

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



Seventy-seventh meeting of the Standing Committee  
Geneva (Switzerland), 6–10 November 2023

Species conservation and trade

Fauna

Aquatic species

Sharks and rays (Elasmobranchii spp.)

REPORT OF THE SECRETARIAT

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:
  15. *DIRECTS the Standing Committee to provide guidance on regulatory matters in connection to the implementation of the shark listings, including but not limited to the determination of legal acquisition, traceability and enforcement issues, as appropriate;*
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.)* included in Annex 1 to this document.
4. This document reports on the implementation of Decisions 19.222, 19.223 and 19.224 directed to the Parties and the Secretariat. This document should be read in conjunction with document SC77 Doc. 67.2 prepared by the Chair of the Animals Committee on the implementation of Decisions 19.225 and 19.226.

Implementation of Decision 19.222

5. Pursuant to Decisions 19.222 and 19.224, the Secretariat issued Notification to the Parties [No. 2023/027](#) of 16 March 2023 inviting Parties to submit information related to conservation and management of sharks and rays. Information was requested with a particular focus on the making of non-detriment findings (NDFs) and legal acquisition findings (LAFs); identification and monitoring of CITES-listed shark products; stockpiles of commercial and/or pre-Convention shark parts and derivatives; and capacity-building needs to assist developing countries and small island developing States with reporting requirements.
6. The Secretariat received 26 responses from the following Parties: Argentina, Bangladesh, Brazil, Colombia, Costa Rica, Croatia, El Salvador, the European Union, Guatemala, Honduras, Indonesia, Italy, Japan, Maldives, Mexico, Mozambique, the Netherlands, Nicaragua, Panama, Peru, the Republic of Korea, Slovakia, Spain, Sweden, the United Kingdom of Great Britain and Northern Ireland and the United States of America. One non-governmental organization, Wildlife Conservation Society, also provided a response. The responses and a summary on the scientific elements of the responses were presented to the 32nd meeting of the Animals Committee (AC32; Geneva, June 2023) in Annex 2 to document [AC32 Doc. 37](#) and information document [AC32 Inf. 11](#), respectively.

#### Implementation of Decision 19.223

7. The Secretariat has secured funding to provide capacity-building assistance for implementing Appendix-II shark and ray listings to Parties thanks to the generous support of the European Union. Nicaragua and Yemen have requested capacity-building support from the Secretariat. Any other Parties seeking assistance from the Secretariat are encouraged to write to the Secretariat detailing their capacity-building needs.
8. With regards to legal acquisition findings and legislation, the Secretariat, in collaboration with the United Nations Food and Agriculture Organisation (FAO) organized the FAO-CITES Regional Training Workshop on CITES, Fisheries, and LAFs in May 2023, which was hosted by Ecuador's CITES Management Authority in Manta, Ecuador. It was attended by 13 countries in the Central and South America and the Caribbean region: Argentina, Brazil, Chile, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Panama, Peru and Venezuela (Bolivarian Republic of). Representatives from the Central American and Dominican Republic Wildlife Enforcement Network, the Permanent Commission for the South Pacific, the Defenders of Wildlife, the World Wide Fund for Nature, fishing enterprises, the UN Office on Drugs and Crime (UNODC), and the UN Conference on Trade and Development (UNCTAD) also participated. Further information on the FAO-CITES Regional Training Workshops can be found in document SC77 Doc. 46 on *Legal acquisition findings*.
9. The Secretariat attended two online workshops of the Sustainable Ocean Initiative (SOI) hosted by the Secretariat of the Convention on Biological Diversity: *SOI workshop on ocean-related capacity-building needs for the Kunming-Montreal Global Biodiversity Framework (GBF)* and the *Intersessional workshop of the Sustainable Ocean Initiative Global Dialogue with Regional Seas Organizations and Regional Fishery Bodies* to present on the outcomes of CoP19 as they relate to aquatic species and the synergies between the implementation of CITES and the GBF.
10. The Secretariat also participated and presented in-person and online at the 12th ROAVIS<sup>1</sup> Meeting's Regional CITES Implementation Workshop for building capacity on LAFs, permit issuance, making of NDFs and the implementation of the Convention for new authorities, from 2 to 4 August 2023 in Santo Domingo, Dominican Republic. This meeting was attended by Management Authorities, including some responsible for fisheries, Scientific Authorities and enforcement focal points from Belize, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras and Panama.
11. In implementation of Decision 19.223, paragraph c), the Secretariat is collaborating with TRAFFIC and FAO to 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 based on the information available on catches of CITES-listed species. This study will build on a study previously conducted by TRAFFIC entitled *Missing sharks: A country review of catch, trade and management recommendations for CITES-listed shark species* and, as requested by the Animals Committee (see summary record [AC32 SR](#)), consider the information presented on oceanic white tip shark by Maldives (see information document [AC32 Inf. 3](#)). The Secretariat will report on the results of the further study to the 78th meeting of the Standing Committee with proposed recommendations to resolve this issue.
12. The Secretariat is also collaborating with FAO to implement Decision 19.223, paragraph d), in order to verify the information on the shark measures database and compile imagery of wet and dried unprocessed shark fins along with related species-level taxonomic information not only to facilitate refinement of iSharkFin software but also to facilitate development of new software or mobile apps for the identification of CITES-listed sharks and rays in trade.
13. FAO has conducted a study analysing the trade in non-fin shark products of CITES-listed species, which is expected to be published at the end of 2023. The Secretariat will present the scientific outcomes of the study to the 33rd meeting of the Animals Committee and prepare recommendations on how to address any implementation challenges for consideration by the 78th meeting of the Standing Committee.

#### Implementation of Decision 19.224

14. The implementation of paragraph a) of Decision 19.224 relating to the publication of the Notification to the Parties issued by the Secretariat is reported on in paragraphs 5 and 6 above. The scientific elements of the responses to the Notification were reviewed by AC32. However, responses relating to legal acquisition

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<sup>1</sup> *Red de Observancia y Aplicación de la Normativa de Vida Silvestre de Centroamérica y República Dominicana (ROAVIS) / Central American and Dominican Republic Wildlife Enforcement Network (CAWEN)*

findings, legislations and stockpiles remain to be reviewed. The Secretariat recommends that the review of the responses to the Notification be included in the purview of the intersessional working group on sharks and rays to support its current mandate.

15. In fulfilment of paragraph b) of Decision 19.224, the Secretariat presents information from the CITES Trade Database on commercial trade in CITES-listed sharks and rays since 2000, sorted by species and by product. The overview is presented in Annex 2 to the present document and the raw data accessed on 15 August 2023 is presented as an Excel file in Annex 3. Contrary to previous CITES Trade Data presented to the Committee (see for instance document [SC74 Doc. 67.2](#)), the overview provides information at the shipment level and not aggregated trade records. This provides more fine-grain information that more accurately reflects the number of shipments of sharks and rays being traded. The main findings are:
  - a) The most commonly commercially traded species by number of records and by volume are *Isurus oxyrinchus* and *Carcharhinus falciformis*, listed in 2019 and 2017, respectively. The majority of records of *I. oxyrinchus* is of introduction from the sea (reported as source code “X”) while the majority of records of *C. falciformis* is of import/export (reported as source code “W”).
  - b) Over 5,200 metric tons of sharks were recorded as introduction from the sea, while 4,900 metric tons of sharks were reported as being exported and 6,200 metric tons of sharks were reported as being imported.
  - c) Fins are the most commonly traded specimen type with a large number of species being traded for fins reported as source code “W”. By volume, bodies and meat are the highest traded specimen type with *I. oxyrinchus* making up the majority of trade in bodies (reported as source code “X”) and meat (reported as source code “W”).
16. In document [AC32 Doc. 37 \(Rev. 1\)](#), the Secretariat provided information on the implementation of Decisions 19.222, 19.223, 19.224 and 19.226 to AC32. The Animals Committee, *inter alia*, requested 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 in an amendment of the [Guidelines for the preparation and submission of CITES annual reports](#). In order to add catch locations, the reporting of both one-state transactions (reported as introduction from the sea) and two-state transactions (reported as import/export) should be considered.
17. The current Guidelines for the preparation and submission of CITES annual and illegal reports only provide instructions for one-state introduction from the sea transactions. They do not provide specific instructions for two-state transactions or for re-exports of specimens taken from areas beyond national jurisdiction (ABNJ). The guidance provided for records of introduction from the sea transactions is:
  - g) *Any introductions from the sea should be included in the section on imports, and in these cases the field corresponding to ‘Country of export or re-export’ should be recorded as “HS” and the field corresponding to ‘Source code’ should be recorded as “X”.*

Code “HS” refer to *high seas* and source code “X” refers to *specimens taken in “the marine environment not under the jurisdiction of any State*.

18. In practice, the current CITES trade records for specimens taken from areas beyond national jurisdiction are reported in several ways:
  - a) A one-state introduction from the sea transaction, where a vessel registered under Party “A” lands specimens in Party “A” is recorded as follows with “HS” as the exporter and source code “X”:

| Year | App. | Taxon                    | Importing | Exporting | Origin | Importer reported quantity | Exporter reported quantity | Term   | Unit | Purpose | Source |
|------|------|--------------------------|-----------|-----------|--------|----------------------------|----------------------------|--------|------|---------|--------|
| 2019 | II   | <i>Isurus oxyrinchus</i> | A         | HS        |        | 10,000                     |                            | bodies | kg   | T       | X      |

- b) However, the same transaction has also been recorded with “HS” as the exporter and source code “W”. This is presumed to be an introduction from the sea transaction because of the use of “HS” .

| Year | App. | Taxon                    | Importing | Exporting | Origin | Importer reported quantity | Exporter reported quantity | Term   | Unit | Purpose | Source |
|------|------|--------------------------|-----------|-----------|--------|----------------------------|----------------------------|--------|------|---------|--------|
| 2019 | II   | <i>Isurus oxyrinchus</i> | A         | HS        |        | 10,000                     |                            | bodies | kg   | T       | W      |

- c) A two-state transaction where a vessel registered in one State (Party “A”) harvests specimens from an ABNJ and lands this harvest in a different State (Party “B”) is recorded as below with Party “A” as the exporter, Party “B” as the importer, and source code “X”:

| Year | App. | Taxon                    | Importing | Exporting | Origin | Importer reported quantity | Exporter reported quantity | Term | Unit | Purpose | Source |
|------|------|--------------------------|-----------|-----------|--------|----------------------------|----------------------------|------|------|---------|--------|
| 2020 | II   | <i>Isurus oxyrinchus</i> | B         | A         |        | 5000                       |                            | Fins | kg   | T       | X      |

- d) If the transaction in paragraph 18 c) was recorded with source code “W”, it would not be identified as a specimen taken from ABNJ but presumed to be taken from the Economic Exclusive Zone of the country.
- e) The reporting of the re-export of specimens taken from ABNJ either as a one-state or two-state transaction introduces similar problems. Re-export of specimens landed as a one-state transaction would require the use of “HS” in the origin and source code “X” while export of specimens landed as a two-state transaction would only be distinguishable from other re-export records by the use of source code “X”.

19. The Secretariat will review examples of trade in specimens taken from areas beyond national jurisdiction in the CITES Trade Database and provide updated guidance and, if feasible, guidance on recording catch locations to SC78, after review of the scientific elements by the 33rd meeting of the Animals Committee.

#### Recommendations

20. The Standing Committee is invited to:

- a) take note of the progress made on the implementation of Decisions 19.222 to 19.224;
- b) request the Standing Committee’s intersessional working group on sharks and rays to consider the non-scientific aspects of the responses to Notification to the Parties No. 2023/027 contained in [Annex 2](#) to document AC32 Doc. 37 (Rev. 1) to implement its mandate; and
- c) invite the Secretariat to consider updating the *Guidelines for the preparation and submission of CITES annual and illegal reports* to include explicit guidance on reporting on specimens taken from areas beyond national jurisdiction and report on this at its 78th meeting.

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 shark 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.



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

1. CITES trade records for Elasmobranchii spp. at the shipment level were downloaded from the CITES Trade Database for the period 2000-2022 on 15 August 2023. This is the first time CITES trade data on sharks and rays are being presented at the shipment level and not as aggregate data available on the public CITES Trade Database. The Secretariat notes that when interpreting the available CITES trade data, the Committee should take into account the increase in the number of species listed on the Appendices over time.<sup>2</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 importers for Appendix-II listed species transactions.
2. The dataset uses the nomenclature standard references adopted at CoP19 and records of *Manta* species has been updated to *Mobula* species and *Rhina ancylostoma* is coded as *R. ancylostomus*.
3. The CITES Trade Database contains 15,753 shipment records of Elasmobranchii spp. for the period 2000-2022, of which 150 are of Appendix-I species, 9,262 are of Appendix-II and 6,341 are of Appendix-III listed species. The dataset contained records from 2000 to 2022 but only includes nine shipments (two for Appendix-I and seven for Appendix-III) for 2022 as the deadline for the submission of 2022 annual reports is 31 October 2023.
4. When only Appendix-II species traded for commercial purposes (purpose code T), excluding source code I and O, are considered, the database includes 6,770 shipment records of Appendix II species. The breakdown of the shipments by reporter type and type of trade is shown in Table 1 and in Figure 1. All records with “HS” as the exporter were considered to be introduction from the sea transactions whether it used source code “X” as specified in the Guidelines or source code “W”.

Table 1. Number of shipments reported by exporters and importers between 2000 and 2021 shown by type of trade (import/export or re-export).

| Type of trade | Number of shipments (Exporter reported) | Number of shipments (Importer reported) |
|---------------|---|---|
| import/export | 3030                                    | 2329                                    |
| re-export     | 406                                     | 225                                     |
| IFS           | -                                       | 780                                     |

<sup>2</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

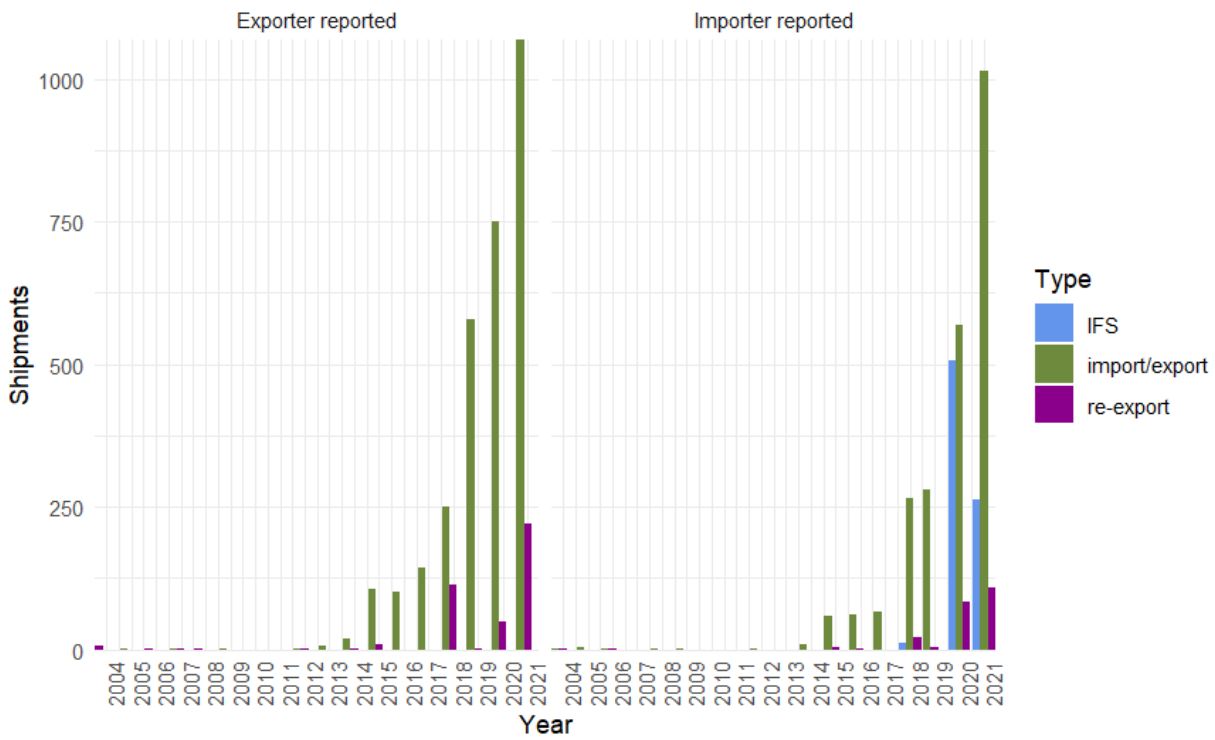


Figure 1. Number of shipments reported by exporters and importers between 2000 and 2021 shown by type of trade (import/export or re-export).

Trade based on number of shipments

5. The rest of the overview considers only 'direct trade' with re-export transactions excluded to avoid considering a shipment more than once. The majority of the commercial trade is reported with source code "W", followed by source code "X" with small numbers of source code "C" (Figure 2). As expected, the majority of introduction from the sea transactions are reported with source code "X" with a few shipments being reported with source code "W".

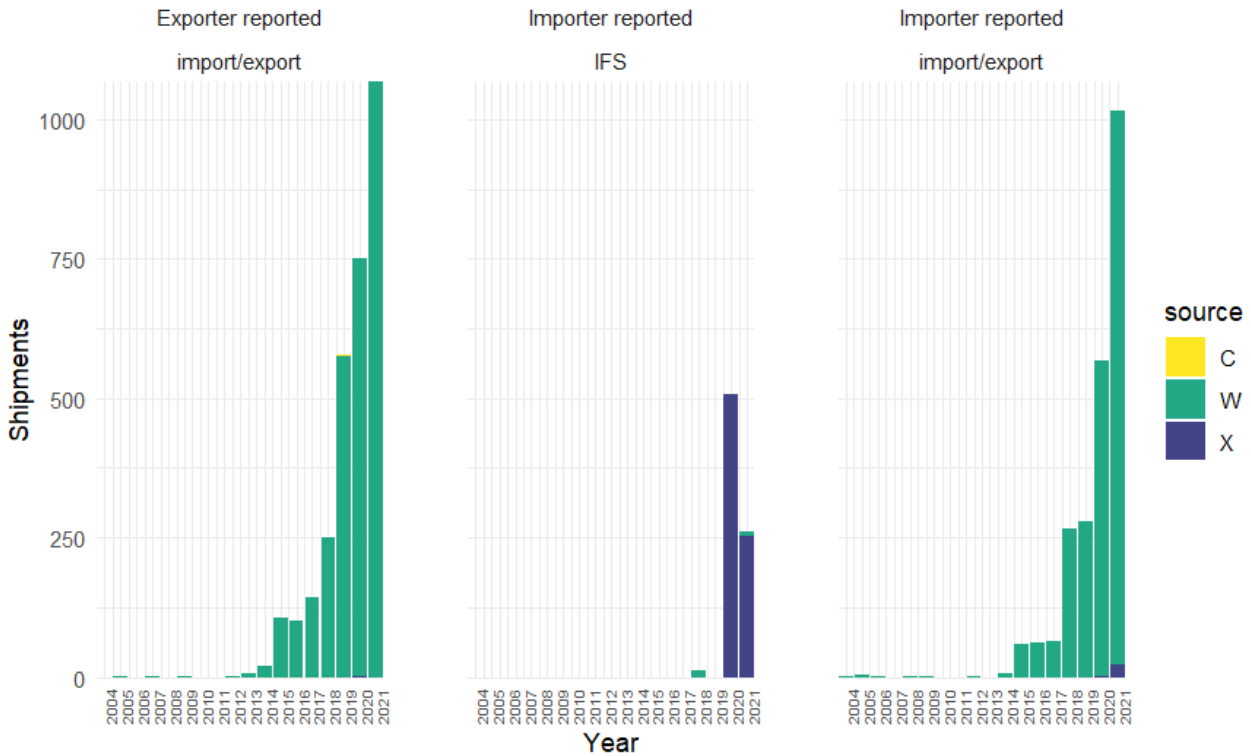


Figure 2. Number of shipments reported by exporters and importers between 2000 and 2021 coloured by the source code reported in the record.

6. The breakdown of families of sharks and rays in commercial trade over time is shown in Figure 3 and the breakdown of species of sharks and rays shown in Table 3. Based on the number of shipment records, *Isurus oxyrinchus* was the most commonly traded species (1,288 shipments reported by importers and 604 shipments reported by exporters), noting that the species was listed in 2019. The majority of the records of *I. oxyrinchus*, 729 records, are introduction from the sea transactions (Figure 3 and Table 3).
7. The second most commonly traded species is *Carcharhinus falciformis* (710 shipments reported by exporters and 595 shipments reported by importers), which was listed in 2017. The species in the genus *Sphyrna* (*S. lewini* [404 shipments reported by exporters and 255 shipments reported by importers]; *S. zygaena* [281 shipments reported by exporters and 164 shipments reported by importers]; and *S. mokarran* [163 shipments reported by exporters and 98 shipments reported by importers]), listed in 2014, are the next highest recorded trade along with *Alopias pelagicus* (106 shipments reported by exporters and 247 shipments reported by importers).

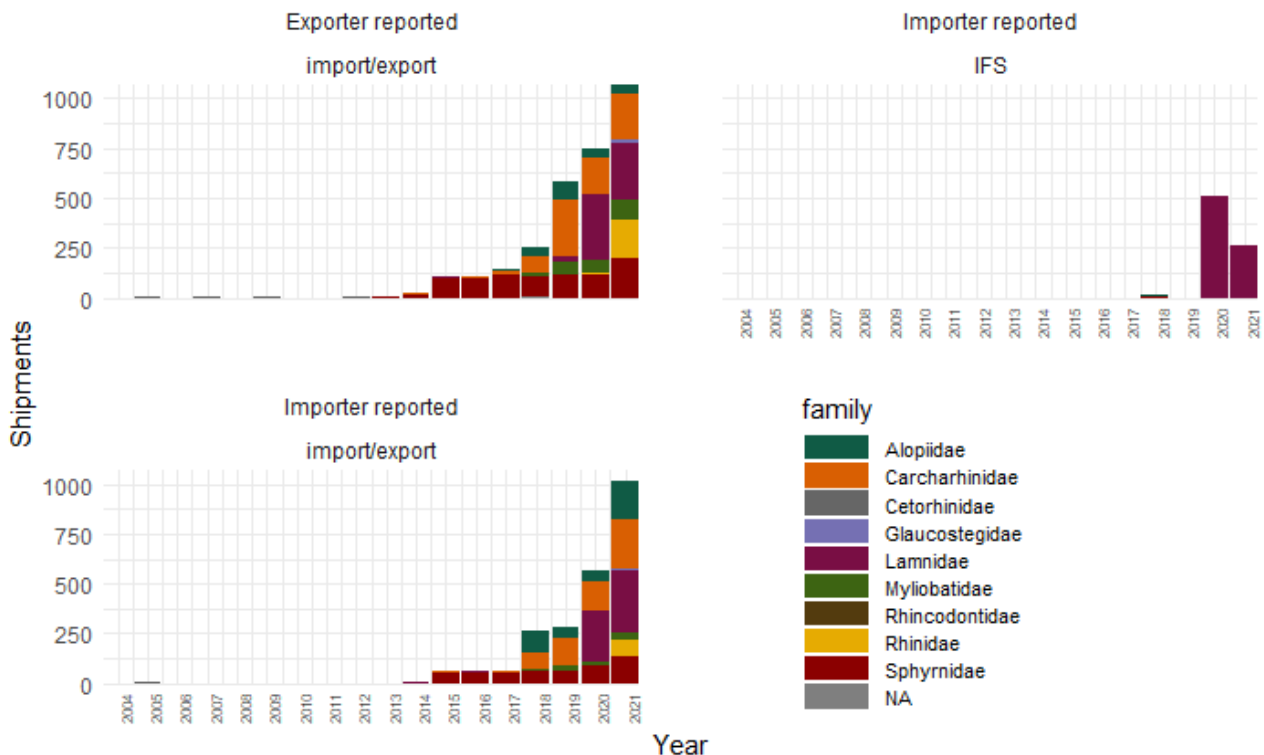


Figure 3. Number of shipments reported by exporters and importers between 2000 and 2021 coloured by family.

8. For import/export transactions, fins are the most commonly reported trade term code with 2,303 shipments reported by exporters and 1,692 shipments reported by importers. This is followed by meat (131 shipments reported by exporters and 297 shipments reported by importers), gill plates (239 shipments reported by exporters and 82 shipments reported by importers), bodies (176 shipments reported by exporters and 163 shipments reported by importers), skins (85 shipments reported by exporters and 47 shipments reported by importers ) and live (72 shipments reported by exporters and 37 shipments reported by importers). The majority of trade records consists of trade in fins, which has steadily increased since 2014. The trade in bodies and meat has also increased since 2018 (Figure 4).
9. For introduction from the sea transactions, the most commonly reported trade term code is bodies with 764 shipments, followed by 15 shipments of fins and 1 shipment of meat (Figure 4).

Table 2. Number of shipments reported by exporters and importers between 2000 and 2021 shown by type of trade and by species.

| Type          | Family         | Species                         | Number of shipments (importer reported) | Number of shipments (exporter reported) |
|---------------|----------------|---------------------------------|---|---|
| IFS           | Alopiidae      | <i>Alopias pelagicus</i>        | 2                                       | -                                       |
|               |                | <i>Alopias vulpinus</i>         | 2                                       | -                                       |
|               | Carcharhinidae | <i>Carcharhinus falciformis</i> | 6                                       | -                                       |
|               | Lamnidae       | <i>Isurus oxyrinchus</i>        | 729                                     | -                                       |
|               |                | <i>Isurus paucus</i>            | 37                                      | -                                       |
|               | Sphyrnidae     | <i>Sphyrna lewini</i>           | 4                                       | -                                       |
| import/export | Alopiidae      | <i>Alopias pelagicus</i>        | 245                                     | 106                                     |
|               |                | <i>Alopias</i> spp.             | 32                                      | 38                                      |
|               |                | <i>Alopias superciliosus</i>    | 105                                     | 56                                      |
|               |                | <i>Alopias vulpinus</i>         | 34                                      | 36                                      |
|               |                | Alopiidae spp.                  | -                                       | 1                                       |
|               | Carcharhinidae | <i>Carcharhinus falciformis</i> | 589                                     | 710                                     |
|               |                | <i>Carcharhinus longimanus</i>  | 33                                      | 87                                      |
|               | Cetorhinidae   | <i>Cetorhinus maximus</i>       | 9                                       | 5                                       |
|               | Glaucostegidae | Glaucostegidae spp.             | NA                                      | 1                                       |
|               |                | <i>Glaucostegus granulatus</i>  | 1                                       | 1                                       |
|               |                | <i>Glaucostegus obtusus</i>     | 1                                       | 1                                       |
|               |                | <i>Glaucostegus</i> spp.        | 12                                      | 14                                      |
|               | Lamnidae       | <i>Carcharodon carcharias</i>   | 4                                       | 9                                       |
|               |                | <i>Isurus oxyrinchus</i>        | 559                                     | 604                                     |
|               |                | <i>Isurus paucus</i>            | 8                                       | 24                                      |
|               |                | <i>Lamna nasus</i>              | 11                                      | 15                                      |
|               | Myliobatidae   | <i>Mobula birostris</i>         | 7                                       | 12                                      |
|               |                | <i>Mobula hypostoma</i>         | 1                                       | 4                                       |
|               |                | <i>Mobula japanica</i>          | 16                                      | 76                                      |
|               |                | <i>Mobula mobular</i>           | 7                                       | 22                                      |
|               |                | <i>Mobula</i> spp.              | 32                                      | 52                                      |
|               |                | <i>Mobula tarapacana</i>        | 21                                      | 94                                      |
|               |                | Myliobatidae spp.               | -                                       | 1                                       |
|               | Rhincodontidae | <i>Rhincodon typus</i>          | -                                       | 1                                       |
|               | Rhinidae       | <i>Rhina ancylostomus</i>       | 18                                      | 48                                      |
|               |                | <i>Rhynchobatus australiae</i>  | 26                                      | 54                                      |
|               |                | <i>Rhynchobatus djiddensis</i>  | 11                                      | 29                                      |
|               |                | <i>Rhynchobatus laevis</i>      | 9                                       | 22                                      |
|               |                | <i>Rhynchobatus</i> spp.        | 7                                       | 26                                      |
|               |                | <i>Rhynchobatus springeri</i>   | 8                                       | 23                                      |
|               | Sphyrnidae     | <i>Sphyrna lewini</i>           | 251                                     | 404                                     |
|               |                | <i>Sphyrna mokarran</i>         | 98                                      | 163                                     |
|               |                | <i>Sphyrna</i> spp.             | 6                                       | 8                                       |
|               |                | <i>Sphyrna zygaena</i>          | 162                                     | 281                                     |
|               |                | Sphyrnidae spp.                 | 2                                       | 1                                       |
|               | NA             | Lamniformes spp.                | -                                       | 1                                       |
|               | Rhinidae       | <i>Rhynchobatus luebberti</i>   | 3                                       | -                                       |
|               |                | <i>Rhynchobatus palpebratus</i> | 1                                       | -                                       |

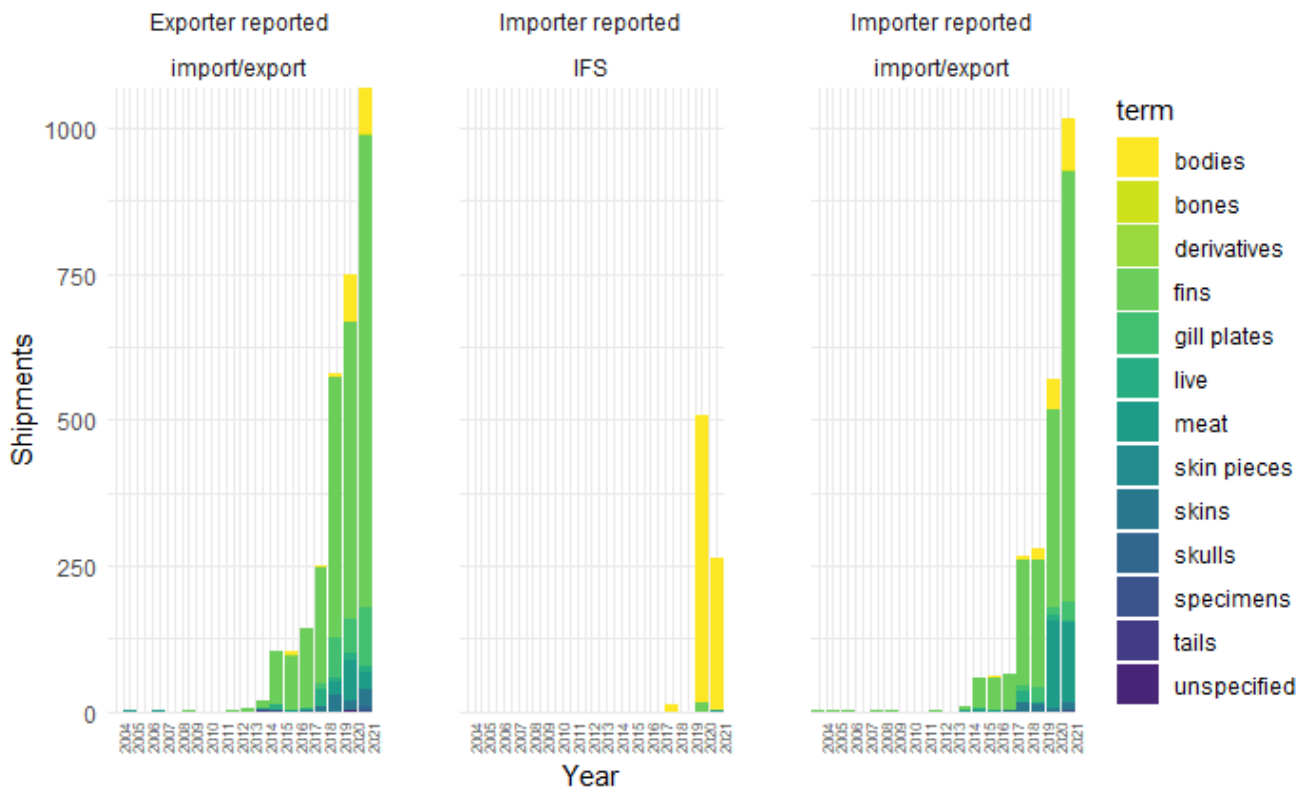


Figure 4. Number of shipments reported by exporters and importers between 2000 and 2021 coloured by the trade term code reported in the record.

10. A large number of species were traded for their fins (Figure 5) with *C. falciformis*, *I. oxyrinchus*, *Sphyrna* spp., and *A. pelgaicus* being the most traded species or fins. In comparison, the trade in bodies, meat and live were concentrated in one species. The trade in bodies and meat are mostly of *I. oxyrinchus*, the trade in live are mostly of *S. lewini*.

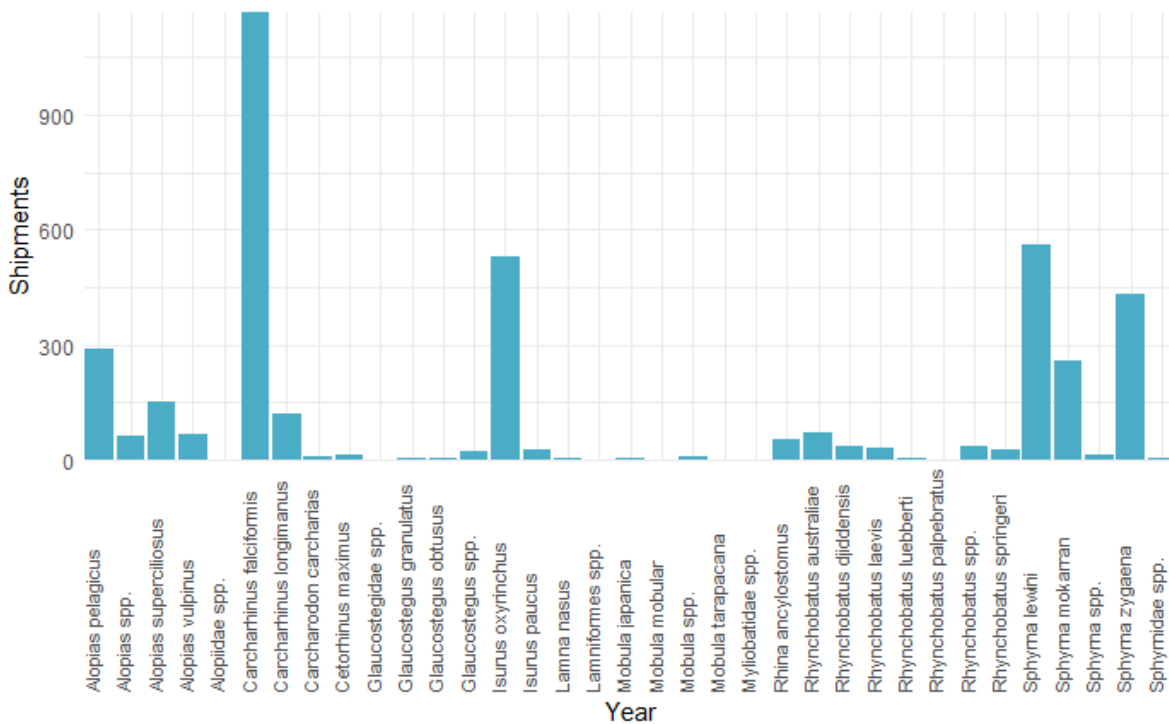


Figure 5. Number of recorded commercial trade transactions in fins of shark and ray species listed in CITES Appendix II.

Trade based on records reported in weight

11. The greatest volume of trade reported in kilograms was in specimens of *I. oxyrinchus* with a large proportion of it being introduction from the sea records (5,200 metric tons reported as introduction from the sea; 3,376 to 3,613 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 3).

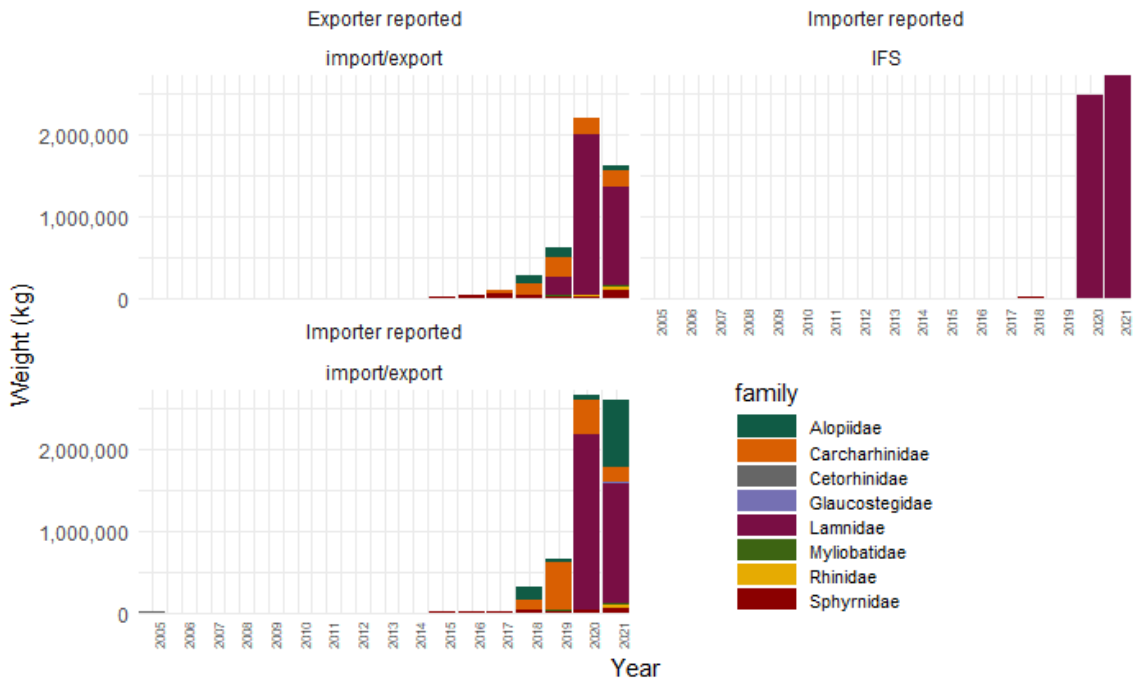


Figure 6. Volume of commercial trade reported by exporters and importers that was recorded in kg between 2000 and 2021 colored by family of sharks and rays listed in CITES Appendix II.

12. The majority of the trade in volume is made up of trade in bodies, meat and fins (Figure 7). 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. pelgaicus*), meat (*I. oxyrinchus*) and fins (*C. falciformis*, *I. oxyrinchus*, *A. pelgaicus* and *S. zygaena*).

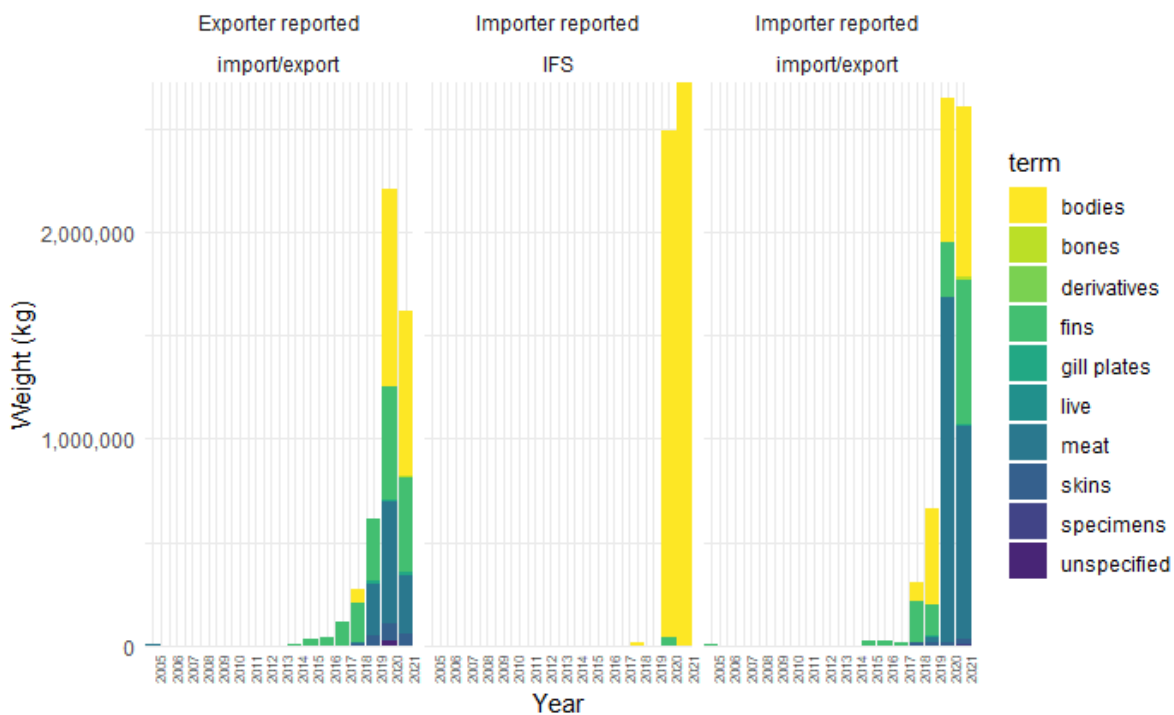


Figure 7. Volume of commercial trade reported by exporters and importers that was recorded in kg between 2000 and 2021 colored by the trade term code reported in the record.

Table 3. Volume of trade as reported by exporters and importers between 2000 and 2021 shown by type of trade and by species.

| Type          | Family                          | Taxon                           | Total weight in kg (importer reported) | Total weight in kg (exporter reported) |
|---------------|---------------------------------|---------------------------------|--|--|
| IFS           | Alopiidae                       | <i>Alopias pelagicus</i>        | 870                                    | -                                      |
|               |                                 | <i>Alopias vulpinus</i>         | 685                                    | -                                      |
|               | Carcharhinidae                  | <i>Carcharhinus falciformis</i> | 6309                                   | -                                      |
|               | Lamnidae                        | <i>Isurus oxyrinchus</i>        | 5201240.89                             | -                                      |
|               |                                 | <i>Isurus paucus</i>            | 9370.16                                | -                                      |
| Sphyrnidae    | <i>Sphyrna lewini</i>           | 14301                           | -                                      |  |
| import/export | Alopiidae                       | <i>Alopias pelagicus</i>        | 936789.12                              | 170624.52                              |
|               |                                 | <i>Alopias</i> spp.             | 10254.91                               | 16167.68                               |
|               |                                 | <i>Alopias superciliosus</i>    | 70314.76                               | 36412.18                               |
|               |                                 | <i>Alopias vulpinus</i>         | 43780.257                              | 69379.64                               |
|               |                                 | Alopiidae spp.                  | -                                      | 200                                    |
|               | Carcharhinidae                  | <i>Carcharhinus falciformis</i> | 1315962.82                             | 770901.14                              |
|               |                                 | <i>Carcharhinus longimanus</i>  | 13694                                  | 30411.15                               |
|               | Cetorhinidae                    | <i>Cetorhinus maximus</i>       | 6933.4                                 | 4361                                   |
|               | Glaucostegidae                  | Glaucostegidae spp.             | -                                      | 84.5                                   |
|               |                                 | <i>Glaucostegus granulatus</i>  | 202                                    | 202                                    |
|               |                                 | <i>Glaucostegus obtusus</i>     | 30                                     | 30                                     |
|               |                                 | <i>Glaucostegus</i> spp.        | 16202.63                               | 7925.41                                |
|               | Lamnidae                        | <i>Carcharodon carcharias</i>   | 236.09                                 | 3729.881821                            |
|               |                                 | <i>Isurus oxyrinchus</i>        | 3612926.675                            | 3375618.965                            |
|               |                                 | <i>Isurus paucus</i>            | 579.81                                 | 3317.1                                 |
|               |                                 | <i>Lamna nasus</i>              | 2036.7                                 | 2026.84                                |
|               | Myliobatidae                    | <i>Mobula birostris</i>         | 1165.5                                 | 2050                                   |
|               |                                 | <i>Mobula japanica</i>          | 3697.85                                | 16991.45                               |
|               |                                 | <i>Mobula mobular</i>           | 844.9                                  | 3269                                   |
|               |                                 | <i>Mobula</i> spp.              | 5675.15                                | 12400.65                               |
|               |                                 | <i>Mobula tarapacana</i>        | 2690.8                                 | 15783.85                               |
|               |                                 | Myliobatidae spp.               | NA                                     | 183                                    |
|               | Rhinidae                        | <i>Rhina ancylostomus</i>       | 1856.12                                | 4479.58                                |
|               |                                 | <i>Rhynchobatus australiae</i>  | 24284.753                              | 19860.04                               |
|               |                                 | <i>Rhynchobatus djiddensis</i>  | 3160.1                                 | 6999.5                                 |
|               |                                 | <i>Rhynchobatus laevis</i>      | 1342.67                                | 1038.47                                |
|               |                                 | <i>Rhynchobatus</i> spp.        | 2218.15                                | 7166.65                                |
|               |                                 | <i>Rhynchobatus springeri</i>   | 8684.8                                 | 7211.66                                |
|               | Sphyrnidae                      | <i>Sphyrna lewini</i>           | 100332.92                              | 124139.88                              |
|               |                                 | <i>Sphyrna mokarran</i>         | 21883.5714                             | 34445.39                               |
|               |                                 | <i>Sphyrna</i> spp.             | 5634.38                                | 1100.53                                |
|               |                                 | <i>Sphyrna zygaena</i>          | 75097.576                              | 164839.925                             |
|               |                                 | Sphyrnidae spp.                 | 2295                                   | 475                                    |
| NA            | Lamniformes spp.                | -                               | 390                                    |  |
| Rhinidae      | <i>Rhynchobatus luebberti</i>   | 772.85                          | -                                      |  |
|               | <i>Rhynchobatus palpebratus</i> | 935                             | -                                      |  |