supply and demand: the EU's role in the global shark trade





vision: animals and people thriving together.



mission: fresh thinking and bold action for animals, people and the place we call home.

contents

2	vision & mission	
3	index	26
		27
5	executive summary	
	introduction	
8	visual data overview of EU's role	30
	in shark fin and meat trade	31

in shark fin and meat trade introduction

31

methods

14 methods

10

findings

- 18 shark fin-related imports from the EU
- 20 shark fin-related exports to the EU
- 21 shark meat-related imports from the EU
- 22 shark meat-related exports to the EU
- 24 data discrepancies: comparing import data from Asian trade hubs against EU export data

about IFAW

For over a decade, IFAW has been working with governments around the world to support better management for sharks and rays. From the development of shark identification materials for fisheries, customs and enforcement officers, to raising awareness on the conservation needs of shark species, and building the capacity of governments to meet their obligations under international conventions such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention on the Conservation of Migratory Species of Wild Animals (CMS). IFAW also provides technical support for governments looking to enact progressive and precautionary management for shark catch limits, or prohibitions when warranted, at a national level.

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Cover photo: © Shane Gross A bonnethead shark.

conclusions & recommendations

conclusions recommendations

acknowledgements, references & end notes

acknowledgements references end notes



executive summary

Since the early 2010s, global shark conservation work has come a long way. At that time, sharks were considered a side item in conservation conversations; even an afterthought and almost no management existed. Today, shark management issues are a core component of many conservation conversations, especially relating to their catch, trade and contributions to global marine biodiversity health. In the span of just 10 years, the beginning of a global framework to monitor and manage shark populations has started to emerge.

However, while the world has made significant progress in its management of sharks and rays in recent years, the actions taken have not been enough. Shark populations continue to decline rapidly worldwide. More than 50% of shark species are threatened or near threatened with extinction, and pelagic sharks (species of sharks found on the high seas) have declined more than 70% in only a 50-year period. Adding to the concern, a recent study found that shark populations were functionally extinct on 20% of reefs surveyed globally.

Small or large, coastal or high seas-sharks are disappearing, with the piecemeal management efforts to date failing to stop their decline.

Global shark declines are driven by international demand for shark fins and meat, coupled with widespread lack of management for both the catch and trade of shark species. While many place the burden of change on the consumptive countries, primarily in Asia, equally responsible for these declines are countries with internationally operating fishing fleets and trade in shark products.

IFAW developed this study to examine the role of the European Union (EU) in the global shark trade and steps needed to ensure that the EU becomes a positive player ceasing its contribution to the decline of shark species, as well as providing recommendations for the way forward. Previous studies have examined the EU's role as a leading shark catcher (Okes & Sant, 2019), as well as a major supplier for the global shark meat trade based on graph theory¹ (Niedermüller et al., 2021). This current study provides the first comprehensive picture of the EU's role as reflected in official raw customs data from Hong Kong Special Administrative Region (referred to as Hong Kong SAR hereafter), Singapore and Taiwan province, China (referred to as Taiwan province hereafter), covering both fin and meat import, re-export and export data compiled over an extensive period (2003–2020). This has allowed us to examine up-to-date trade routes between the EU and major shark fin hubs, identify discrepancies in reporting and suggest improvements from both a traceability and management perspective.

This study found that despite known population declines, the EU continues to be a significant player in the global export of shark fins, with EU Member States supplying on average 28% of the shark fin-related imports into Hong Kong SAR, Singapore and Taiwan province and even up to 45% in 2020.

Every country participating in the global shark trade must take actions, both at a national and international level. Historically, the EU has championed shark and ray trade management measures at conventions such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) or the Convention on the

5



Conservation of Migratory Species of Wild Animals (CMS), but with only 25% of the global trade currently subject to sustainable trade limits and populations in rapid decline, clearly additional steps must be taken. Other similarly resourced governments, such as Canada and the United Kingdom, have taken strong precautionary action in recent years to ban their trade in (detached) shark fins due to well-reasoned sustainability concerns. If the EU is to adhere to its biodiversity and sustainability ambitions while remaining one of the largest traders of shark products, it must once again step into a leadership role and set the global tone for trade management and reform needed to improve the tracking of shark products traded internationally; and to prevent the widespread extinction of sharks.

Given its significant role, action by the EU to better monitor and track the trade of shark products, as well as to advocate for sustainable trade limits via CITES Appendix II listings, would shift global markets towards a better, sustainable future for sharks.

Co-author Barbara Slee, IFAW's EU Manager, Marine Conservation

Scalloped hammerhead sharks are particularly threatened by the global shark fin trade and currently listed in CITES Appendix II.



introduction



visual data overview of EU's role in shark fin and meat trade

study period 2003-2020



(metric tons) of shark fin products were imported into Hong Kong SAR, Singapore and Taiwan province combined, with the EU responsible for almost a third of this import (on average 28.35%, 53,407.49 metric tons). From 2017 onwards the EU's role increases and accounts for almost half of the shark fin imports in 2020 (45.42% in 2020).

top five EU member state sources for shark **fin imports**

into Hong Kong SAR, Singapore and Taiwan province

	Reported sources	Total reported trade (metric tons)
1st	Spain	51795
2nd	Portugal	642
3rd	Netherlands	621
4th	France	295
5th	Italy	25



top five sources of shark fin imports

into Hong Kong SAR. Singapore and Taiwan province

	Reported sources	Total reported trade (metric tons)
1st	Spain	51795
2nd	Singapore	17006
3rd	Taiwan province	12823
4th	Indonesia	11386
5th	United Arab Emirates	5680



data discrepancies

between import data from Hong Kong SAR, Taiwan province and Singapore compared to the EU export data: the aggregated import data consistently displayed a considerably higher import figure than the corresponding total export data from the EU (to all countries). The discrepancy between the two datasets ranges from 1,650.08 metric tons to 2,318.18 metric tons, suggesting a concerning case of potential misreporting in the shark fin-related trade.



trade hubs of Hong Kong SAR, Singapore and Taiwan province, where an estimated more than 50% of global shark fin trade passes. Given this key role in the supply chain, the EU has a responsibility to ensure that its participation in the global trade of shark-related products is not driving these species towards extinction.

* 'shark meat' covers all data from shark meat-related customs codes 'shark fin' covers all data from shark fin-related customs codes



proportion of export by EU member states has increased

whereas global shark fin-related exports to Hong Kong SAR, Singapore, Taiwan province have been declining. A decrease in the number of shark fins traded each year is most likely attributable to global shark population declines, and making shark species more difficult to catch and therefore trade in such high numbers.





6.689 t

(2.5%) of 267,345.33 metric tons of shark meat were exported to the EU. The comparatively low export of meat to the EU is not unexpected as most of the shark meat-related products are exported to South America and South Korea where they are consumed locally.

top five destinations of shark meat exports

out of Hong Kong SAR, Singapore and Taiwan province

	Reported destinations	Total reported trade (metric tons)
1st	Uruguay	69444
2nd	Brazil	60361
3rd	Mexico	25006
4th	Korea	23744
5th	Vietnam	17373

top five EU member state destinations of shark meat exports

out of Hong Kong SAR, Singapore and Taiwan province

	Reported destinations	Total reported trade (metric tons)
1st	Italy	4245
2nd	Spain	680
3rd	Greece	674
4th	Bulgaria	560
5th	Cyprus	91





introduction

Shark fin and shark meat are two of the most commonly internationally traded forms of shark products. A landmark global catch assessment estimated that every year at least 100 million sharks are caught in fisheries driven by the demand for these items (Worm et al., 2013). While the demand for shark fin is mostly accounted for by Asian markets such as Hong Kong SAR, Singapore (both important consumer markets and trade hubs for shark fin), and Chinese mainland, the scale of the trade is global. More than 128 countries/territories around the world have participated in the trade of shark fins, historically or to the present day (Shea & To, 2017), as exporters, re-exporters or importers. Latest research has also shown that, despite gaining less attention than the

importers. Latest research has also shown that, despite gaining less attention than the fin trade, the shark meat trade is no less global in scale, with demand not only in <u>Asian</u> markets, but also in <u>Europe</u>, <u>South America</u>, <u>Australia</u> and <u>Africa</u> (Niedermüller et al., 2021).

The global scale of the trade and complexity of trade networks has made it challenging to trace trade routes, volumes or product details even for key players to show exactly how countries/territories are involved, particularly for places where there are no strong trade regulations or policies to ensure clear records. As more than 50% of the global trade in shark fins moves through <u>Hong Kong SAR</u>, <u>Singapore</u> and <u>Taiwan province</u>, examining trade data at these hubs can yield a comprehensive and reliable picture of the global trade and networks (Clarke, 2004).

Studies of Hong Kong SAR's trade data have found reduced shark fin imports with a sharp drop after 2011, despite starting to rise again in 2014. Similar declines have since also been observed in Taiwan province and Chinese mainland (Shea & To, 2017). While an optimistic interpretation of this reduction may point to decreased demand, which is possible for some markets, a more cautionary interpretation is urged. Declines in the trade may simply be attributed to dwindling shark populations, leading to declines in catches and trade volumes (FAO, 2010). While the declines may also have been influenced by tightened regulations (e.g. fishing quotas) for shark fisheries at source, this explanation is unlikely a driving factor, given widespread lack of management in most of the world's shark-related fisheries (Fischer et al., 2012; Davidson et al., 2016). Notably, while global assessments in 2014 found that 24% of shark species were threatened, only seven years later, that number had increased to one third of chondrichthyan species assessed as

threatened with extinction due to overfishing (Dulvy et al., 2021). Signs of decline in the shark fin trade should therefore be taken as a warning sign that widespread global shark population declines are occurring. It is therefore even more important that countries/territories with significant catch and trade levels act on data that shows them as contributors to the global problem.

Using available official trade data from these ports, we examined the levels of imports and exports of both shark fin and shark meat to and from the EU. In doing so, this study presents a more comprehensive picture of the EU's role in the international shark product trade through key Asian hubs. This information can therefore be used to determine what next steps the EU must take to ensure its actions are not driving global shark populations to extinction.

- ▲ View of the caudal fins of a stack of blue sharks (Prionace glauca). Covered with ice and sold at the Port of Vigo, Galicia, Spain.
- A blue shark swims in the ocean.



methods





methods

This study uses the official trade data from key players in the global shark fin and meat trade to trace trade routes and conduct cross comparisons using Harmonized System (HS) commodity codes. Trade data under all HS codes related to shark fin and meat products was collected from three key trade hubs in the international shark fin trade, including Hong Kong SAR, Taiwan province and Singapore, for the years where trade data is available; that is from 2003 through to 2020.

All three studied datasets were collected from their respective official data sources to ensure that the original data is used for the study. From Hong Kong SAR, the data was collected from the Census and Statistics Department (CSD) of the Government of Hong Kong SAR. From Taiwan province, it was obtained through the Directorate General of Customs Headquarters in Taipei and the Customs Administration, Ministry of Finance's online trade statistics search engine. From Singapore, the datasets were purchased from IE STATLINK service (the official source of statistics for Singapore's trades). It is also noted that the global database of the Food and Agriculture Organization of the United Nations (FAO) aggregates national figures for the shark fin-related trade. However, while providing a broader perspective of the trade, it potentially oversimplifies product categories (Clarke, 2004). FAO data is therefore not included in this study.

All countries/territories found in each dataset were grouped under one of the three following categories in the analysis: "EU", including all 27 Member States of the EU² and its nine outermost regions (ORs); EU Overseas Countries and Territories (OCTs), British Indian Ocean Territories (BIOT), and any countries/territories located in Europe but not a part of the EU are categorised as "EUassociated"; while "Non-EU" comprises all other countries/territories found in the trade data.

In the final section, Hong Kong SAR, Taiwan province and Singapore's imports from EU

Member States are compared against the EU's total export data. Trade data from the EU was collected from the official online portal for <u>EU trade statistics</u> (Access2Market, 2021). Note that in that section, the trade data for the EU's exports are included for all global exports (not only exports to Hong Kong SAR, Taiwan province and Singapore).

Further information on datasets and methodology will be available in the full report as authored by <u>BLOOM Association</u> <u>Hong Kong</u>, and IFAW (the International Fund for Animal Welfare) to be published in mid-2022.

- ▲ Shark dorsal and/or pectoral fins of all shapes and sizes drying out on the rooftop of an industrial building in Kennedy Town, Sai Wan, Hong Kong SAR.
- A dusky shark (Carcharhinus obscurus) swims in the Mediterranean Sea.



findings



shark fin-related imports from the EU

During the period of 2003–2020, the EU was found to be a significant, and at times the largest source of sharkrelated products for shark fin trade hubs Hong Kong SAR, Singapore and Taiwan province.

From all sources, a grand total of 188,369.3 metric tons of shark-fin related products were reported in imports into Hong Kong SAR, Singapore and Taiwan province combined, with an annual average of 10,464.96 metric tons.³ EU Member States contributed 53,407.49, averaging 28.35% of the total reported imports over the studied period. The percentage of imports from EU Member States fluctuated between 18.54% and 45.42%. From 2017 the percentage increased steadily from 28.34% to more than 45% in 2020 (see Figure 1). While global shark fin-related exports to Hong Kong SAR have decreased globally, the EU continues to catch and export shark fins in large numbers (Figure 2). If this trend continues, the EU could easily become the majority source of shark fins for the three largest trading hubs for shark products.

Of all the reported imports from EU Member States, Spain was the largest reported source of imports, with a total of 51,795.32 metric tons recorded and an annual average of 2,877.52 metric tons.

Portugal accounted for the second highest volume of imports with a total of 642.23 metric tons and an average of 35.68 metric tons per annum recorded. This was followed by the Netherlands, responsible for a total of 620.70 metric tons. It is worth noting that the reported imports from the Netherlands originate from a single shipment in 2013 and have had no further records since.

	Reported source of imports	Total reported trade (metric tons)
1st	Spain	51,795.32
2nd	Portugal	642.22
3rd	Netherlands	620.70
4th	France	294.57
5th	Italy	24.88

Table 1. Top Five reported EU Member State sources of the total shark fin-related imports into Hong Kong SAR, Singapore and Taiwan province 2003-2020

A total of 667.30 metric tons were reportedly imported from EU-associated countries/territories, accounting for approximately 0.35% of the grand total of reported imports.





Spinner shark with fishing line caught in mouth.



shark fin-related exports to the EU

Unlike import records, the majority of the aggregated total fin-related exports and re-exports from Hong Kong SAR, Singapore and Taiwan province were outbound to non-EU destinations, underlining the EU's status as a supplying nation, but not necessarily a consumer of shark fin-related products.

Only 0.02% (approximately a total of 24.99 metric tons) of the aggregated total exports and re-exports were reportedly outbound to EU Member States from 2003– 2020. Furthermore, there were no reported exports to any EU member state in 2014–2015 or 2017–2020.

However, for the exports that did occur, Spain once again ranked highest here among EU member state destinations for total exports. A total of 20.93 metric tons were recorded.

(metric tons)	
1st Spain 20.93	
2nd Netherlands 3.38	
3rd Italy 0.63	
4th Portugal 0.02	
5th Cyprus 0.02	

Table 2. Top Five reported EU Member State destinations of the total shark fin-related exports from Hong Kong SAR, Singapore and Taiwan province 2003-2020

As for the EU-associated destinations, a total of 9.28 metric tons were recorded.

shark meat-related imports from the EU

Using trade records from Hong Kong SAR, Singapore and Taiwan province, the EU was once a significant source of shark meat for these three locations, but that has changed in recent years. From the aggregated import data, a total of 3,980.7 metric tons of meat were reportedly imported from EU Member States, with an average of 221.15 metric tons per year, amounting to approximately 4% of the grand total of reported imports during the studied time period. The majority of the reported imports from EU Member States were dated between 2008 and 2011. After the peak of 1,172 metric tons in 2011, reported imports dropped sharply and remained low, and since 2016 no further reported imports from EU Member States were recorded.

Spain was responsible for a total of 3,929.95 metric tons, with an average of 218.33 metric tons, making it the highest reported source of imports among all EU Member States. <u>Slovenia</u> was the second highest, with a total of 50.71 metric tons.

A total of 429.30 metric tons were reportedly imported from EU-associated countries/territories, with the peak in 2019 with 93.69 metric tons.

This is not unexpected, as Hong Kong SAR, Singapore, and Taiwan province are not regarded as big consumers of shark meat, which is most often consumed domestically within the EU or in South America and South Korea. In light of the recent study identifying the EU as a supplier of 22% of the world's shark meat (Niedermüller et al., 2021), it is likely that the drop in meat imports from the EU is related to shifts in trade routes.

	Reported source of imports	Total reported trade (metric tons)
1st	Spain	3,929.953
2nd	Slovenia	50.705
3rd	France	0.03
4th	Germany	0.01

Table 3. Top Five reported EU Member State sources of the total shark-meat related imports into Hong Kong SAR, Singapore and Taiwan province 2003-2020



Figure 3. Total shark meat-related imports into Hong Kong SAR, Singapore and Taiwan province (aggregated) from the EU and EU-associated sources 2003-2020



of meat were reportedly imported from EU Member States



of the world's shark meat identified the EU as a supplier in a recent study (Niedermüller et al., 2021)



were reportedly imported from EU-associated countries/ territories

Sharks sold on ice at market.



shark meat-related exports to the EU

Similar to imports into Hong Kong SAR, Singapore and Taiwan province, the proportion of shark meat-related exports and re-exports from these destinations to the EU and EU-associated destinations were comparably low. A total of 6,688.85 metric tons, with an annual average of 371.6 metric tons were reported for EU Member States destinations.

Italy received the highest volume among all EU Member States, with a total of 4,245.31 metric tons recorded and an average of 235.85 per annum. Despite being the largest reported destination in the EU, there were no further reported exports/re-exports to Italy from 2017 onwards.

Spain ranked second highest, with 680.47 metric tons recorded and an average of 37.80 metric tons. Greece ranked third, with 674.25 metric tons and an average of 37.46 metric tons, and Bulgaria followed with a total of 559.99 metric tons. It is worth noting that no further exports/re-exports to either Spain or Greece were reported in 2020.

	Reported destinations	Total reported trade (metric tons)
1st	Italy	4,245.31
2nd	Spain	680.47
3rd	Greece	674.25
4th	Bulgaria	559.99
5th	Cyprus	90.83

A total of 1,565.034 metric tons were reportedly destined for EU-associated countries/territories. There were no further exports/re-exports reported after 2018.



Figure 4. Total shark meat-related exports from Hong Kong SAR, Singapore and Taiwan province (aggregated) to the EU and EU-associated destinations

◀ A blue shark.



data discrepancies: comparing import data from Asian trade hubs against EU export data

Hong Kong SAR, Singapore and Taiwan province's import data from EU Member States was aggregated (referred to in this section as the "aggregated import data") and compared against the total reported export data (to all countries) from EU trade statistics between 2016 and 2020 to observe compatibility in the results and identify data discrepancies. While the aggregated import data and EU export data showed a matching general trend, the aggregated import data consistently displayed a considerably higher import figure than the corresponding export data from the EU. There is a discrepancy between the two datasets which ranges from 1,650.08 tons to 2,318.18 tons; this suggests a concerning case of potential misreporting in the shark fin-related trade, and may be worth further investigating by the relevant governing bodies.⁴ Using the compatible commodity codes, a further breakdown of the comparison was conducted. Results showed that for frozen fins, reported imports in the aggregated data are relatively higher than the reported EU exports. While such a discrepancy is worth further investigation, it should also be noted that discrepancies in data related to frozen fin products can also be due to whether or not reported weights have taken into account the product water content, which has been found to be able to increase the product's weight to up to four times the actual weight. In the current comparison, it is not clear whether any of the datasets may have adjusted their data accordingly to account for water content, which can lead to discrepancies if other countries/territories under comparison have not done the same.

Apart from the marked differences observed in the reported trade for frozen fin products, the EU export data for the dried fin trade and fresh fin trade combined in 2016 and 2017 were also found to be consistently lower than the reported imports from the EU in Hong Kong SAR, Singapore and Taiwan province's aggregated data. Discrepancies of up to 620.40 tonnes were found, which potentially indicates another case of misreporting at either end of the trade. Interestingly, the trade data appeared to closely match after 2018. In particular, the datasets matched most closely in 2019 and 2020, suggesting that the majority of the dried and fresh shark fins exported from EU Member States were sent directly to the destinations of Hong Kong SAR, Singapore and Taiwan province. The high level of correspondence between the aggregated import data and the EU export data furthermore suggests that Hong Kong SAR, Singapore and Taiwan province are the top destinations for shark fin exports from EU Member States in those years.

Once again, it should be noted that while in the EU trade data commodity codes separate products into fresh, dried and frozen fin products, the differentiation between dried and fresh products is not made in Singapore's trade data. Therefore, data for dried and fresh fin products were combined for this comparison. This again demonstrates the importance of compatible systems for recording the trade and in assigning commodity codes between trading partners to achieve greater traceability and transparency.

Such discrepancies should be investigated immediately and steps taken to improve the accuracy of recording, as the EU may not be aware of the significant role it is playing in global shark catch and subsequent population declines based on EU export data alone.



Figure 5. Total shark fin-related exports to all countries according to EU trade data vs. imports from the EU as recorded by Hong Kong SAR, Singapore and Taiwan province (aggregated)



Figure 6. Total frozen shark fin exports to all countries according to EU trade data vs. imports from the EU as recorded by Hong Kong SAR, Singapore and Taiwan province (aggregated)



Figure 7. Total dried and fresh shark fin exports to all countries according to EU trade data vs. imports from the EU into Hong Kong SAR, Singapore and Taiwan province (aggregated)



conclusions & recommendations





conclusions

By examining the recorded trade data in the key hubs of Hong Kong SAR, Singapore and Taiwan province, we have been able to shed light on yet another piece of the puzzle regarding patterns in the global trade of sharks and shark products.

This study's findings demonstrate that, although the core demand of the shark fin-related market is in Asia, the EU is a significant player in the global shark fin trade as a core supplier to Asian markets. Global trade in shark products plays a significant role in the collapse of the world's shark populations, indicating better regulation and enforcement of the trade is necessary.

The EU is one of the top sources of shark fin-related products for the global trade hubs of Hong Kong SAR, Singapore and Taiwan province, where it is estimated more than 50% of the global shark trade passes. Providing 45% of shark fins to key consumer hubs in Asia in 2020, as well as 22% of global shark meat supply (Niedermüller et al., 2021), the EU has a responsibility to ensure that its participation in the global trade of shark-related products is not driving these species towards extinction.

The EU, as a key player in the global shark markets, also has an important responsibility to ensure the accuracy of trade records and the enactment of sustainability requirements of sharks in trade. Taking on such a

leadership role would undoubtedly influence other players to do so as well. While there are numerous fisheries management measures in place for shark catches within the EU and in bilateral/multilateral initiatives (e.g. RFMOs) (European Commission, 2021), regarding international trade, the EU can and should do more to bring the entire trade in shark products under sustainable management and to understand and monitor its portion of the trade. Such efforts are imperative if shark trade is to continue on a commercial scale. Furthermore, existing regulations are limited only to the most endangered and threatened species. Global shark fin exports are declining, while the EU proportion of the trade continues to rise - it is undoubtedly the species without management that continue to be caught and traded, despite widespread declines noted across many species in trade.

There is now not only an opportunity, but a responsibility, for the EU to track, manage and sustainably limit the export of numerous species currently threatened or commercially exported and likely to become threatened without trade management.

▲ Catsharks at Olhão Fish Market, Portugal.

◀ Oceanic whitetip shark, one of the most threatened sharks and listed on Appendix II of CITES.



recommendations

Given the continued and increasingly rapid declines in global shark populations, every country participating in their catch and trade must accurately track trade levels and manage shark populations in trade to ensure adequate protections are in place. The <u>EU</u> is no exception.

The recommendations made below provide ways to move towards a more holistically managed trade system, where data collected can also enable a more accurate understanding of what is being traded through the EU's ports, and the extent to which the trade is contributing to the endangerment of species already facing threats to survival.

IFAW's recommendations on next steps for the EU to better manage its role in the global shark trade are:

1. Improve recording of data and trade records via a review of the Harmonized System (HS) commodity codes for shark products and standardise code use with key trading partners

The EU must take the lead to initiate and form collaborations with its key trading partners in shark-related products to review HS codes used, and reach consensus on updating codes for the most traded products to provide higher resolution on products traded, as well as increasing traceability by using compatible codes. In particular, species-specific information should be reflected in the codes for at least <u>CITES-listed species</u> and species threatened with extinction.

With increased traceability and transparency, analyses of trade datasets can inform the creation of policies for sourcing countries/territories on fisheries management, and strengthen enforcement and monitoring capacity in trading countries/territories to help meet broader conservation targets, such as the Aichi Biodiversity targets (Clarke, 2004), while more effectively managing trade at sustainable levels.

2. Ensure that any shark species found in the international shark product trade is listed in CITES Appendix II

Species whose unmanaged trade is contributing to population declines meet the CITES Criteria for Appendix II (CITES, 2021). When listed, international trade may only continue with the appropriate permits issued by national authorities, to ensure that trade levels are limited to sustainable levels. Given that shark populations are dwindling rapidly and comprehensive revision of HS codes can take years to complete, the EU must act to ensure any sharks that are commercially traded are listed onto CITES Appendix II. This step is no longer precautionary, but necessary given widespread evidence of shark declines due to unmanaged catch and trade.

There are two additional benefits of such a permitting system. Firstly, where it is properly implemented, there is the ability to collect detailed information on how threatened shark species are traded by countries/territories. Secondly, increased traceability would lead to better data on the implementation and effectiveness of any enacted sustainable fishing limits for highly traded species, leading to better enforcement as needed.

3. Build domestic capacity for long-term trade monitoring through trade data analysis

It is recommended that the EU improves its capacity for long-term and detailed monitoring of its shark-related trade, through trade data analysis and research, identifying key trading partners, and specialised training of frontline staff to more effectively detect illegal trading of CITES-listed species. Alongside recommendation 1 of making quality data more accessible, this recommendation encourages the use of such data in meaningful analyses to obtain information about the EU's shark-related trade, and maintains long-term monitoring efforts for the EU's own trade activities (particularly in relation to threatened or CITES-listed species).

4. Prioritise the use of trade data to combat illegal wildlife trade in sharks and shark products

Analysis of trade data can provide an additional source of information or lead to investigations into potentially illegally traded shipments and trade routes. It is also recommended that trade data is shared in cross-national platforms to enable the better coordination of intelligence between border checkpoints at the international level, at least with relevant key trading partners.

In addition to the sharing of trade datasets, the EU should establish a database for successful seizures conducted by governments, and make this accessible to trading partners. Such a database can enable further understanding of the scale, key players, trade routes and patterns in the illegal trade. On the topic of international collaborations, it was found in this study that apart from EU Member States and outermost regions, the Overseas Countries and Territories (OCTs) associated with the EU are also involved in the trade, and where resources are less available, the EU is in a position to provide assistance in regulating trades (Andersson et al., 2021).

◀ Mako shark.



acknowledgements, references & end notes



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▲ Store with dried products showing the head of two shortfin make sharks (Isurus exvrinchus). a hammerhead shark (Sphyrna) specimen and a shark mandible.

references

Andersson, A., Tilley, H., Lau, W., Dudgeon, D., Bonebrake, T. & Dingle, C. (2021) CITES and beyond: Illuminating 20 years of global, legal wildlife trade Global Ecology and Conservation: 26 e01455

Access2Markets (2021) EU trade statistics (excluding United Kingdom) Retrieved from: https://trade.ec.europa.eu/access-tomarkets/en/statistics on 28th of December, 2021

Census & Statistics Department (C&SD) (2021) Hong Kong SAR Merchandise Trade Statistics Imports Retrieved from: https:// www.statistics.gov.hk/pub/ B10200012011MM12B0100.pdf on 15th September 2021 Clarke, S. (2004)

Understanding pressures on fishery resources through trade statistics: a pilot study of four products in the Chinese dried seafood market Fish and Fisheries: 5 pp. 53 – 74

Davidson, L., Krawchuk, M., Dulvy, N. (2016) Why have global shark and ray landings declined: improved management or overfishing? Fish & Fisheries: 17 (2) pp. 438 - 458

European Commission (2021) Retrieved from: https://ec.europa.eu/oceans-and-fisheries/ ocean/marine-biodiversity/sharks en on 4th November 2021

European Commission (2022) Retrieved from: https://trade.ec.europa.eu/access-tomarkets/en/statistics on 18th January 2022

FAO (2010) The state of the world fisheries and aquaculture Food and Agriculture Organization of the United Nations, Rome, Italy, 2010, pp. 218

Fischer, J., Erikstein, K., D'Offay, B., Barone, M., Guggisberg, S. (2012) Review of the Implementation of the International Plan of Action for the Conservation and Management of Sharks Food and Agriculture Organization of the United Nations, Rome, 125 pp.

endnotes

- ¹ Graph theory is the mathematical study of a network of interacting elements. This approach provides a quantitative but simplified view of the multiple factors involved in the connection (edges) among elements (nodes) contained in a network (Niedermüller et al., 2021).
- ² The 'EU' customs data covers trade data of 27 Member States and excludes the United Kingdom to illustrate the role of the EU in its current composition. The customs data from the United Kingdom is however covered within the EU-associated category.
- ³ In this summary report, trade data collected from Hong Kong SAR, Singapore and Taiwan province are combined to provide an "aggregated" dataset. It should also be noted that trade data from Hong Kong SAR is separated into "country of

origin (CO)" and "country of consignment (CC)". In the following sections unless otherwise specified, CO data is used for import data, while CC data is used for export/re-export data. The distinction is not made for Singapore or Taiwan province's data.

Dulvy, N., Pacoureau, N., Riby, C., Pollom, R., Jabado, R., Ebert, D., Finucci, B., Pollock, C., Cheok, J., Derrick, D., Herman, K., Sherman, C., VanderWright, W., Lawson, J., Walls, R., Carlson, J., Charvet, P., Bineesh, K., Fernando, D., Ralph, G., Matsushiba, J., Hilton-Taylor, C., Fordham, S. & Simpfendorfer, C. (2021) Overfishing drives over one-third of all sharks and rays toward a global extinction crisis Current Biology: 31(21) pp. 4773 - 4787

Niedermüller, S., Ainsworth, G., de Juan, S., Garcia, R., Ospina-Alvarez, A., Pita, P. & Villasante, S. (2021) The Shark and Ray Meat Network: A Deep dive into a global affair 2021 WWF MMI, Rome, Italy Retrieved from: https://wwfeu.awsassets.panda.org/ downloads/a4 shark 2021 low.pdf on 4th November 2021

Okes, N. and Sant, G. (2019) An overview of major shark traders, catchers and species TRAFFIC, Cambridge, UK

Shea, K. & To, A. (2017) From boat to bowl: Patterns and dynamics of shark fin trade in Hong Kong SAR - implications for monitoring and management Marine Policy: 81 pp. 330 - 339

Worm, B., Davis, B., Kettermer, L., Ward-Paige, C., Chapman, D., Heithaus, M., Kessel, S. Gruber, S. (2013) Global catches, exploitation rates, and rebuilding options for sharks Marine Policy: 40 pp. 194–204

⁴ A few things to note when reviewing this initial analysis: only country of consignment data was used for Hong Kong SAR's dataset for this comparison section, meaning that the data showed shipments transported directly from the ports of EU Member States to Hong Kong SAR without further intermediate stops. This differentiation between country of origin and country of consignment is not available in Taiwan province and Singapore's datasets. Furthermore, this distinction is also not made in the EU data, therefore it is not known whether

the products were exported from EU Member States as the origin, or only as an intermediate stop.

In addition, available commodity codes in the EU export data currently only describe fresh, dried and frozen fin products. To achieve comparable datasets, all categories under other descriptions (such as canned products, preserved or prepared, or descriptions suggesting products were in an airtight container) were omitted from the aggregated import data in this comparison analysis. This furthermore highlights the importance of assigning commodity codes that allow for detailed descriptions of products, such as in the product forms, which if provided in the EU export data would make possible more detailed and accurate trade data comparisons.

International Fund for Animal Welfare

Supply and Demand: The EU's role in the global shark trade Report

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