GLAUCOSTEGUS spp.	Giant wedgefishes	II

### A.9. Mobulids

Family/Genus/Scientific Name	Common Name	CITES Appendix No.
<i>Mobula spp.</i>	Devil rays, manta ray	II

1 - Refers to all species under a specific Family or Order

## B. RARE SPECIES

### B.1. Bivalves

Scientific Name	Common Name
<i>Dentamussium obliteratum</i>	Smudged moon scallop
<i>Eufistulana mumia</i>	Club-shaped boring clam

### B.2. Gastropods

Scientific Name	Common Name
<i>Bolma girgyllus</i>	Girgyllus star shell
<i>Callistocypraea aurantium</i>	Golden cowrie
<i>Callistocypraea leucodon</i>	White toothed cowrie
<i>Clypeomorus adunca</i>	Bent cerith
<i>Cypraeacassis rufa</i>	Bullmouth helmet
<i>Ipsa children</i>	Children's cowrie
<i>Leporicypraea valentia</i>	Prince cowrie
<i>Malluvium lissus</i>	Deep sea cap
<i>Morum grande</i>	Giant morum
<i>Morum kurzi</i>	Kurzi's morum
<i>Morum watsoni</i>	Watson's morum
<i>Naria beckii</i>	Beck's cowrie
<i>Nesioocypraea teramachii</i>	Teramachi's cowrie
<i>Palmulacypraea katsuae</i>	Katsue's cowrie
<i>Palmadusta saulae</i>	Saul's cowrie
<i>Perisserosa guttata</i>	Great spotted cowrie
<i>Phenacovolva dancei</i>	Dance volva
<i>Ransoniella martini</i>	Martini's cowrie
<i>Raybaudia porter</i>	Porter's cowrie
<i>Recluzea lutea</i>	Recluzia snail
<i>Semicassis glabrata</i>	Smooth bonnet
<i>Separatista separatist</i>	True separatista
<i>Tenuitibia martini</i>	Martini's tibia
<i>Varicospira crispate</i>	Network beak shell

## C. THREATENED SPECIES

### C.1. Crabs

Scientific Name	Common Name
<i>Birgus latro</i>	Coconut crab

### C.2. Gastropods

Scientific Name	Common Name
<i>Barnea manilensis</i>	Angel wing shell
<i>Cassis cornuta</i>	Horned helmet
<i>Charonia tritonis</i>	Trumpet shell
<i>Rochia nilotica</i>	Smooth top shell
<i>Turbo marmoratus</i>	Green snail

## Information on Sharks and Rays

### Republic of Korea

#### Information on shark and ray conservation management

The Enforcement Decree of the Wildlife Protection and Management Act of Korea stipulates detailed conditions for import/export of species including sharks on each Appendices of the CITES, which include examining whether export or import of the globally endangered species threatens the survival of the species as well as whether the species were obtained in compliance with the regulations on protection and management.

International trades for all CITES-listed species including sharks require a permit from a regional environmental office to be submitted to the Korean customs. Any import or export without the permit would be in contravention of the Customs Act and thus be subject to punishments in accordance with Articles 269 and 270 of the Act.

Besides these measures for international trades of the CITES-listed shark species, Korea has designated two shark species (*Rhincodon typus* and *Sphyrna lewini*) as marine organisms under protection in accordance with the Conservation and Management of Marine Ecosystem Act, as a result of which capturing, collecting, transplanting, processing, distributing and storing the two shark species are prohibited in Korea.

**Non-detriment findings (NDFs)** used to be requested to be issued for sharks incidentally caught by Korean distant water fishing vessels.

In making NDFs, fish identification guides and relevant literatures were used for biological characteristics while stock assessment results of Regional Fisheries Management Organizations (RFMOs) served as data sources for population sizes.

In order to assess the potential impact of the trade of sharks accidentally caught, the amount of the shark to be traded was compared with the maximum sustainable yields (MSY) and total allowable catch (TAC) for the shark species suggested and decided by the RFMOs that manage the waters where those sharks were caught. All the trade amount of sharks from Korean vessels was less than 1% of the MSY as well as the TAC set by the RFMOs, so it was concluded that the impact from the trades to the stock status would be very marginal.

From 2017 to 2020, the total of 47 NDFs were requested to be made and issued for shark species, including silky shark (10), thresher shark (9), scalloped hammerhead (16), shortfin mako (11), pelagic thresher (1). No request for NDF issuance has been made since then as Korean distant water fishing vessels do not retain sharks caught on board the vessels anymore, instead either releasing alive or discarding incidentally caught sharks during their fishing operations.



As for **legal acquisition findings (LAFs)**, the legitimacy of catches from Korean vessels is ensured by various measures that the Ministry of Oceans and Fisheries implements.

The Distant Water Fisheries Development Act of Korea provides in its enforcement rule that anyone who is authorized to fish in distant waters shall report on their fishing operations including catch and bycatch within 24 hours of end of fishing operation. Their reported catches are verified by our fisheries scientists from the National Institute of Fisheries Science (NIFS) afterwards.

Also, there are other monitoring activities implemented by the Korean Fisheries Monitoring Center (FMC) and observers on board the vessels. Positions of fishing vessels are automatically transmitted to the FMC, which helps ensure those Korean flagged fishing vessels comply with the regulations at seas with the help of observers on board them.

### **Non-detriment findings and conversion factors**

Conversion factors are not used as live weights of sharks incidentally caught are already required to be provided to the NIFS when NDFs are requested to be issued. In addition, as already mentioned above, Korean flagged vessels do not retain sharks on board anymore, thus no needs of using conversion factors.

### **Questions, concerns or difficulties in collecting or submitting documentation on authorized trade data**

No questions, concerns or difficulties identified yet.

### **Information on Oceanic Whitetip Shark**

Retaining oceanic whitetip shark on board is prohibited in many RFMOs that Korea is a member of, including for example WCPFC and IATTC, the two tuna RFMOs that manage tuna and tuna-like species in the Pacific.

Korea has made sure that all Korean-flagged distant water fishing vessels shall comply with the conservation and management measures (CMMs) of the RFMOs in accordance with the Distant Water Fisheries Development Act. The vessels are monitored by the FMC in near real-time, who also conducts in-port inspections on the Korean flagged vessels regularly when they come back to Korean ports.

REPUBLIQUE DU SENEGAL  
Un Peuple - Un But - Une Foi

-----  
MINISTERE DE L'ENVIRONNEMENT  
ET DU DEVELOPPEMENT DURABLE

-----  
DIRECTION DES EAUX, FORETS, CHASSES  
ET DE LA CONSERVATION DES SOLS

-----  
**AUTORITE DE GESTION CITES**

**RAPPORT SUR LA NOTIFICATION  
2024/004 DU 04 JANVIER 2024**

## A- Emissions d'avis de commerce non préjudiciable :

Pour une meilleure protection et de conservation des requins et raies, le Sénégal appuyé par ses partenaires comme Human Society International a pris des décisions et mené des ACNP allant dans le sens du renforcement de la conservation de ces espèces menacées. Ces résultats ont été obtenus grâce à une collaboration étroite entre l'organe de gestion de la CITES, le ministère de la pêche et les acteurs de la pêche c'est-à-dire les mareyeurs exploitants. Ce qui a abouti à :

- ✓ L'émission d'un quota de zéro exportation pour le requin Longimane en 2023 (voir annexe).
- ✓ La réalisation d'un ACNP pour le requin Mako qui est en cours de finalisation.

## B- Emission d'avis d'acquisition légale

Sous ce chapitre, toutes les opérations de capture et de débarquement sont contrôlées d'amont en aval par le service des pêches qui délivre les autorisations de capture et les certificats d'origines à cet effet pour attester de la légalité du produit.

## C- Identification et surveillance des produits commercialisés (voir rapports CITES antérieurs)

## D- Evaluation des débarquements en tonnes

Des données de capture de quelques requins annexés 2 sont présentées sur le tableau qui suit. Elles ont été obtenues au niveau de la direction de la pêche maritime qui est chargé du suivi et du contrôle des activités de capture et de débarquement

Nom scientifique	Nom commun	2018	2019	2020	2021	2022
<i>Carcharhinus altimus</i>	Requin babosse (nuit)	1462	1337	907,18	786,117	677,977
<i>Sphyrna spp</i>	Requins marteau nca	741,17	514	378,39	270,55	302,615
<i>Rhinobatos rhinobatos</i>	Raie-guitare commune	965	801	575,79	791,04	563,658
<i>Glaucostegus nemuculus</i>	Guitare de mer fousseuse					6,405
<i>Isurus oxyrinchus</i>	Requin-taupe bleu	597,2				

## ANNEXES

## **UK response to Notification 2024/004**

Parties are invited to submit information related to shark and ray conservation management.

Pursuant to Decision 19.222 paragraph a), the Secretariat hereby invites Parties to submit a brief report in accordance with Resolution Conf. 12.6 (Rev. CoP18) on new information on their shark and ray conservation management activities, in particular on any national management measures that prohibit commercial take or trade (with an executive summary not exceeding 200 words, if the report exceeds four pages) with a focus on the following topics:

### **A. the making of non-detriment findings (NDFs);**

CITES is implemented in the UK through its Wildlife Trade Regulations, which are stricter than the requirements of the Convention. The UK is required to issue import permits and make attendant non-detriment findings for specimens of Annex B species (Annex B effectively corresponds to CITES Appendix II). With this in mind, and anticipating a greater volume of imports than (re-)exports, the UK has produced two detailed NDFs for shark species with a multi-ocean basin global scope. An NDF for shortfin mako *Isurus oxyrinchus*, published on the CITES website, and an NDF for blue shark *Prionace glauca*, completed and going through external peer review. The aim is to provide this to the CITES Secretariat for publication as soon as possible.

The UK assesses every application to trade shark specimens, for all purposes, including undertaking non-detriment findings, on a case-by-case basis. For any live specimens we will also assess the suitability of care and accommodation.

### **B. the making of legal acquisition findings (LAFs);**

The UK processes very few permits for shark species and they are mainly scientific samples for conservation research.

### **C. identification and monitoring of CITES-listed shark products in trade in source, transit and consumer Parties**

The UK CITES Authorities monitor all CITES-listed trade, for annual reporting requirements and to appraise and compare volumes, quantities, specimens and species in trade and to identify changes in trade patterns and emerging trends.

The UK government (Defra) provided financial support to a collaboration between Cefas (the UK's Centre for Environment, Fisheries and Aquaculture Science), the Indonesian government and the Wildlife Conservation Society (WCS) to facilitate the production of visual guides for identifying CITES-listed shark and ray species. A three-guide series covers whole animals, shark trunks and dried products such as shark fins and devil ray gill plates. The whole animal and product guides combine decades of previous work and have been developed as part of a global collaboration with governments, non-governmental organizations, and other partner and funding organizations (including the CITES Secretariat, the United Nations Food and Agriculture Organization (FAO), the European Union, the Pew Charitable Trusts, and Shark Conservation Fund). These guides simplify the training process for customs officials by covering all CITES listed species, and the major products in trade in one set of guides. The guides are currently being updated to include all the elasmobranch species listed on CITES Appendix II at CITES CoP19. The aim is to complete this work in June 2024 and submit to the CITES Secretariat for placement on the CITES website.

**D. recording of stockpiles of commercial and/or pre-Convention shark parts and derivatives for CITES Appendix-II elasmobranch species and controlling the entry of these stocks into trade; and**

The UK does not currently have any plans for recording of stockpiles of commercial and/or pre-Convention shark parts and derivatives for CITES Appendix-II elasmobranch species, as we do not receive many import permits requests for such species.

**E. capacity building needs to assist developing countries and small island developing states with reporting requirements**

The UK continues to provide CITES training to Parties, non-Parties who aim to accede to the Convention, enforcement agencies and others.

**Additional management information**

The practice of ‘shark finning’ has been banned in the UK since 2003 through Council Regulation (EC) No 1185/2003, transposed into UK law. The Regulation prohibits the removal of shark fins on board vessels, and to retain on board, tranship or land shark fins. The version of Regulation 1185/2003 which was retained in UK law includes the amendments made by Regulation 605/2013.

Since 2009 a ‘Fins Naturally Attached’ policy has been enforced to further combat the illegal finning of sharks in UK waters and by UK vessels worldwide.

The Shark Fins Act 2023 gained Royal Assent in the UK in June 2023. The Act will ban the import and export of shark fins, or things containing shark fins.

A range of other measures are in place for various shark and ray species, including some of those that are listed on CITES, for example basking shark (*Cetorhinus maximus*) which is listed on the Wildlife and Countryside Act 1981. Further information can be found [here](#).

Fisheries regulations applying to UK fishing vessels in UK, EU and international waters (for example of the ICCAT convention area), include a prohibition on fishing for, retaining and landing a range of CITES-listed species, including bigeye thresher *Alopias superciliosus*, white shark *Carcharodon carcharias*, porbeagle *Lamna nasus*, oceanic whitetip shark *Carcharhinus longimanus*, whale shark *Rhincodon typus*, as well as sawfish, hammerhead sharks (except *Sphyrna tiburo*) and mobulid rays.

In terms of commercial exploitation of elasmobranchs, there are Total Allowable Catches in place for skates and rays (*Rajiformes*), and spurdog *Squalus acanthias*, and trip limits on the retention of tope *Galeorhinus galeus*. Common thresher shark *Alopias vulpinus* (Appendix II) cannot be exploited by target fisheries.

CITES-listed elasmobranchs found in the waters of the UK and its Overseas Territories include:

Scientific name (species found in UK waters highlighted)	Common name
<i>Carcharhinus acronotus</i>	Blacknose shark
<i>Carcharhinus altimus</i>	Bignose shark
<i>Carcharhinus brevipinna</i>	Spinner shark
<i>Carcharhinus falciformis</i>	Silky shark

<i>Carcharhinus galapagensis</i>	Galapagos shark
<i>Carcharhinus leucas</i>	Bull shark
<i>Carcharhinus limbatus</i>	Blacktip shark
<i>Carcharhinus perezii</i>	Caribbean reef shark
<i>Carcharhinus plumbeus</i>	Sandbar shark
<i>Carcharhinus signatus</i>	Night shark
<i>Negaprion brevirostris</i>	Lemon shark
<i>Prionace glauca</i>	Blue shark
<i>Rhizoprionodon porosus</i>	Caribbean sharpnose shark
<i>Sphyrna lewini</i>	Scalloped hammerhead
<i>Sphyrna mokarran</i>	Great hammerhead
<i>Sphyrna tiburo</i>	Bonnethead shark
<i>Sphyrna zygaena</i>	Smooth hammerhead
<i>Alopias superciliosus</i>	Bigeye thresher
<i>Alopias vulpinus</i>	Common thresher
<i>Cetorhinus maximus</i>	Basking shark
<i>Carcharodon carcharias</i>	Great white shark
<i>Isurus oxyrinchus</i>	Shortfin mako
<i>Lamna nasus</i>	Porbeagle
<i>Mobula alfredi</i>	Reef Manta Ray
<i>Mobula birostris</i>	Oceanic manta ray
<i>Mobula hypostoma</i>	Atlantic pygmy devil ray
<i>Mobula tarapacana</i>	Sicklefin devil ray
<i>Rhincodon typus</i>	Whale shark
<i>Pristis pectinata</i>	Smalltooth sawfish
<i>Pristis pristis</i>	Large-tooth sawfish

## U.S. Response to Notification to the Parties No. 2024/004

- **Request for information on shark and ray conservation management**

Pursuant to Decision 19.222 paragraph a), the Secretariat hereby invites Parties to submit a brief report in accordance with [Resolution Conf. 12.6 \(Rev. CoP18\)](#) on new information on their shark and ray conservation management activities, in particular on any national management measures that prohibit commercial take or trade:

### **Executive Summary**

The National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) is responsible for managing sharks and rays within the U.S. exclusive economic zone under the Magnuson-Stevens Fishery Conservation and Management Act. Pursuant to this Act, shark finning is prohibited, and sharks are required to be landed with their fins naturally attached. Recent legislation makes it illegal, with certain exceptions, to possess, buy, sell, or transport shark fins. NMFS is currently working on stock assessments for great, smooth, Carolina, and scalloped hammerhead sharks. U.S. scientists continue to conduct many projects covering the life history, stock structure, and fisheries of several shark species. Among the regulations promulgated in 2023 and 2024, NMFS published a final rule that prohibits the retention of oceanic whitetip sharks throughout the Atlantic Ocean and prohibits the retention of great, smooth, and scalloped hammerhead sharks in the U.S. Caribbean. The U.S. Fish and Wildlife Service (U.S. Division of Scientific Authority) reports no new non-detriment findings for sharks and rays at this time, although general advice was prepared in 2023 on the import, export and Introduction from the Sea of Appendix-I and Appendix-II biological samples encountered during research surveys or fisheries-related activities conducted by NOAA. Additionally, a general advice was developed for the export of CITES Appendix II requiem shark (family Carcharhinidae) species harvested from the wild in commercial fisheries in the Atlantic Ocean, including the Gulf of Mexico and Caribbean Sea, by U.S. fishermen during the 2023 and 2024 harvest seasons.

#### **a) the making of non-detriment findings (NDFs);**

The United States has provided several examples of non-detriment findings (NDFs) for the export of shark and ray species to the CITES Secretariat, which are available on the [CITES website](#). This includes a general advice for exports and Introduction from the Sea of hammerheads (*Sphyna lewini*, *S. mokarran*, and *S. zygaena*), common thresher (*Alopias vulpinus*), and porbeagles (*Lamna nasus*) harvested in commercial fisheries by U.S. fishermen in the northwest Atlantic, including the Gulf of Mexico and Caribbean. While there are no new NDFs for shark and ray species to share at this time, a general advice was prepared in early 2023 on the import, export and Introduction from the Sea of biological samples derived from live or salvaged from dead specimens of species included in CITES Appendix I and II encountered during scientific research surveys or fisheries related activities conducted by the NOAA. Additionally, a general advice was developed for the export of CITES Appendix II requiem shark (family Carcharhinidae) species



harvested from the wild in commercial fisheries in the Atlantic Ocean, including the Gulf of Mexico and Caribbean Sea, by U.S. fishermen during the 2023 and 2024 harvest seasons.

U.S. CITES implementing regulations for making a non-detriment finding are included below, as stated in 50 U.S. Code of Federal Regulations Part 23.

**50 U.S. Code of Federal Regulations Part 23 §23.61**

*PART 23—CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES)*

*Subpart D—Factors Considered in Making Certain Findings*

**§23.61 What factors are considered in making a non-detriment finding?**

(a) *Purpose.* Articles III and IV of the Treaty require that, before we issue a CITES document, we find that a proposed export or introduction from the sea of Appendix-I or -II specimens is not detrimental to the survival of the species and that a proposed import of an Appendix-I specimen is for purposes that would not be detrimental to the survival of the species.

(b) *Types of detriment.* Detrimental activities, depending on the species, could include, among other things, unsustainable use and any activities that would pose a net harm to the status of the species in the wild. For Appendix-I species, it also includes use or removal from the wild that results in habitat loss or destruction, interference with recovery efforts for a species, or stimulation of further trade.

(c) *General factors.* The applicant must provide sufficient information for us to make a finding of non-detriment. In addition to factors in paragraphs (d) and (e) of this section, we will consider whether:

(1) *Biological and management information demonstrates that the proposed activity represents sustainable use.*

(2) *The removal of the animal or plant from the wild is part of a biologically based sustainable-use management plan that is designed to eliminate over-utilization of the species.*

(3) *If no sustainable-use management plan has been established, the removal of the animal or plant from the wild would not contribute to the over-utilization of the species, considering both domestic and international uses.*

(4) *The proposed activity, including the methods used to acquire the specimen, would pose no net harm to the status of the species in the wild.*

(5) *The proposed activity would not lead to long-term declines that would place the viability of the affected population in question.*

(6) *The proposed activity would not lead to significant habitat or range loss or restriction.*

(d) *Additional factor for Appendix-II species.* In addition to the general factors in paragraph (c) of this section, we will consider whether the intended export of an Appendix-II species would cause a significant risk that the species would qualify for inclusion in Appendix I.

(e) *Additional factors for Appendix-I species.* In addition to the general factors in paragraph (c) of this section, we will consider whether the proposed activity:

(1) *Would not cause an increased risk of extinction for either the species as a whole or the population from which the specimen was obtained.*

(2) *Would not interfere with the recovery of the species.*

(3) *Would not stimulate additional trade in the species. If the proposed activity does stimulate trade, we will consider whether the anticipated increase in trade would lead to the decline of the species.*

(f) *How we make our findings.* We base the non-detriment finding on the best available biological information. We also consider trade information, including trade demand, and other scientific management information. We make a non-detriment finding in the following way:

(1) *We consult with the States, Tribes, other Federal agencies, scientists, other experts, and the range countries of the species.*

(2) *We consult with the Secretariat and other Parties to monitor the level of trade that is occurring in the species.*

(3) *Based on the factors in paragraphs (c) through (e) of this section, we evaluate the biological impact of the proposed activity.*

(4) *In cases where insufficient information is available or the factors above are not satisfactorily addressed, we take precautionary measures and would be unable to make the required finding of non-detriment.*

(g) *Risk assessment. We review the status of the species in the wild and the degree of risk the proposed activity poses to the species to determine the level of scrutiny needed to make a finding. We give greater scrutiny and require more detailed information for activities that pose a greater risk to a species in the wild. We consider the cumulative risks, recognizing that each aspect of international trade has a continuum of risk (from high to low) associated with it as follows:*

(1) *Status of the species: From Appendix I to Appendix II.*

(2) *Origin of the specimen: From wild-collected to born or propagated in a controlled environment to bred in captivity or artificially propagated.*

(3) *Source of the propagule used to grow the plant: From documentation that the plant was grown from a non-exempt seed or seedling to documentation that the plant was grown from an exempt seed or seedling.*

(4) *Origin of the species: From native species to nonnative species.*

(5) *Volume of legal trade: From high to low occurrence of legal trade.*

(6) *Volume of illegal trade: From high to low occurrence of illegal trade.*

(7) *Type of trade: From commercial to noncommercial.*

(8) *Genetic status of the specimen: From a purebred species to a hybrid.*

(9) *Risk of disease transmission: From high to limited risk of disease transmission.*

(10) *Basis for listing: From listed under Article II(1) or II(2)(a) of the Treaty to listed under Article II(2)(b).*

(h) *Quotas for Appendix-I species. When an export quota has been set by the CoP for an Appendix-I species, we will consider the scientific and management basis of the quota together with the best available biological information when we make our non-detriment finding. We will contact the Scientific and Management Authorities of the exporting country for further information if needed.*

## **b) the making of legal acquisition findings (LAFs);**

The United States has been working on improving efficiency for making legal acquisition findings (LAFs) for marine species including sharks and rays (Elasmobranchii spp.). The U.S. Division of Management Authority has been incorporating applicable guidance found into 'Rapid guide for making legal acquisition findings' to aid in streamlining LAFs such as designing supplemental material for permit applications specific for marine species. In addition, our CITES implementing regulations for making legal acquisition findings are included below, as stated in 50 Code of Federal Regulations Part 23:

### **50 U.S. Code of Federal Regulations Part 23 §23.60**

*PART 23—CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES)*

*Subpart D—Factors Considered in Making Certain Findings*

#### **§23.60 What factors are considered in making a legal acquisition finding?**

(a) *Purpose. Articles III, IV, and V of the Treaty require a Management Authority to make a legal acquisition finding before issuing export permits and re-export certificates. The Parties have*

*agreed that a legal acquisition finding must also be made before issuing certain CITES exemption documents.*

*(b) Types of legal acquisition. Legal acquisition refers to whether the specimen and its parental stock were:*

*(1) Obtained in accordance with the provisions of national laws for the protection of wildlife and plants. In the United States, these laws include all applicable local, State, Federal, tribal, and foreign laws; and*

*(2) If previously traded, traded internationally in accordance with the provisions of CITES.*

*(c) How we make our findings. We make a finding that a specimen was legally acquired in the following way:*

*(1) The applicant must provide sufficient information (see §23.34) for us to make a legal acquisition finding.*

*(2) We make this finding after considering all available information.*

*(3) The amount of information we need to make the finding is based on our review of general factors described in paragraph (d) of this section and additional specific factors described in paragraphs (e) through (k) of this section.*

*(4) As necessary, we consult with foreign Management and Scientific Authorities, the CITES Secretariat, State conservation agencies, Tribes, FWS Law Enforcement, APHIS or CBP, and other appropriate experts.*

*(d) Risk assessment. We review the general factors listed in this paragraph and additional specific factors in paragraphs (e) through (k) of this section to assess the level of scrutiny and amount of information we need to make a finding of legal acquisition. We give less scrutiny and require less-detailed information when there is a low risk that specimens to be exported or re-exported were not legally acquired, and give more scrutiny and require more detailed information when the proposed activity poses greater risk. We consider the cumulative risks, recognizing that each aspect of the international trade has a continuum of risk from high to low associated with it as follows:*

*(1) Status of the species: From Appendix I to Appendix III.*

*(2) Origin of the specimen: From wild-collected to born or propagated in a controlled environment to bred in captivity or artificially propagated.*

*(3) Source of the propagule used to grow the plant: From documentation that the plant was grown from a non-exempt seed or seedling to documentation that the plant was grown from an exempt seed or seedling.*

*(4) Origin of the species: From species native to the United States or its bordering countries of Mexico or Canada to nonnative species from other countries.*

*(5) Volume of illegal trade: From high to low occurrence of illegal trade.*

*(6) Type of trade: From commercial to noncommercial.*

*(7) Trade by range countries: From range countries that do not allow commercial export, or allow only limited noncommercial export of the species, to range countries that allow commercial export in high volumes.*

*(8) Occurrence of the species in a controlled environment in the United States: From uncommon to common in a controlled environment in the United States.*

*(9) Ability of the species to be bred or propagated readily in a controlled environment: From no documentation that the species can be bred or propagated readily in a controlled environment to widely accepted information that the species is commonly bred or propagated.*

*(10) Genetic status of the specimen: From a purebred species to a hybrid.*

*(e) Captive-bred wildlife or a cultivated plant. For a specimen that is captive-bred or cultivated, we may consider whether the parental stock was legally acquired.*

*(f) Confiscated specimen. For a confiscated Appendix-II or -III specimen, we consider whether information shows that the transfer of the confiscated specimen or its offspring met the conditions of the remission decision, legal settlement, or disposal action after forfeiture or*

*abandonment.*

*(g) Donated specimen of unknown origin. For an unsolicited specimen of unknown origin donated to a public institution (see §10.12 of this subchapter), we consider whether:*

*(1) The public institution follows standard recordkeeping practices and has made reasonable efforts to obtain supporting information on the origin of the specimen.*

*(2) The public institution provides sufficient information to show it made a reasonable effort to find a suitable recipient in the United States.*

*(3) The export will provide a conservation benefit to the species.*

*(4) No persuasive information exists on illegal transactions involving the specimen.*

*(5) The export is noncommercial, with no money or barter exchanged except for shipping costs.*

*(6) The institution has no history of receiving a series of rare and valuable specimens or a large quantity of wildlife or plants of unknown origin.*

*(h) Imported previously. For a specimen that was previously imported into the United States, we consider any reliable, relevant information we receive concerning the validity of a CITES document, regardless of whether the shipment was cleared by FWS, APHIS, or CBP.*

*(i) Personal use. For a wildlife or plant specimen that is being exported or re-exported for personal use by the applicant, we consider whether:*

*(1) The specimen was acquired in the United States and possessed for strictly personal use.*

*(2) The number of specimens is reasonably appropriate for the nature of your export or re-export as personal use.*

*(3) No persuasive evidence exists on illegal transactions involving the specimen.*

*(j) Sequential ownership. For a specimen that was previously possessed by someone other than the applicant, we may consider the history of ownership for a specimen and its parental stock, breeding stock, or cultivated parental stock.*

*(k) Wild-collected in the United States. For a specimen collected from the wild in the United States, we consider the site where the specimen was collected, whether the species is known to occur at that site, the abundance of the species at that site, and, if necessary, whether permission of the appropriate management agency or landowner was obtained to collect the specimen.*

**c) identification and monitoring of CITES-listed shark products in trade in source, transit and consumer Parties;**

The United States engages in the export, import, and re-export of shark products. CITES-listed shark products are identified and monitored in trade.

**d) recording of stockpiles of commercial and/or pre-Convention shark parts and derivatives for CITES Appendix-II elasmobranch species and controlling the entry of these stocks into trade; and**

The United States does not record stockpiles of commercial or pre-Convention shark parts and derivatives for CITES Appendix-II listed elasmobranch species. Most shark products (i.e., meat) are sold fresh. Additionally, the recent Shark Fin Sales Elimination Act makes it illegal, with certain exceptions, to possess, buy, sell, or transport shark fins or any product containing shark fins, with an exemption for smooth or spiny dogfish fins.

**e) capacity building needs to assist developing countries and small island developing states with reporting requirements.**

Not applicable.

**Additional information on shark and ray conservation and management activities updates from 2023 through 2024.**

○ **Update on National Regulatory Actions for the Management and Conservation of Sharks and Rays**

The 2000 Shark Finning Prohibition Act amended the Magnuson–Stevens Fishery Conservation and Management Act (MSA) to prohibit the practice of shark finning by any person under U.S. jurisdiction. The 2000 Shark Finning Prohibition Act requires the NMFS to promulgate regulations to implement its provisions, initiate discussion with other nations to develop international agreements on shark finning and data collection, provide Congress with annual reports describing efforts to carry out the Shark Finning Prohibition Act, and establish research programs. The most recent report can be found here: <https://www.fisheries.noaa.gov/resource/document/2023-shark-finning-report-congress>. This report describes the efforts of the NMFS during calendar years 2018 to 2022 to implement the 2000 Shark Finning Prohibition Act and more recent shark conservation legislation.

In January 2023, NMFS published a draft recovery plan for the oceanic whitetip shark and solicited public comment. More information is available on the [NMFS webpage](#).

On May 23, 2023, NMFS announced a [positive 90-day finding](#) on a petition to list the smalltail shark (*Carcharhinus porosus*) as threatened or endangered under the Endangered Species Act (ESA).

In August 2023, NMFS published the [2023 Report to Congress on Improving International Fisheries](#). In the Report, the People’s Republic of China and Vanuatu were identified for shark catch where those nations do not have a comparable regulatory program to that of the United States. After each report is issued, NMFS works with nations and entities for two years to address the activities for which they were identified. Afterwards, NMFS issues a certification determination.

Between 2023 and 2024, the following new measures for sharks in the Atlantic Ocean were adopted by NMFS:

On January 3, 2024, NMFS published a final rule that, among other things, prohibits the commercial and recreational retention of oceanic whitetip sharks fisheries in all U.S. waters of the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea (by adding this species to the highly migratory species prohibited shark species group). In addition, the rule prohibits the commercial and recreation retention of hammerhead sharks (great, smooth, and scalloped hammerhead sharks) in the U.S. Caribbean. The rule became effective on February 2, 2024. This action is responsive to two Biological Opinions for highly migratory species fisheries that strongly encouraged a prohibition on fishing for oceanic whitetip sharks and scalloped hammerhead sharks (a specific subpopulation). Oceanic

whitetip sharks throughout its range and scalloped hammerhead sharks in a portion of its range are listed as threatened under the U.S. Endangered Species Act.

In 2023 to 2024, there were no new rules or legislation pertaining to shark conservation in California, Oregon or Washington.

Between 2022 and 2024, the following actions have been taken by NMFS for sharks in the Western and Central Pacific Ocean:

In 2022, the Hawaii shark protection act went into effect, making it illegal to knowingly capture, entangle, or kill any shark species in state marine waters.

On April 28, 2022, NMFS published a final rule (87 FR 25153) prohibiting the use of wire leaders and requiring the removal of fishing gear from oceanic whitetip sharks (*Carcharhinus longimanus*) caught in longline fisheries in the Pacific Islands Region. This rule was intended to reduce post-hooking mortality of these threatened sharks by reducing the amount of fishing gear (i.e., trailing gear) attached to sharks when released and increasing the probability they could bite free of the gear after being hooked. Analysis of observer records to evaluate the effects of the rule are currently underway.

In 2023, the Pacific Islands Regional Office began developing a longline crew training program focused on best practices for the handling and release of any protected species that is incidentally caught in the fishery, including protected sharks and rays. This training stems from terms and conditions from a 2023 Biological Opinion aimed at reducing post-interaction mortality of these species. The first crew members will be trained in 2024, and all Hawaii and American Samoa longline fishing vessels will have at least one trained crewmember by spring 2025.

On May 12, 2023, NMFS issued a final rule (88 FR 30671) to implement decisions of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. In relation to shark and ray conservation, the final rule establishes bycatch restrictions for sharks and rays. This rule applies to U.S. fishing vessels used for commercial fishing for highly migratory species on the high seas and in exclusive economic zones in the Convention Area. This satisfies the obligations of the United States under the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean.

- **Stock Assessments**

Of the many shark species included in Appendix II of CITES, 31 are managed by the Atlantic Highly Migratory Species (HMS) Management Division within NMFS. Based on a 2023 stock assessment by the International Convention for the Conservation of Atlantic Tunas (ICCAT) Standing Committee Research and Statistics (SCRS), NMFS has determined the North Atlantic blue shark stock is not overfished and not experiencing overfishing (SCRS 2023).<sup>i</sup> NMFS is currently working on stock assessments for great (*Sphyrna mokarran*), smooth (*Sphyrna zygaena*), and scalloped (*Sphyrna lewini*) hammerhead sharks (SEDAR 77). This stock assessment process is also considering

Carolina hammerhead sharks (*Sphyrna gilberti*), which is a cryptic hammerhead species that looks like scalloped hammerhead sharks. This assessment process should be finalized in late 2024. More information on this assessment can be found on the [SEDAR webpage](#). NMFS is considering the next stock assessments to conduct after the hammerhead shark assessments are complete. The species under consideration are lemon (*Negaprion brevirostris*), finetooth (*Carcharhinus isodon*), bull (*Carcharhinus leucas*), spinner sharks (*Carcharhinus brevipinna*), and tiger (*Galeocerdo cuvier*). Information on these assessments can be found here: <http://sedarweb.org/>

- **Research Activities**

Many of the Atlantic shark research activities conducted by U.S. scientists were presented to the Shark Species Group of the SCRS. Collaborative activities among members of the SCRS Shark Species Group include projects covering different aspects of the life history, stock structure, and fisheries of various shark species. More information is available on the [ICCAT webpage](#).

NMFS also produces an annual Stock Assessment and Fisheries Evaluation (SAFE) Report that reviews the current status of Atlantic HMS fish stocks (tunas, swordfish, billfish, and sharks). These reports are available: [NMFS's Atlantic Highly Migratory Species webpage](#).

NMFS conducts a shark research fishery in the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea. More information is available on this [NMFS webpage](#).

NMFS also conducts other shark research at its Fishery Science Centers around the country. More details of this research can be found at the sites below:

**Alaska:** <https://www.fisheries.noaa.gov/alaska/ecosystems/shark-research-alaska>

**Northeastern United States:** <https://www.fisheries.noaa.gov/new-england-mid-atlantic/atlantic-highly-migratory-species/shark-research-northeast>

**Southeastern United States:** <https://www.fisheries.noaa.gov/about/southeast-fisheries-science-center>

**West Coast of the United States:**  
<https://www.fisheries.noaa.gov/about/fisheries-resources-division-southwest-fisheries-science-center>

**U.S. Pacific Islands Region:**

The International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific (ISC) is undertaking a new stock assessment for North Pacific shortfin mako shark in 2024. The last assessment conducted in 2018 indicated that the stock was likely not in an overfished and overfishing is likely not occurring. The new 2024 assessment will be presented to the annual ISC Plenary meeting in June 2024 and the meeting of the

Scientific Committee of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC) in August 2024.

The Hawaii Community Tagging Program (HCTP) is a collaborative research program focused on the use of advanced telemetry technologies to elucidate shark movement behavior and habitat requirements, focusing on oceanic whitetip, silky, mako, and scalloped hammerhead sharks. Over the past year, the HCTP has continued analyzing results of acoustic and satellite tagging efforts and working with fishers to develop non-lethal deterrents and identify avoidance strategies to reduce interactions and mortality of sharks in the Hawaii small boat tuna fishery.

Genetic sampling for mobulids is ongoing in the U.S. Pacific longline fishery (Hawaii and American Samoa) to help elucidate species identification issues and better understand fisheries' impacts on giant mantas (*Mobula birostris*) specifically. Over the past year, 9 samples have been analyzed (24 total to date since the start of the project in 2021) and an additional 13 samples were collected that are ready for analysis. Similar genetic sampling efforts are also ongoing in the Western and Central Pacific purse seine fishery. Sampling efforts in the purse seine fishery are being led by the International Seafood Sustainability Foundation (ISSF), funded through a grant from NOAA. Over the past year, they have collected and analyzed 8 samples. There are currently 12 U.S. purse seine vessels participating in the research.

In addition to the genetic sampling occurring, there is also deployment of pop up satellite archival tags (PSATs) (provided to observers and other researchers on Hawaii longline and U.S. purse seine vessels), also in an effort to better understand fisheries impacts to giant mantas (*Mobula birostris*), specifically. The tagging efforts are ongoing in both the U.S. Pacific longline and the Western Central Pacific Ocean purse seine fisheries, and are intended to assess the post-release mortality rates and to identify handling and dispatch methods that would improve survival rates. In the past year, there have been six tags deployed in the longline fishery and five tags deployed in the purse seine fishery. In addition, a species identification guide was developed to improve species identification, which has been distributed to the Pacific Islands Regional Observer Program and captains and crew on both longline and purse seine vessels; a series of workshops to train purse seine vessel owners and operators on the most up-to-date release guidelines for mobula rays were conducted.

Funds provided through a grant to the ISSF funded a series of workshops for U.S. purse seine vessel owners and operators and to continue testing a number of bycatch reduction devices and safe-handling and release methods to increase post-release survivorship of mobulid rays. ISSF has also been working with researchers to train crew on mobulid ray sampling and tagging.

List of peer-reviewed scientific papers published by NMFS scientists during the reporting period (2023-2024):



- Anderson, BN, J Kaloczi, C Holden, A Einig, L Donaldson, H Malone, MS Passerotti, LJ Natanson, HD Bowlby, and JA Sulikowski. 2023. Using reproductive hormones extracted from archived muscle tissue to assess maturity and reproductive status in porbeagles *Lamna nasus*. *Frontiers in Marine Science* 10:1176767. <https://doi.org/10.3389/fmars.2023.1176767>
- Braun, CD, MC Arostegui, N Farchadi, M Alexander, P Afonso, A Allyn, SJ Bograd, S Brodie, DP Crear, EF Culhane, TH Curtis, EL Hazen, A Kerney, N Lezama-Ochoa, KE Mills, D Pugh, N Queiroz, JD Scott, GB Skomal, DW Sims, SR Thorrold, H Welch, R Young-Morse, and RL Lewison. Building use-inspired species distribution models: Using multiple data types to examine and improve model performance. *Ecological Applications* 33(6):e2893. <https://doi.org/10.1002/eap.2893>
- Braun, CD, N Lezama-Ochoa, N Farchadi, MC Arostegui, M Alexander, A Allyn, SJ Bograd, S Brodie, DP Crear, TH Curtis, EL Hazen, A Kerney, KE Mills, D Pugh, JD Scott, H Welch, R Young-Morse, and RL Lewison. 2023. Widespread habitat loss and redistribution of marine top predators in a changing ocean. *Science Advances* 9(32): eadi2718. <https://doi.org/10.1126/sciadv.adi2718>
- Carlson, JK. 2023. Trouble in the trawls: Is bycatch in trawl fisheries preventing the recovery of sawfish? A case study using the US population of smalltooth sawfish, *Pristis pectinata*. *Global Ecology and Conservation* 48: e02745. <https://doi.org/10.1016/j.gecco.2023.e02745>
- Carlson, JK, CT McCandless, and M Passerotti. 2023. Stock identification of Atlantic blue shark (*Prionace glauca*). *Collect. Vol. Sci. Pap. ICCAT* 80(4):284-288.
- Carlson, JK, M Passerotti, and CT McCandless. 2023. Age, growth and maturity of blue shark (*Prionace glauca*) in the northwest Atlantic Ocean. *Collect. Vol. Sci. Pap. ICCAT* 80(4):269-283.
- Courtney, D., Rice, J. (2023). Meta-Analysis of Historical Stock Assessment Uncertainty for U.S. Atlantic HMS Domestic Sharks: An Example Application within a Tiered Acceptable Biological Catch (ABC) Control Rule. Southeast Fisheries Science Center (U.S.). NOAA technical memorandum NMFS-SEFSC 761. <https://doi.org/10.25923/1cgs-xp60>
- Crear, DP, TH Curtis, CP Hutt, and Y Lee. 2023. Climate-influenced shifts in a highly migratory species recreational fishery. *Fisheries Oceanography* 32(4):327-340. <https://doi.org/10.1111/fog.12632>
- Crear, DP, CD Peterson, JM Higgs, JM Hendon, and ER Hoffmayer. 2023. Ontogenetic habitat partitioning among four shark species within a nursery ground. *Marine and Freshwater Research* 74:1388-1403.

<https://doi.org/10.1071/MF23130>.

- Farmer, NA, LP Garrison, JA Litz, JG Ortega-Ortiz, G Rappucci, PM Richards, JR Powell, DM Bethea, JA Jossart, AL Randall, ME Steen, TN Matthews, and JA Morris. 2023. Protected species considerations for ocean planning: A case study for offshore wind energy development in the U.S. Gulf of Mexico. *Marine and Coastal Fisheries* 15(3):e10246. <https://doi.org/10.1002/mcf2.10246>
- Francis, MP, WS Lyon, SC Clarke, B Finucci, MR Hutchinson, SE Campana, MK Musyl, KM Schaefer, SD Hoyle, T Peatman, D Bernal, K Bigelow, J Carlson, R Coelho, C Heberer, D Itano, E Jones, B Leroy, K Liu, H Murua, F Poisson, P Rogers, C Sanchez, Y Semba, T Sippel, and N Smith. 2023. Post-release survival of shortfin mako (*Isurus oxyrinchus*) and silky (*Carcharhinus falciformis*) sharks released from pelagic tuna longlines in the Pacific Ocean. *Aquatic Conservation: Marine and Freshwater Ecosystems* 33:366-378. <https://doi.org/10.1002/aqc.3920>
- Frazier, BS, EA Vinyard, AT Fields, WB Driggers, RD Grubbs, DH Adams, JM Drymon, JM Gardiner, JM Hendon, E Hoffmayer, RE Hueter, RJD Wells, TR Wiley, and DS Portnoy. 2023. Age, growth, and maturity of the bonnethead *Sphyrna tiburo* in the U.S. Gulf of Mexico. *Environmental Biology of Fishes* 106:1597–1617. <https://doi.org/10.1007/s10641-023-01439-5>
- Knaub, JL, M Passerotti, LJ Natanson, T Meredith, and M Porter. 2024. Vertebral morphology in the tail-whipping common thresher shark, *Alopias vulpinus*. *Royal Society Open Science* 11:231473. <https://doi.org/10.1098/rsos.231473>
- La Freniere, B. R., et al. (2023). Vertebral Chemistry Distinguishes Nursery Habitats of Juvenile Shortfin Mako in the Eastern North Pacific Ocean. *Marine and Coastal Fisheries*, 15(2), e10234.
- Lezama-Ochoa, N., Brodie, S., Welch, H., Jacox, M.G., Pozo Buil, M., Fiechter, J., Cimino, M., Muhling, B., Dewar, H., Becker, E.A., Forney, K.A., Costa, D., Benson, S.R., Farchadi, N., Braun, C., Lewison, R., Bograd, S., and Hazen, E.L. 2023. Divergent responses of Highly Migratory Species to climate change in the California Current. <https://doi.org/10.1111/ddi.13800>.
- McClure, M. M., et al. (2023). Vulnerability to climate change of managed stocks in the California Current large marine ecosystem. *Frontiers in Marine Science*.
- Natanson, LJ, WB Driggers, CT McCandless, and NE Kohler. 2023. Updated reproductive parameters for the tiger shark (*Galeocerdo cuvier*) in the western North Atlantic Ocean. *Fishery Bulletin* 121:84-95. <https://doi.org/10.7755/FB.121.3.3>
- Natanson, LJ, CT McCandless, and NE Kohler. 2023. Distribution of the tiger

shark (*Galeocerdo cuvier*) in the North Atlantic Ocean by season, sex, and life stage, based on tag and recapture data. *Fishery Bulletin* 121:145-160. <https://doi.org/10.7755/FB.121.4.1>

- Pacoureaux, N, JK Carlson, HK Kindsvater, CL Rigby, H Winkler, CA Simpfendorfer, P Charvet, RA Pollom, R Barreto, CS Sherman, BS Talwar, DJ Skerritt, UR Sumaila, JH Matsushiba, WJ VanderWright, HF Yan, and NK Dulvy. 2023. Conservation successes and challenges for wide-ranging sharks and rays. *Proceedings of the National Academy of Sciences* 120(5): e2216891120. <https://doi.org/10.1073/pnas.2216891120>
- Pate, JH, JR Wilmott, C Jones, C Horn, and NA Farmer. 2023. Multiple datasets confirm range extension of the sicklefin devil ray *Mobula tarapacana* in the western North Atlantic Ocean off the eastern USA. *Journal of the Marine Biological Association of the United Kingdom* 103:e30. [doi:10.1017/S002531542300022X](https://doi.org/10.1017/S002531542300022X)
- Prinzing, T.S, Bigman, J.S., Skelton, Z.R., Dulvy, N.K., and Wegner, N.C . 2023. The allometric scaling of oxygen supply and demand in the California horn shark, *Heterodontus francisci*. *J. Exp. Biol.* 226: jeb246054. <https://doi.org/10.1242/jeb.246054>.
- Pytka, JM, PM Kyne, JK Carlson, N Wosnick, and RW Jabado. 2024. A tangled web: global review of fishing interactions with rhino rays. *Reviews in Fish Biology and Fisheries* 34:131-160. <https://doi.org/10.1007/s11160-023-09821-3>
- Sherman, CS, CA Simpfendorfer, N Pacoureaux, JH Matsushiba, HF Yan, RHL Walls, CL Rigby, WJ VanderWright, RW. Jabado, RA Pollom, JK Carlson, P Charvet, A Bin Ali, Fahmi, J Cheok, DH Derrick, KB Herman, B Finucci, TD Eddy, MLD Palomares, CG Avalos-Castillo, B Kinattumkara, M Blanco-Parra, Dharmadi, M Espinoza, D Fernando, AB Haque, PA Mejía-Falla, AF Navia, JC Pérez-Jiménez, J Uzurum, RR Yuneni, and NK Dulvy. 2023. Half a century of rising extinction risk of coral reef sharks and rays. *Nature Communications* 14:15. <https://doi.org/10.1038/s41467-022-35091-x>
- Skelton, Z.R., Prinzing, T.S., Hastings, P.A. and Wegner, N.C. 2023. Laboratory-based measures of temperature preference and metabolic thermal sensitivity provide insight into the habitat utilisation of juvenile California Horn Shark (*Heterodontus francisci*) and Leopard Shark (*Triakis semifasciata*). *Journal of Fish Biology*. <https://doi.org/10.1111/jfb.15307>.
- Smith, KL, A Fearing, NM Phillips, AM Kroetz, TR Wiley, JK Carlson, and SS Taylor. 2023. Historical specimens and photographs reveal long-term changes in Smalltooth Sawfish (*Pristis pectinata*) age class distribution and average size during U.S. population decline. *Aquatic Conservation: Marine and Freshwater Ecosystems* 34: e4084. <https://doi.org/10.1002/aqc.4084>

- Welch, H., Savoca, M.S., Brodie, S., Jacox, M.G., Muhling, B.A., Clay, T.A., Cimino, M.A., Benson, S.R., Block, B.A., Conners, M.G., Costa, D.P., Jordan, F.D., Leisong, A.W., Mikles, C.S., Palacios, D.M., Shaffer, S.A., Thorne, L.H., Watson, J.T., Holser, R.R., Dewitt, L., Bograd, S.J., Hazen, E.L. 2023. Impacts of marine heatwaves on top predator distributions are variable but predictable. *Nat Commun* 14, 5188. <https://doi.org/10.1038/s41467-023-40849-y>.
- Wiley, TR, AB Brame, and AM Kroetz. 2023. Using multiple approaches to study the historical and current population of smalltooth sawfish in the Tampa Bay region of Florida. *Florida Scientist* 86(2):141-158.

- **Request for non-detriment findings and conversion factors**

For fisheries management in the Atlantic Ocean, NMFS regularly uses conversion factors to convert from whole to dressed weight or from dressed to whole weight, depending on our need. Our domestic quotas for sharks are in dressed weight. The conversion factors used for sharks (both in stock assessments and for quality management) match the conversion factors used for ICCAT.

The United States provided a copy of the conversion factors that NMFS currently uses for its shark fisheries management in the Atlantic Ocean in response to CITES Notification 2023/027. No further revisions have been made to date. However, please note that these conversion factors will evolve over time with the availability of new information.

- **Reporting on trade in sharks and rays**

U.S. Fish and Wildlife Service's Office of Law Enforcement (OLE) continue to monitor international trade of CITES-listed sharks and rays and their derivatives. OLE requires a declaration and clearance on all CITES-listed sharks and rays. The United States has not encountered any widespread problems with our ability to collect or submit documentation on authorized trade data for the CITES Trade Database.

- **Request for information on oceanic whitetip shark (*Carcharhinus longimanus*)**

- a) **all Parties that catch pelagic sharks to submit information on their national level implementation efforts and regulations for implementing the listing of *C. longimanus*; and**

U.S. Fish and Wildlife Service has been fully implementing the CITES listings for oceanic whitetip shark since September 14, 2014. There has been only one import of *C. longimanus* specimens (for scientific purpose) since the CITES listing has been in effect. There has been no commercial export of oceanic whitetip shark from the United States since the CITES listing has been in effect.

In addition, NMFS [listed the species as threatened](#) under the [U.S. Endangered Species Act](#) in 2018. As previously mentioned, NMFS published a draft recovery plan for the oceanic whitetip shark and solicited public comment. More information is available on the [NMFS webpage](#).

On January 3, 2024, NMFS published a final rule that, among other things, prohibits the commercial and recreational retention of oceanic whitetip sharks fisheries in all U.S. waters of the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea (by adding this species to the highly migratory species prohibited shark species group). The rule became effective on February 2, 2024.

- b) all Parties who are encountering difficulties implementing the listing of *C. longimanus* to submit information detailing the difficulties and any other relevant information.**

Not applicable.

---

<sup>i</sup> SCRS. 2023, Report of the Standing Committee on Research and Statistics. ICCAT September 25-29, 2023.



## WCS response to Notification to the Parties N° 2024/004

### Executive Summary

During the last five years the Wildlife Conservation Society (WCS) has assisted CITES Parties with data collection on shark and ray fisheries landings, technical input into policy development (conservation and fisheries management measures), and associated NDF trainings and implementation workshops for government officials in Bangladesh, Mozambique, Congo, Gabon, Madagascar, Kenya, Tanzania and Gabon. Looking forward, we will continue to support CITES Parties in countries where we have WCS offices.

WCS continues to lead the development of implementation tools to assist all Parties with customs level implementation of the CITES shark and ray listings. Current versions of the visual ID guides that cover all pre CoP19 CITES listed shark and ray species in all commonly traded forms and at point of landing can be found here and downloaded at no cost: <https://www.wcs.org/our-work/wildlife/sharks-skates-rays>

We will be updating those visual ID guides to cover all species listed at CoP19 by mid-2024, and we will make such materials widely available on the CITES website and through national or regional capacity building efforts. Additionally, WCS is partnering with Mote Marine Laboratory to develop and place in locations where there is a clear need a new genetic identification tool that will work in partnership with the visual ID guides to allow for the species level identification of all CITES listed sharks and rays by CITES or customs officials in a timely and affordable manner.

The following WCS country programs and partner groups will, in the next two years, assist their respective governments in planning and executing customs trainings using these identification tools, the collection of catch and trade data on CITES listed sharks and rays, and the development of NDF's and associated conservation and management measures to meet the obligations associated with CITES listings of sharks and rays:

Guatemala, Honduras, El Salvador, Cuba, Belize, Philippines, Singapore, Hong Kong SAR, Sri Lanka, Bangladesh, Maldives, Madagascar, Kenya, Mozambique, Congo, Gabon and Tanzania.

Below is a summary of major pieces of work undertaken by WCS over the past year to assist Parties in implementing CITES shark and ray listings:

NDFs	<p><b><u>Mozambique</u></b> In February 2024, the NDF for silky shark was finalized as positive, with conditions. There is also currently an NDF pending for the scalloped hammerhead shark.</p> <p><b><u>Madagascar</u></b></p>
------	--

	<p>In October 2023, an NDF development workshop was conducted, leading to twelve new shark and ray draft NDF's. This workshop follows the August 2022 NDF training workshop, where two draft/case study NDF's were developed. In August 2022, WCS Madagascar held an NDF training workshop in an in-person/virtual hybrid setting. Two draft/case study NDFs were created</p> <p><b><u>Kenya</u></b> Current planning is underway, and funding secured, for an NDF training workshop, provisionally scheduled for August 2024.</p> <p><b><u>Tanzania</u></b> In August 2023, an NDF workshop took place and one NDF was created. This NDF included four guitarfish and all three wedgfish species in Tanzania, and resulted in a negative outcome.</p>
ID and Monitoring	<p><b><u>Global</u></b> By the time the AC meets in 2024, we hope to have finalized and will be able to launch the update visual and genetic ID tools that will cover all CITES listed sharks and rays (including those listed at CoP19)</p> <p><b><u>Mozambique</u></b> In July 2023, WCS Mozambique facilitated a training workshop on genetic barcoding for four Mozambique government technicians, at a genetics laboratory in South Africa, to support CITES enforcement capacity.</p> <p>In October 2023, WCS Mozambique hosted a training workshop for eight Mozambique government staff on the use of a rapid genetic sequencer for real-time genetic identification of species to support CITES enforcement capacity.</p> <p><b><u>Madagascar</u></b> Planning is underway, and funding secured, for an in-person ID workshop to be held in November August 2024. 105 delegates plan to attend this training, which will include the newly listed species from CITES CoP19.</p> <p><b><u>Tanzania</u></b></p>

In October 2023, WCS Tanzania hosted a training workshop for government staff on the use of a rapid genetic sequencer for real-time genetic identification of species to support CITES enforcement capacity.

As a follow-up to a previous ID workshop in 2022, another workshop was held in March 2023 for over 50 fisheries data collectors from ten government agencies. This workshop included a focus on threatened species, most commonly landed species and prohibited species, in addition to training on CITES-listed shark and ray species.

In August 2023, a CITES implementation workshop was held virtually, and covered the range of implementation tools available.

**Kenya**

With funding secured, a provisional date for a CITES implementation workshop is scheduled for May/June 2024.

**Gabon**

Currently ongoing data collection concerning the catch of CITES species by both industrial and artisanal fishing – international trade in shark products is not permitted, so CITES records should not show trade from the country.

**Democratic Republic of Congo**

Currently ongoing data collection concerning the catch of CITES species by both industrial and artisanal fishing to inform local and national level management decisions.

**Bangladesh**

In June 2023, WCS Bangladesh introduced digital data collection with the Spatial Monitoring and Reporting Tool (SMART). Two data models were reconfigured by WCS to enable community-based MPA monitoring by citizen science fishermen and daily reporting of shark and ray landings by citizen scientists from local communities with major coastal fish landing sites. Through regular visits and frequent calls, WCS field staff provided mentoring support to all citizen scientists currently engaged in the WCS Citizen Science Fishermen Safety Network (CSFSN) and shark and ray landing site data collectors. During these



	<p>visits, WCS staff also engaged with local government officers and fisheries associations and disseminated CITES shark and ray identification materials to improve data collection.</p>
<p>Capacity building</p>	<p><b><u>Democratic Republic of Congo</u></b></p> <p>In March 2024, WCS DRC facilitated a marine species workshop, creating a pathway for better CITES compliance and building capacity for the administration on CITES species and byproducts.</p> <p><b><u>Bangladesh</u></b></p> <p>December 2022 and February 2023, WCS conducted two consultative workshops in Chattogram and Khulna, respectively. During the workshop, 31 inspectors and desk officers from Customs, the Fish Inspection and Quality Control Unit of the Department of Fisheries, and the Wildlife Crime Control Unit of the Forest Department jointly formulated practical approaches to align fish and fish product export policies and procedures across these agencies and with shark and ray trade regulations as per Wildlife (Conservation and Security) Act 2012 and CITES. These gaps were identified by national fisheries and wildlife experts during CITES NDF development workshops that have been previously conducted in the country.</p> <p>In September 2023, WCS organized two day-long workshops to improve the understanding of current procedures, gaps, and feasible actions for stopping illegal shark and ray trade with Myanmar. The workshops were held in Teknaf, a shark and ray trade hotspot in the Bangladesh-Myanmar border area, with a total of 28 mid-level and frontline officers from the Bangladesh Forest Department, Department of Fisheries, Border Guard Bangladesh, Coast Guard, Navy (BN), and Customs.</p> <p>In October 2023, the fifth national CITES seminar for senior policy and decision makers from multiple government sectors was hosted by the Ministry of Environment, Forest and Climate Change in Dhaka. The aim was to strengthen interministerial and multiagency collaborations for improving CITES</p>

	compliance, and agreeing on future CITES priority actions.
Other relevant shark and ray conservation measures	<p><b><u>Bangladesh</u></b> Bangladesh's first multi-use MPA, the Swatch-of-No-Ground (SoNG) MPA, covers priority shark and ray habitat, particularly in the proposed expansion that will connect it with the Sundarbans mangrove forest - a critical breeding and nursery area for several globally threatened species. If effectively implemented, the SoNG MPA will benefit a large range of CITES-listed species throughout these waters.</p>

## OVERVIEW OF THE CITES TRADE DATA ON CITES-LISTED SHARK AND RAY SPECIES

1. In accordance with Decision 19.224, paragraph b), information from the CITES Trade Database on commercial trade in CITES-listed sharks and rays since 2010, sorted by species and by product is provided in this Annex.
2. CITES trade records for Elasmobranchii spp. at the shipment level were downloaded from the CITES Trade Database for the period 2010-2022 on 25 March 2024. The Secretariat notes that, when interpreting the available CITES trade data, the Animals Committee should take into account the increase in the number of species listed on the Appendices over time.<sup>3</sup> The Secretariat further notes that Parties are not obligated to report on the import of Appendix II-listed species and so there are fewer records as reported by the importing Parties than by the exporting Parties for Appendix-II listed species transactions.
3. The CITES Trade Database contains 19,040 shipment records of Elasmobranchii spp. for the period 2010-2022, of which 133 are of Appendix-I species, 12,356 are of Appendix-II and 6,551 are of Appendix-III listed species. Of these, 10,827 shipment records (57%) were of commercially traded specimens of Appendix-II species (6,537 exporter reported and 4,290 importer reported) with the following breakdown in source codes:

Table 1. Number of shipments reported by exporters and importers between 2010 and 2022 by source code.

Source code	Importer reported	Exporter reported
Bred in captivity (C)	1	7
Confiscated or seized (I)	47	2
Pre-Convention (O)	357	525
Unknown (U)	0	2
Wild (W)	2,769	5,771
Marine – ABNJ(X)	1,116	136
NA	0	94

4. When only Appendix-II species traded for commercial purposes (purpose code “T”), excluding those traded with source codes “I”, “O” and “C” are considered, the database includes 9,794 shipment records. Source code C shipments were excluded as the species in these transactions are unlikely to be captive-bred and likely an error in recording. The shipments were categorized as import/export, one-state and two-state transactions from areas beyond national jurisdiction (ABNJ) and re-export based on the following combination of fields:

<sup>3</sup> History of listings in effect of Elasmobranchii spp. on CITES Appendices and corresponding number of species included in the Appendices from 2000-2019. The numbers in brackets indicate the number of species (Arabic numbers) listed by Appendices (Roman numbers) in each year.

- 2000 (III: 1): *Cetorhinus maximus* -> Appendix III (United Kingdom of Great Britain and Northern Ireland)
- 2001 (III: 2): *Carcharodon carcharias* (Appendix III, Australia)
- 2003 (II: 2, III: 1): *Cetorhinus maximus*, *Rhincodon typus* -> Appendix II
- 2005 (II: 3, III: 0): *Carcharodon carcharias* -> Appendix II
- 2007 (I: 5, II: 4, III: 0): *Pristidae* spp. -> Appendix I, except *Pristis microdon* -> Appendix II
- 2012 (I: 5, II: 4, III: 2): *Lamna nasus* -> Appendix III (Belgium, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, United Kingdom of Great Britain and Northern Ireland); *Sphyrna lewini* -> Appendix III (Costa Rica)
- 2013 (I: 6, II: 3, III: 2): *Pristis microdon* -> Appendix I
- 2014 (I: 6, II: 10, III: 0): *Sphyrna lewini*, *S. mokarran*, *S. zygaena*, *Lamna nasus* -> Appendix II; *Carcharhinus longimanus* -> Appendix II; *Manta* spp. -> Appendix II
- 2017 (I: 6, II: 23, III: 24): *Alopias* spp., *Carcharhinus falciformis*, *Mobula* spp. -> Appendix II; *Potamotrygon* spp. -> Appendix III (Brazil); *Paratrygon aiereba*, *Potamotrygon constellata*, *P. magdalenae*, *P. motoro*, *P. orbignyi*, *P. schroederi*, *P. scobina*, *P. yepezi* -> Appendix III (Colombia)
- 2019 (I: 6, II: 41, III: 24): *Isurus oxyrinchus*, *I. paucus*, *Glaucostegus* spp., *Rhinidae* spp. -> Appendix II
- 2022 (I: 6, II: 147, III: 18): *Carcharhinidae* spp., *Sphyrnidae* spp., *Rhinobatidae* spp., *Potamotrygon* spp. -> Appendix II

- records with “HS” as the exporter and no origin country were considered to be one-state introduction from the sea transaction whether it had source code “X” as specified in the *Guidelines* or source code “W”;
- records with source code “X”, no origin country and a name of a Party in the exporter and importer columns were considered to be two-state transaction from ABNJ;
- records with no origin country and an exporter that is not “HS” were considered to be an “import/export” transaction; and
- records with an origin country, whether it is “HS” or a Party, were considered to be “re-export” transactions.

5. The breakdown of the shipments by reporter type and type of trade is shown in Table 2 and in Figure 1.

Table 2. Number of shipments reported by exporters and importers between 2010 and 2022 shown by type of trade.

Type of trade	Number of shipments (Exporter reported)	Number of shipments (Importer reported)
import/export	5,364	2,493
One-state	NA	1,073
Two-state	3	56
re-export	542	263

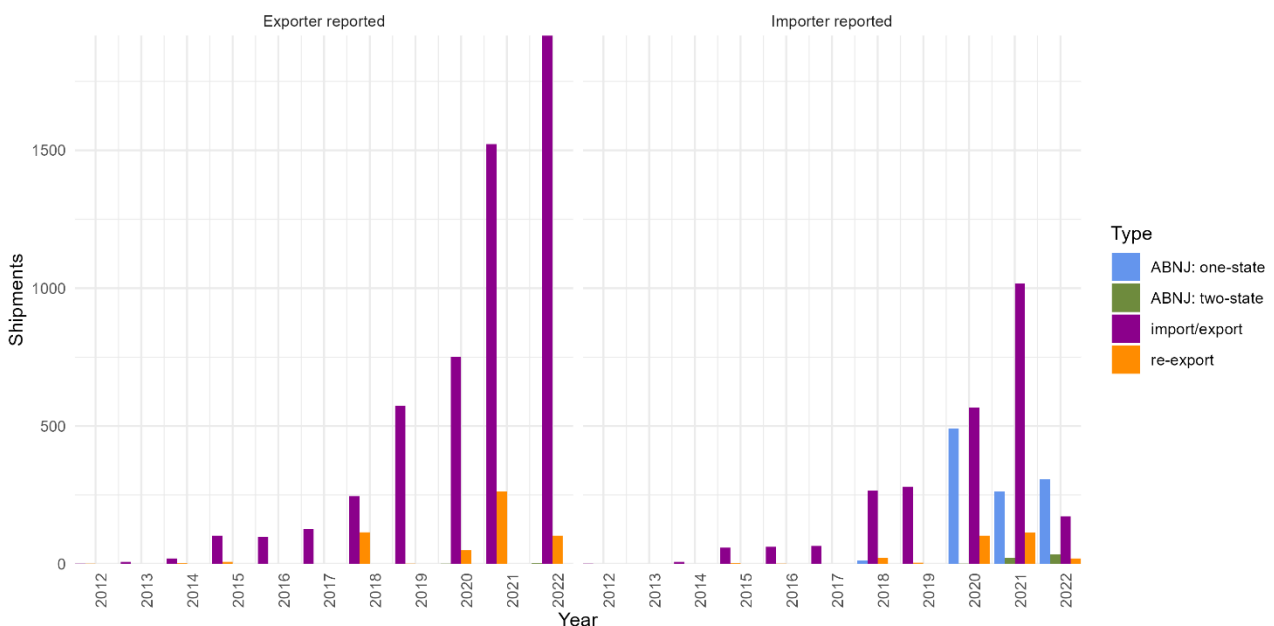


Figure 1. Number of shipments reported by exporters and importers between 2010 and 2022 shown by type of trade.

### Trade based on number of shipments

6. The rest of the Annex considers only “direct trade” with re-export transactions excluded to avoid considering a shipment more than once. The breakdown of families of sharks and rays in commercial trade over time is shown in Figure 2 and the breakdown of species of sharks and rays shown in Table 3. At a family level, Lamnidae species, Carcharhinidae species, Sphyrnidae species, Alopiidae species, Rhinidae species and Myliobatidae species are the most commonly reported (Table 3).

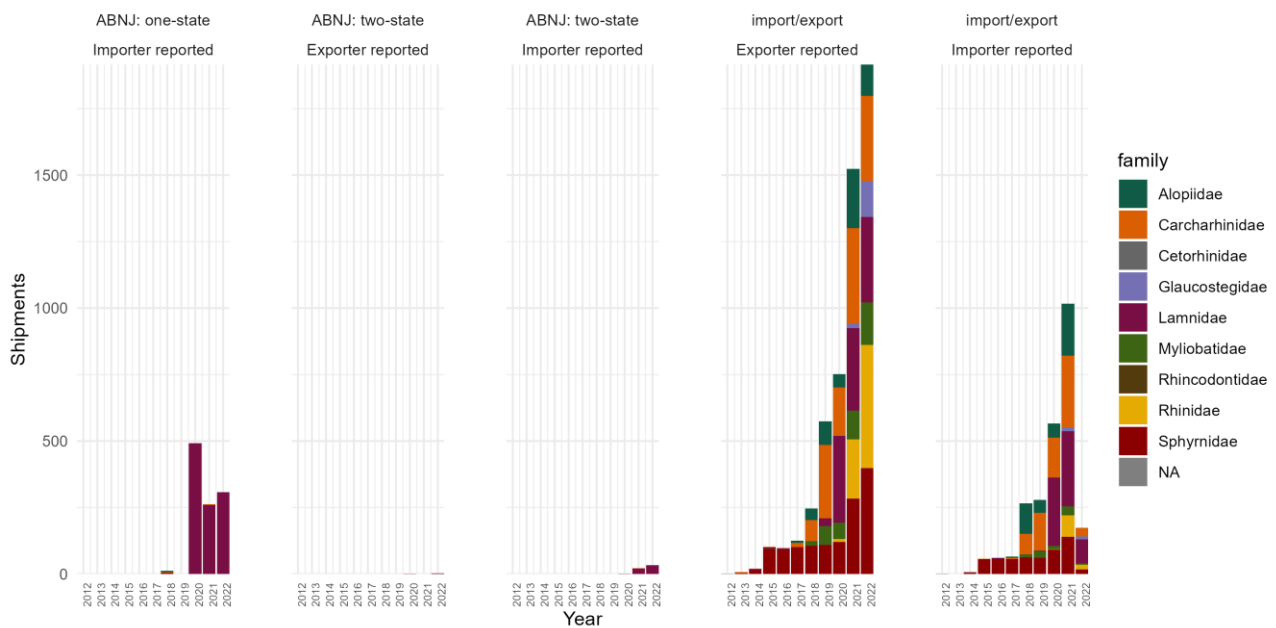


Figure 2. Number of shipments reported by exporters and importers between 2010 and 2022 colour-coded by family.

7. Based on the number shipment records, *Isurus oxyrinchus* was the most commonly traded species by shipment number (total of 2,612 shipment records: 918 shipments reported by exporters, 673 shipments reported by importers and 1,021 one-state introduction from the sea transactions), noting that the species was listed in 2019. The second most commonly trade species by shipment number is *Carcharhinus falciformis* (total of 1,782 shipment records: 1,128 shipments reported by exporters, 648 shipments reported by importers and 6 one-state introduction from the sea transactions), which was listed in 2017. The species in the genus *Sphyrna* [*S. lewini* (603 shipments reported by exporters and 266 shipments reported by importers); *S. zygaena* (439 shipments reported by exporters and 164 shipments reported by importers); and *S. mokarran* (261 shipments reported by exporters and 98 shipments reported by importers)], listed in 2014, are the next highest recorded.
8. The majority of introduction from the sea transactions are of Lamnidae species with *I. oxyrinchus* accounting for 1,021 shipment record and *I. paucus* accounting for 38 shipment records. *C. falciformis* (6 shipment records), *Sphyrna lewini* (4 shipment records), *Alopias pelagicus* and *Alopias vulpinus* (each 2 shipment records) are the remaining introduction from the sea transactions.
9. The breakdown of trade term code (i.e., specimen types) in trade are shown in Figure 3. Fins are the most commonly reported trade term code and the majority of this trade is reported in import/export transactions (3,206 shipments reported by exporters and 1,772 shipments reported by importers). Since the introduction of the two new codes, fin (dried) and fin (wet) to describe shark fin trade, there has been 847 shipment records for fin (dried) and 45 shipment records of fin (wet) within the first year (Figure 3 top panel).
10. Trade in bodies and meat also make up a large number of shipment records and these records are reported in one-state introduction from the sea transactions as well as import/export records (Figure 3 middle panel). All introduction from sea transactions is of bodies (1,072 shipment records) except for one record of meat.
11. For the remaining trade terms, gill plates are also commonly reported for Myliobatidae species with 402 shipment records reported by exporters and 82 shipment records reported by importers. Skins (167 shipment records reported by exporter and 47 shipment records reported by importers) and live specimens (86 shipment records reported by exporters and 49 shipment records reported by importers) make up the next most reported trade term. The most commonly trade species for skin are *C. falciformis* (71 shipment records reported by exporters and 27 shipment records reported by importers), *S. zygaena* (18 shipment records reported by exporters and 2 shipment records reported by importers), and *I. oxyrinchus* (14 shipment records reported by exporters and 1 shipment record reported by importers). For live specimens, *S. lewini* (60 shipment records reported by exporters and 34 shipment records reported by importers), *Rhina ancylostomus* (11 shipment records reported by exporters and 5 shipment records reported by importers) and *Mobula hypostoma* (4 shipment records reported by exporters and 6 shipment records reported by importers) are the most reported species.

Table 3. Number of shipments reported by exporters and importers between 2010 and 2022 shown by type of trade and by species.

Type	Family	Taxon	Number of shipments (importer reported)	Number of shipments (exporter reported)
ABNJ: one-state	Alopiidae	<i>Alopias pelagicus</i>	2	-
		<i>Alopias vulpinus</i>	2	-
	Carcharhinidae	<i>Carcharhinus falciformis</i>	6	-
	Lamnidae	<i>Isurus oxyrinchus</i>	1,021	-
		<i>Isurus paucus</i>	38	-
Sphyrnidae	<i>Sphyrna lewini</i>	4	-	
ABNJ: two-state	Carcharhinidae	<i>Carcharhinus falciformis</i>	1	-
	Lamnidae	<i>Isurus oxyrinchus</i>	53	3
		<i>Isurus paucus</i>	2	-
import/export	Alopiidae	<i>Alopias pelagicus</i>	245	281
		<i>Alopias</i> spp.	32	37
		<i>Alopias superciliosus</i>	105	165
		<i>Alopias vulpinus</i>	34	47
		Alopiidae spp.	-	1
	Carcharhinidae	Carcharhinidae spp.	-	1
		<i>Carcharhinus falciformis</i>	647	1,128
		<i>Carcharhinus longimanus</i>	34	115
		<i>Carcharhinus</i> spp.	-	1
	Cetorhinidae	<i>Cetorhinus maximus</i>	1	1
	Glaucostegidae	Glaucostegidae spp.	-	1
		<i>Glaucostegus granulatus</i>	1	1
		<i>Glaucostegus obtusus</i>	1	1
		<i>Glaucostegus</i> spp.	21	63
		<i>Glaucostegus thouin</i>	-	19
		<i>Glaucostegus typus</i>	2	65
	Lamnidae	<i>Carcharodon carcharias</i>	4	11
		<i>Isurus oxyrinchus</i>	620	915
		<i>Isurus paucus</i>	9	60
		<i>Lamna nasus</i>	11	15
	Myliobatidae	<i>Mobula birostris</i>	7	12
		<i>Mobula hypostoma</i>	6	4
		<i>Mobula japanica</i>	16	124
		<i>Mobula mobular</i>	7	28
		<i>Mobula</i> spp.	32	105
		<i>Mobula tarapacana</i>	21	145
		Myliobatidae spp.	-	1
	Rhincodontidae	<i>Rhincodon typus</i>	-	1
	Rhinidae	<i>Rhina ancylostomus</i>	25	142
		<i>Rhynchobatus australiae</i>	29	183
		<i>Rhynchobatus djiddensis</i>	18	45
		<i>Rhynchobatus laevis</i>	9	65
		<i>Rhynchobatus luebberti</i>	3	130
		<i>Rhynchobatus palpebratus</i>	1	-
		<i>Rhynchobatus</i> spp.	8	47
		<i>Rhynchobatus springeri</i>	8	86
	Sphyrnidae	<i>Sphyrna lewini</i>	266	603
		<i>Sphyrna mokarran</i>	98	261
		<i>Sphyrna</i> spp.	6	12
		<i>Sphyrna zygaena</i>	164	439
Sphyrnidae spp.		2	2	
NA	Lamniformes spp.	-	1	

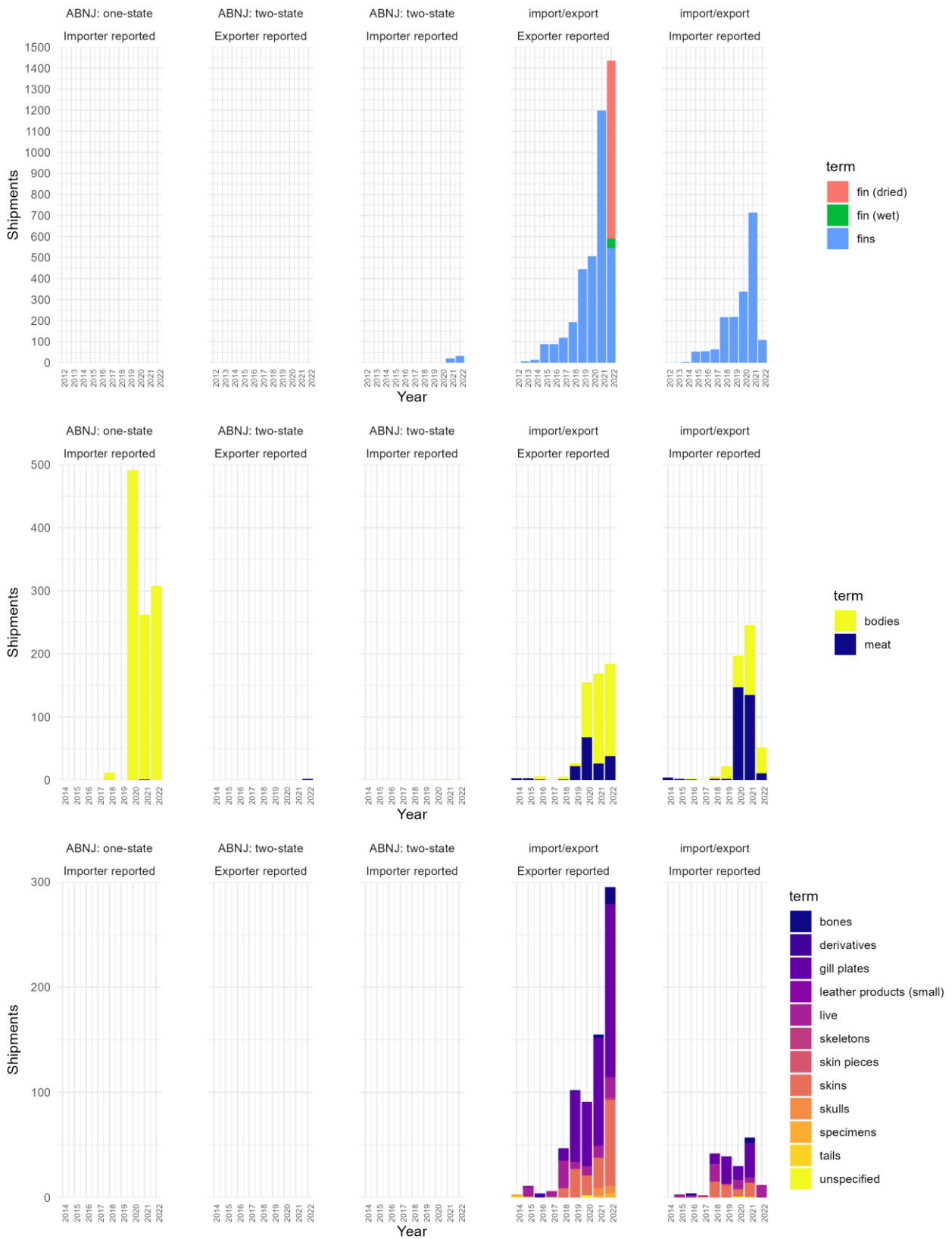


Figure 3. Number of shipments reported by exporters and importers between 2010 and 2022 coloured by the trade term code provided in the shipment record. The top panel shows various “fin” related trade term, the middle panel shows “bodies” and “meat”, and the bottom panel shows all other trade term code provided in the shipment record.

12. The species composition of trade in fin, body and meat has not changed since the last report for SC77 (see document SC77 Doc. 67.3). Many species were traded for their fins (Figure 4) with *C. falciformis*, *I. oxyrinchus*, *Sphyrna* spp., and *A. pelagicus* being the most traded species for fins. Only one species so far, *I. oxyrinchus* has been reported with wet fins being in trade. In comparison, the trade in bodies and meat is concentrated in one species, *I. oxyrinchus*. The trade in bodies and meat are mostly of *I. oxyrinchus*, followed by *A. pelagicus*, *C. falciformis* and *I. paucus*.

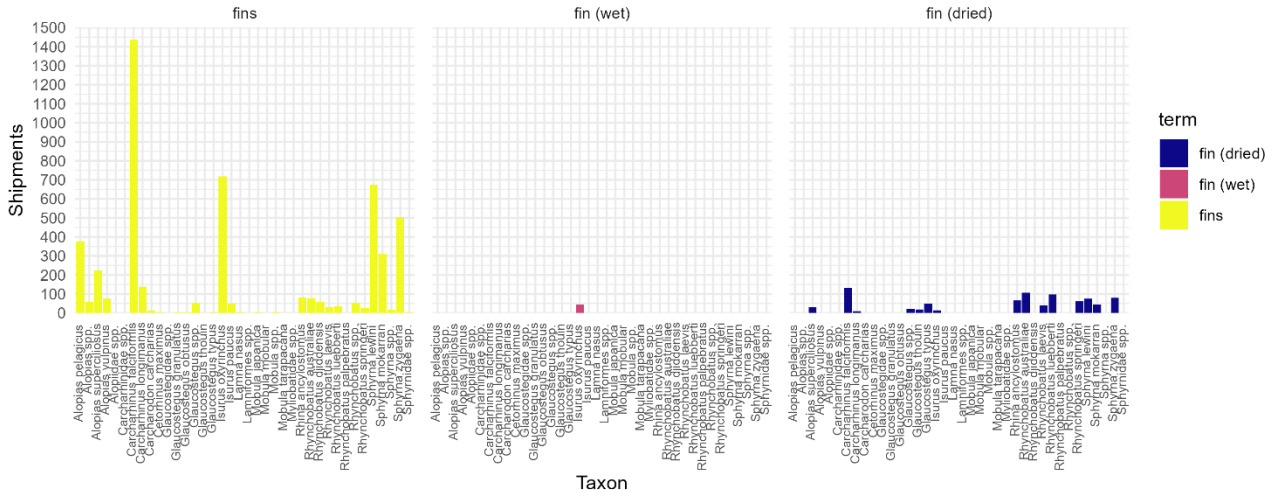


Figure 4. Number of recorded commercial trade transactions in fins of shark and ray species listed in CITES Appendix II.

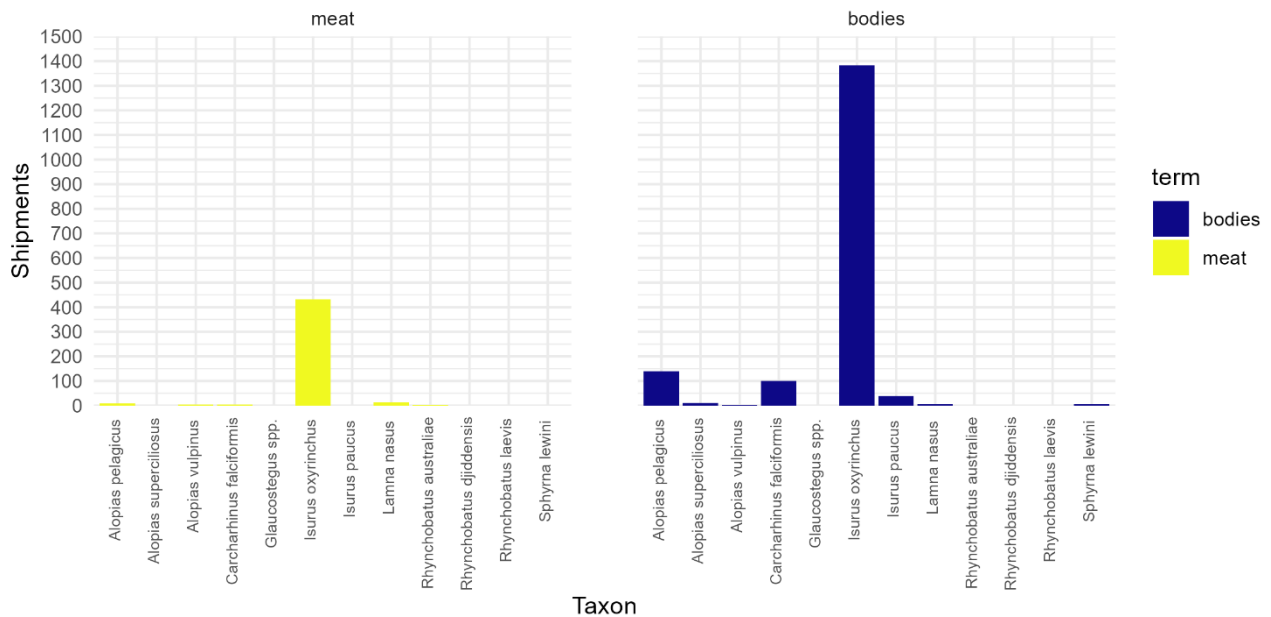


Figure 5. Number of recorded commercial trade transactions in meat and bodies of shark and ray species listed in CITES Appendix II.

Trade based on records reported in weight

13. The greatest volume of trade reported in kilograms is in specimens of Lamnidae species (*I. oxyrinchus*) with a large proportion of it being introduction from the sea records (7,169 metric tons reported as introduction from the sea; 3,827 to 5,117 metric tons as import/export transactions depending on the reporter type). The second and third largest volume of trade recorded in kilograms was for *C. falciformis* and *A. pelagicus* (Figure 6 and Table 4).

14. The volumes of sharks and rays are reported between years 2020 to 2022 is relatively stable with ranges between 2,000 – 3,000 metric tons. The volume of trade reported by importers exceeded that of the volume reported by exporters in 2021 (Figure 6, top panel) while for 2022, the volume reported by imports were significantly lower than that of exporters.



15. The majority of the trade in volume is made up of trade in bodies, meat and fins (Figure 6 bottom panel). Almost all of the introductions from the sea transactions reported in kilograms are of bodies, while the trade records reported as import/export of sharks and rays in kilograms are split between bodies (*I. oxyrinchus*, *C. falciformis* and *A. pelagicus*), meat (*I. oxyrinchus*) and fins (*C. falciformis*, *I. oxyrinchus*, *A. pelgaicus* and *S. zygaena*).

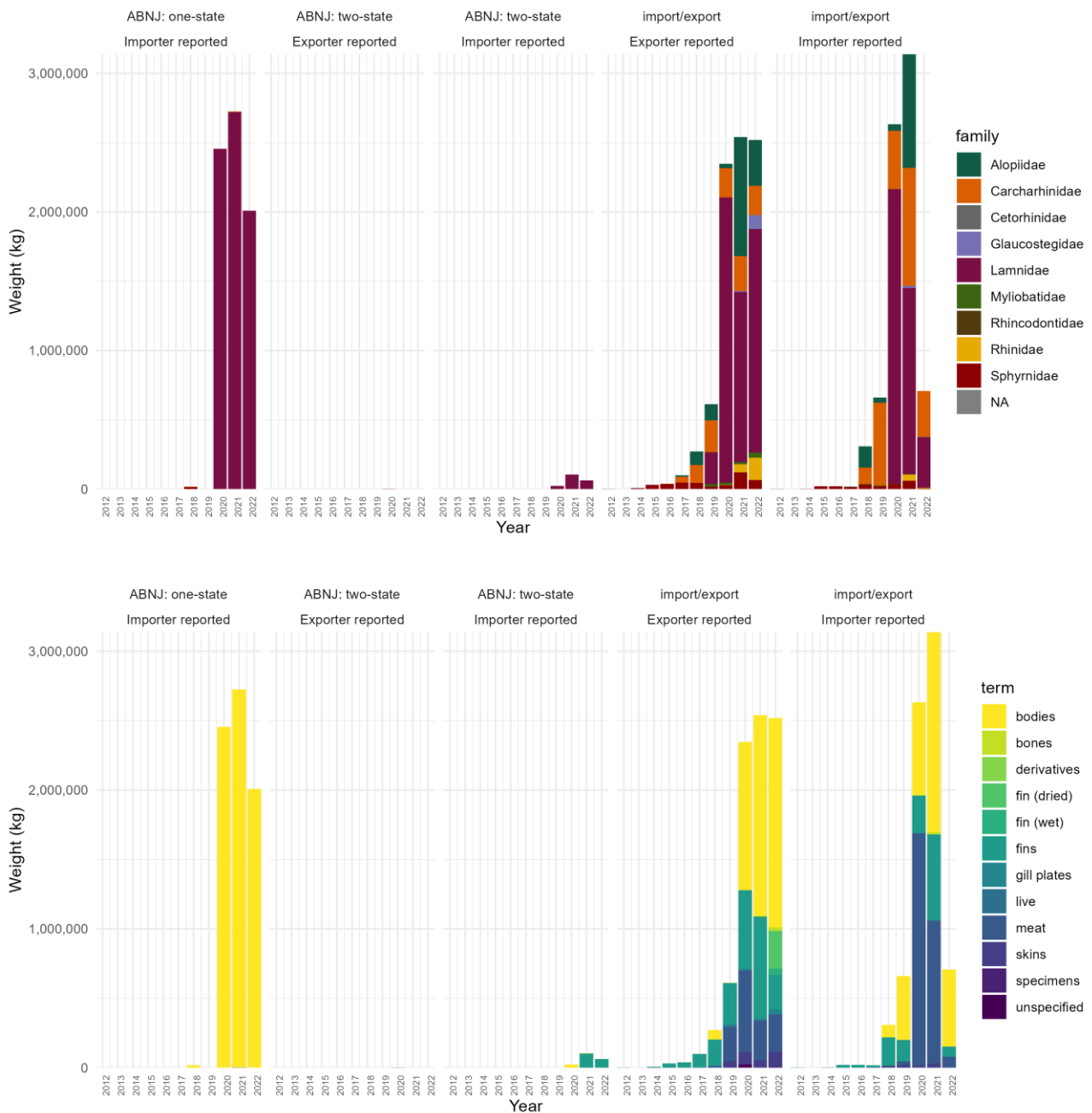


Figure 6. Volume of commercial trade reported by exporters and importers that was recorded in kg between 2010 and 2022 of sharks and rays listed in CITES Appendix II. The top panel shows the information colour-coded by Family of Elasmobranchii species and the bottom panel shows the information colour-coded by specimen type.

Table 4. Volume of trade (kg) reported by exporters and importers between 2010 and 2022 shown by type of trade and by species.

Type	Family	Taxon	Total weight in kg (importer reported)	Total weight in kg (exporter reported)
ABNJ: one-state	Alopiidae	<i>Alopias pelagicus</i>	870	-
		<i>Alopias vulpinus</i>	685	-
	Carcharhinidae	<i>Carcharhinus falciformis</i>	6309	-
	Lamnidae	<i>Isurus oxyrinchus</i>	7169491.92	-
		<i>Isurus paucus</i>	12978.86	-
Sphyrnidae	<i>Sphyrna lewini</i>	14301	-	
ABNJ: two-state	Carcharhinidae	<i>Carcharhinus falciformis</i>	138.3	-
	Lamnidae	<i>Isurus oxyrinchus</i>	187810.45	554
		<i>Isurus paucus</i>	307.9	-
import/export	Alopiidae	<i>Alopias pelagicus</i>	936789.12	1266023.445
		<i>Alopias</i> spp.	10254.91	16077.38
		<i>Alopias superciliosus</i>	70314.76	84445.36
		<i>Alopias vulpinus</i>	43780.257	80663.79
		Alopiidae spp.	-	200
	Carcharhinidae	Carcharhinidae spp.	-	207
		<i>Carcharhinus falciformis</i>	2306094.716	1038035.952
		<i>Carcharhinus longimanus</i>	13703.59	38281.51
		<i>Carcharhinus</i> spp.	-	54.3
	Cetorhinidae	<i>Cetorhinus maximus</i>	576.3	605.6
	Glaucostegidae	Glaucostegidae spp.	-	84.5
		<i>Glaucostegus granulatus</i>	202	202
		<i>Glaucostegus obtusus</i>	30	30
		<i>Glaucostegus</i> spp.	17734.13	58682.45
		<i>Glaucostegus thouin</i>	-	1130.36
		<i>Glaucostegus typus</i>	200	48086.97
	Lamnidae	<i>Carcharodon carcharias</i>	236.09	3808.461821
		<i>Isurus oxyrinchus</i>	3837127.77	5116687.39
		<i>Isurus paucus</i>	621.81	8771.5
		<i>Lamna nasus</i>	2036.7	2026.84
	Myliobatidae	<i>Mobula birostris</i>	1165.5	2050
		<i>Mobula japanica</i>	3697.85	28106.95
		<i>Mobula mobular</i>	844.9	5212
		<i>Mobula</i> spp.	5675.15	24909.75
		<i>Mobula tarapacana</i>	2690.8	27139.95
		Myliobatidae spp.	-	183
	Rhinidae	<i>Rhina ancylostomus</i>	2540.72	10561.68
		<i>Rhynchobatus australiae</i>	26098.613	82999.67
		<i>Rhynchobatus djiddensis</i>	4114.2	10555.5
		<i>Rhynchobatus laevis</i>	1342.67	8398.43
		<i>Rhynchobatus luebberti</i>	772.85	68109.95
		<i>Rhynchobatus palpebratus</i>	935	-
		<i>Rhynchobatus</i> spp.	2368.15	14105.03
		<i>Rhynchobatus springeri</i>	8684.8	28161.86
	Sphyrnidae	<i>Sphyrna lewini</i>	103098.08	158338.415
		<i>Sphyrna mokarran</i>	21883.5714	47684.511
		<i>Sphyrna</i> spp.	5634.38	1157.01
		<i>Sphyrna zygaena</i>	77690.276	182588.881
		Sphyrnidae spp.	2295	696.4
	NA	Lamniformes spp.	-	390