

NOTIFICATION TO THE PARTIES

No. 2024/123

Geneva, 8 November 2024

CONCERNING:

Distribution of information received on gulper sharks (*Centrophoridae* spp.)

1. At its 33rd meeting (AC33; Geneva, July 2024), the Animals Committee invited the Secretariat to issue a Notification to the Parties inviting Parties and organizations to provide information on gulper sharks (*Centrophoridae* spp.), and a second Notification to the Parties to distribute the information collected through the first Notification.
2. On 12 August 2024, the Secretariat issued [Notification to the Parties No. 2024/088](#) inviting Parties and organizations to provide information on the catches, use of and trade in gulper sharks and their products, and conservation measures for the species.
3. The Secretariat received responses from Australia, Ireland, Japan, Mexico, Spain, Sweden, Thailand, Tunisia, the United Kingdom of Great Britain and Northern Ireland (including the Cayman Islands), the United States of America, and TRAFFIC.
4. The Secretariat provides in the Annex the responses received in the language and format in which they were received.

Responses to Notification to the Parties No. 2024/088 on Request for information on gulper sharks (Centrophoridae spp.)

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Response by Australia's CITES Scientific Authority to Notification to the Parties No. 2024/088 concerning *Request for information on gulper sharks (Centrophoridae spp.)*

Introduction

Australia's CITES Scientific Authority welcomes the opportunity to provide information on gulper sharks and to share our experience in developing conservation and recovery measures for these species.

Gulper sharks are a deepwater family and are among the least productive and most vulnerable of all elasmobranchs. Their large livers contain the highest value liver oil (highest squalene content) of all sharks, and they are increasingly targeted and retained as bycatch for the trade. Overfishing is the primary threat to these species. Once overfished, recovery is very slow due to their low productivity. These risks are clearly articulated in the recent *Science* paper "Fishing for oil and meat drives irreversible defaunation of deepwater sharks and rays" (Finucci et al. 2024).

The gulper shark family is one of the most taxonomically complex shark families and it is very difficult to visually distinguish between species. This is due in part to morphological differences between juveniles and adults often being more pronounced than the differences between species. This, combined with overlapping ranges, has resulted in inaccurate species-specific data collection and the group is often reported under a generic category. While some Centrophoridae species (e.g. *Deania* spp.) can be morphologically distinguished from *Centrophorus* spp., these genera co-occur and their traded products cannot be readily separated.

Several species of gulper sharks have undergone significant declines in Australia as a result of fishing pressure. This was primarily due to poor regulation and a lack of understanding of species biology and vulnerability.

Catches, use of and trade in gulper sharks and their products

Gulper shark catches in Australia

Two species in Family Centrophoridae (*Deania calcea* and *D. quadrispinosa*) are permitted to be retained in the Commonwealth Southern and Eastern Scalefish and Shark Fishery (SESSF). Most of the catch is taken from the Commonwealth Trawl Sector with small amounts from the Scalefish Hook Sector.

The Australian Bureau of Resource Economics and Science (ABARES) *Fishery status reports 2023* classifies the status of deepwater sharks (eastern and western 'baskets', comprising 18 species) in the SESSF as **uncertain** with regard to biomass and fishing mortality. Total allowable catch for the eastern and western deepwater shark baskets for the 2022–23 fishing season was 24 t and 235 t, respectively. Actual catch for the 2022–23 fishing season for the eastern and western stocks was under the allowable limits, at 17 t and 85 t, respectively. Information on catch composition is not publicly available; however, *D. calcea* is reported to be the most commonly landed species in the deepwater shark basket (FRDC 2023 shark and ray report card). Further details are available in Thomson et al. (2022).

The SESSF gulper shark multispecies stock, comprised of *C. harrissoni*, *C. moluccensis* and *C. uyato* (formerly *C. zeehaani*), is a no-take stock due to historical overfishing. The ABARES *Fishery status reports 2023* classifies the status of gulper sharks in the SESSF as **uncertain** with regard to fishing mortality and **overfished** with regard to biomass. According to ABARES, there are no reliable indicators to determine whether current fishing mortality will allow the stock to rebuild to above the limit reference point in a timeframe consistent with the requirement of the harvest strategy policy. The most recent estimate of biomass is below the limit reference point.

C. harrissoni and *C. uyato* were listed as Conservation Dependent under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) in 2013. Since 2012 both have been managed by AFMA under the 'Upper-slope Dogfish Management Strategy' (see below) with the objective to rebuild populations of these species.

Other export fisheries that may catch *Centrophorus* and/or *Deania* species include the New South Wales (NSW) Ocean Trawl Fishery, NSW Ocean Trap and Line Fishery and the Commonwealth Coral Sea Fishery (line sector). Small amounts (1–6 t annually) of *C. squamosus* are reported to be targeted by fishers using demersal longlines off southern NSW.

Small catches (<1 t) of deepwater sharks are also reported periodically from Australian vessels fishing in high seas areas of the South Pacific Ocean and Southern Indian Ocean (under the auspices of the South Pacific Regional Fisheries Management Organisation and Southern Indian Ocean Fisheries Agreement), although effort in these fisheries is generally low and sharks are not a target species.

Stock status

Assessments of the status of the following gulper shark species found in Australia is provided in the [Shark and Ray Report Card](#) (FRDC 2023):

- *Deania calcea* ([2023 FRDC Deania calcea final.pdf \(fish.gov.au\)](#)) - **recovering**
- *Deania quadrispinosa* ([2023 FRDC Deania quadrispinosa final.pdf \(fish.gov.au\)](#)) - **recovering**
- *Centrophorus granulosus* ([2023 FRDC Centrophorus granulosus final.pdf \(fish.gov.au\)](#)) - **sustainable**
- *Centrophorus uyato* ([2023 FRDC Centrophorus uyato final.pdf \(fish.gov.au\)](#)) - **depleted**
- *Centrophorus harrissoni* ([2023 FRDC Centrophorus harrissoni final.pdf \(fish.gov.au\)](#)) - **depleted**
- *Centrophorus moluccensis* ([2023 FRDC Centrophorus moluccensis final.pdf \(fish.gov.au\)](#)) - **sustainable**
- *Centrophorus squamosus* ([2023 FRDC Centrophorus squamosus final.pdf \(fish.gov.au\)](#)) - **sustainable**
- *Centrophorus westraliensis* ([2023 FRDC Centrophorus westraliensis final.pdf \(fish.gov.au\)](#)) - **sustainable**

Use of and trade in gulper shark and their products

Most of the meat retained by Australian fisheries is thought to be consumed domestically and is not exported (C. Simpfendorfer, pers. comm. 30 May 2024). However, there is an established squalene extraction business in Australia that exports shark liver oil derivatives

for use in health supplements (e.g. fish oil capsules). Exports of non-protected gulper shark specimens or derivatives are possible under current Wildlife Trade Operation (WTO) approvals for several fisheries.

Australian conservation measures and strategies

Upper-slope Dogfish Management Strategy 2022

Four species of upper-slope dogfish have undergone significant decline in south-eastern Australia as a result of fishing pressure primarily in the SESSF: *C. harrissoni*, *C. uyato*, *C. moluccensis* and *Squalus chloroculus*.

The Upper-Slope Dogfish Management Strategy (the strategy) forms the Australian Fisheries Management Authority's response to risks identified through its ecological risk assessment (ERA) for the Commonwealth trawl and autolongline sectors of the SESSF. The strategy is also designed to meet EPBC Act requirements relating to the Conservation Dependent status of *C. harrissoni* and *C. uyato* and WTO approval for the SESSF.

The objective of the strategy is to stop the decline and support the recovery of *C. harrissoni* and *C. uyato* so that their chances of long-term survival in nature are maximised. Specifically, the objective is to rebuild the populations of *C. harrissoni* and *C. uyato* above a limit reference point of 25 per cent of unfished biomass, in line with the Commonwealth Fisheries Harvest Strategy Policy.

The rebuilding timeframe is estimated to be 62 years for *C. uyato* and 86 years for *C. harrissoni*. In the absence of biomass estimates for these species, a habitat proxy has been used for biomass. Management measures introduced under the strategy also benefit the survivability of *C. moluccensis* and *Squalus chloroculus*.

The strategy relies on a network of spatial closures supplemented by a range of operational measures including regulated handling practices, 100 per cent monitoring in areas where line fishing is permitted, move-on provisions and zero retention of protected gulper sharks. Performance of the strategy is monitored primarily through fishery independent surveys designed to measure the relative index of abundance through time. The strategy was first implemented in 2012 following consultation with the fishing industry, scientists, conservation groups and other stakeholders. The strategy was reviewed during 2019–21.

Australia's National Plan of Action for the Conservation and Management of Sharks

Australia's National Plan of Action for the Conservation and Management of Sharks (Shark-plan) details actions to encourage the effective and sustainable management of Australia's shark populations.

The national document encourages improved management of sharks in Commonwealth, state and Northern Territory managed waters. It provides guidance to fisheries and conservation managers and other resource users to improve the conservation and management of sharks.

The Shark-plan also meets Australia's commitment as a member of the United Nations Food and Agriculture Organization, to the International Plan of Action for the Conservation and Management of Sharks ([IPOA-Sharks](#)).

Australia first developed a National Plan of Action in 2004 (called Shark-plan 1). The plan has been regularly reviewed since then.

Following a 2012 review, the Shark-plan Representative Group (SRG) was established. This group brings together Commonwealth, state and Northern Territory Government fisheries and conservation agencies with a wide range of non-government stakeholders. SRG's main responsibility is to monitor the implementation of the commitments made in the Shark-plan.

The most recent review of the Shark-plan in 2023 was informed by the [Shark Assessment Report](#) conducted by the ABARES and feedback from key stakeholders through the SRG.

Shark-plan 2 articulates how Australia manages sharks and ensures that Australia meets international conservation and management obligations. Shark-plan 2 identifies research and management actions across Australia for the long-term sustainability of sharks, including actions to help minimise the impacts of fishing on sharks.

The Australian Fisheries Management Forum, including representatives from the Australian Government, Northern Territory and state fisheries management agencies, adopted the Revised Shark-plan 2 in April 2024.

Changes to the Shark-plan recognise that many actions have been completed, including the implementation of legislation to ban the practise of shark-finning. The review also noted the emergence of new issues impacting the conservation and management of sharks, particularly climate change.

The plan has moved to a monitoring, education and enforcement stage.

[The Action Plan for Australian Sharks and Rays](#)

The first Action Plan for Australian Sharks and Rays (Kyne et al. 2021) aims to provide a comprehensive and consistent review of the extinction risk of all cartilaginous fishes (hereafter 'sharks') occurring in Australian waters, to provide a benchmark from which changes in population and risk can be measured, and to help guide management for their conservation. This Action Plan also serves to raise the profile of their diversity and conservation needs. This volume includes a taxa profile for each of the 328 species occurring in Australian marine and inland waters.

References

AFMA 2022, [Upper-Slope Dogfish Management Strategy, August 2022](#), Australian Fisheries Management Authority, Australia.

Finucci, B., Pacoureau, N., Matsushiba, J.H., Rigby, C. (2024) Fishing for oil and meat drives irreversible defaunation of deepwater sharks and rays. *Science* 383(6687):1135-1141.
[10.1126/science.ade9121](https://doi.org/10.1126/science.ade9121)

FRDC 2023, [A Report Card for Australia's Sharks and Rays](#), Fisheries Research and Development Corporation, Australia.

Kyne, P, Heupel, M, White, W, Simpfendorfer, C 2021, [The Action Plan for Australian Sharks and Rays 2021](#), Marine Biodiversity Hub, National Environmental Science Program, Australia.

Thomson RB, Daley RK, Dowling N and Althaus F 2022, The SESSF Deepwater Shark basket: exploitation history, data exploration, and FishPath outcomes for *Deania* spp. Presented to AFMA's SERAG meeting. 29-30 November 2022. CSIRO, Australia.

CITES Notification 2024/088 on Gulper sharks

2. The Secretariat invites Parties and organizations to provide information on the following:

a) catches, use of and trade in gulper sharks and their products, and b) conservation measures for the species.

Ireland provides the following information in relation to (a) and (b) in Table 1 below

Ireland has the following five taxa of gulper shark as outlined below. They are all considered to be deepwater species. As there is now a ban on deepwater trawling in EU waters, they are no longer caught in Ireland and none of the species have appeared in fisheries logbook data in the last three years, even as reported discards (*pers comm* Irish Marine Institute 3rd September 2024) .

Table 1 a) catches, use of and trade in gulper sharks and their products, and b) conservation measures for Gulper sharks in Ireland

CENTROPHORIDAE (Gulper Sharks) in Ireland		a) catches, use of and trade in gulper sharks and their products	(b) conservation measures for the species
Gulper Shark	<i>Centrophorus granulosus</i> Not evaluated <i>C. granulosus</i> normally be found further south than Ireland, but is possibly present.	Not caught in Irish waters during last three years. (pers comm Irish Marine Institute 3rd September 2024)	The main body of measures for the management and conservation of cartilaginous fish in Irish waters is the European Union (EU) Common Fisheries Policy (CFP) framework . Zero total allowable catch and quota under European Union legislation since 2010 (EU 2010).
Leafscale Gulper Shark	<i>Centrophorus squamosus</i> Assessed as Endangered A2abd for Ireland and NE Atlantic. Global assessed as a Vulnerable species. (Clarke <i>et al.</i> 2016)	<i>Centrophorus squamosus</i> was commercially exploited from 1989 until the mid-2000s. It used to be a target species caught and landed as ‘Siki shark’. However this fishery ended in 2010 when a total allowable catch (TAC) of zero was set . It did continue to be taken as by-catch in mixed fisheries	Observed population abundance declined by 70% in its core distribution area (west of Scotland) and 77% west of Ireland, between 1994 and 2001 (Clarke <i>et al.</i> 2016) The main body of measures for the management and conservation of

		for deepwater species west and north of Ireland to 2016. This by-catch was considered unavoidable because the fisheries took place within its depth range. Survival of discarded by-catch is very low for deepwater species such as these (Clarke <i>et al.</i> 2016). However, they are no longer caught in Ireland and none of the species have appeared in fisheries logbook data in the last three years, even as reported discards. (<i>pers comm</i> Irish Marine Institute 3rd September 2024)	cartilaginous fish in Irish waters is the European Union (EU) Common Fisheries Policy (CFP) framework .Since 2010, the European Union Fisheries Council prohibited direct fishing for deep-water sharks (EU 2010), including the Leafscale Gulper Shark, in European Community and international waters, and in 2012, no allowances for bycatch were implemented (Finucci <i>et al.</i> 2020)
Little Gulper Shark	<i>Centrophorus uyato</i> Not evaluated	There is only one record in the literature (Clarke <i>et al.</i> 2016)	The main body of measures for the management and conservation of cartilaginous fish in Irish waters is the European Union (EU) Common Fisheries Policy (CFP) framework .Since 2010, the European Union Fisheries Council prohibited direct fishing for deep-water sharks (EU 2010), in European Community and international waters,

			and in 2012, no allowances for bycatch were implemented (Finucci <i>et al.</i> 2020)
Birdbeak Dogfish	<i>Deania calcea</i> is a relatively common deepwater shark species.	It was never a target fishery in Ireland. Survival of by-catch will be very low for deepwater species such as this. (Clarket <i>et al.</i> 2016) However, they are no longer caught in Ireland and none of the species have appeared in fisheries logbook data in the last three years, even as reported discards. (<i>pers comm</i> Irish Marine Institute 3rd September 2024)	The main body of measures for the management and conservation of cartilaginous fish in Irish waters is the European Union (EU) Common Fisheries Policy (CFP) framework .Since 2010, the European Union Fisheries Council prohibited direct fishing for deep-water sharks (EU 2010), in European Community and international waters, and in 2012, no allowances for bycatch were implemented (Finucci <i>et al.</i> 2020)
Rough Longnose Dogfish	<i>Deania mauli</i> Not evaluated	Not caught in Ireland and not appeared in fisheries logbook data in the last three years, even as reported discards. (<i>pers comm</i> Irish Marine Institute 3rd September 2024)	The main body of measures for the management and conservation of cartilaginous fish in Irish waters is the European Union (EU) Common Fisheries Policy (CFP) framework .Since 2010, the European Union Fisheries Council prohibited direct fishing for deep-water sharks (EU 2010), in European

			Community and international waters, and in 2012, no allowances for bycatch were implemented (Finucci <i>et al.</i> 2020)
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3. This information could potentially assist a Party in: a) developing actions they can take for the conservation and management of gulper sharks; b) developing actions that could be brought to the attention of relevant Regional Fisheries Bodies (RFBs); and c) assessing the need for preparing a proposal to include the gulper sharks in the CITES Appendices.

Ireland provides the following information in relation to (a) (b) and (c) below

a) developing actions they can take for the conservation and management of gulper sharks; b) developing actions that could be brought to the attention of relevant Regional Fisheries Bodies (RFBs);

There are strong legislative conservation measures and management in place for these species in operation in Ireland and the European Union as a region, as there is now a ban on deepwater trawling in EU waters (EU 2010), they are no longer caught in Ireland and none of the species have appeared in fisheries logbook data in the last three years, even as reported discards (*pers comm* Irish Marine Institute 3rd September 2024) .

and c) assessing the need for preparing a proposal to include the gulper sharks in the CITES Appendices.

These species however have not been assessed in Ireland since 2016 so data presented may need to be reassessed under IUCN criteria and any additional information on these species and their trade in Ireland since 2016 also assessed to inform if any need for additional international conservation measures on CITES or CMS.

References

- Clarke, M., Farrell, E.D., Roche, W., Murray, T.E., Foster, S. and Marnell, F. (2016) Ireland Red List No. 11: Cartilaginous fish [sharks, skates, rays and chimaeras]. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. Dublin, Ireland.
- EU (2010). COMMISSION REGULATION (EU) No 1201/2010 of 15 December 2010 establishing a prohibition of fishing for deep-sea sharks in Community waters.
- Finucci, B., Bineesh, K.K., Cheok, J., Cotton, C.F., Dharmadi, Kulka, D.W., Neat, F.C., Pacoureaux, N., Rigby, C.L., Tanaka, S. & Walker, T.I. 2020. *Centrophorus squamosus*. The IUCN Red List of Threatened Species 2020: e.T41871A68614964.
<https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T41871A68614964.en>

**Information from Japan in response to CITES Notification 2024/088
regarding the request for information on gulper sharks (*Centrophoridae spp.*)**

In response to CITES Notification 2024/088 regarding the request for information on gulper sharks, Japan hereby submits the following:

1. Gulper sharks (*Centrophoridae spp.*) are caught by a few local fishers operating in Japan's Exclusive Economic Zone (EEZ) for their meat and squalene-rich liver oil. Some local companies sell their products such as cosmetics, dietary supplements and meats. There are some conservation management measures conducted by fishers including restriction of fishing areas for the sustainable use of the species.
2. There are no Japanese flag vessels targeting gulper sharks outside of Japan's EEZ such as in the convention areas of Regional Fisheries Management Organizations (RFMOs). However, Japan would like to inform of conservation and management measures implemented by RFMOs and other relevant information concerning this species.
 - i. Southern Indian Ocean Fisheries Agreement (SIOFA)
 - CMM 12 (2023) Conservation and Management Measure for Sharks;
Prohibition of any fisheries targeting deep-sea sharks including gulper sharks, record and reporting requirements for all deep-sea sharks to the lowest taxonomical level etc.,
 - CMM 02 (2023) Conservation and Management Measure for the Collection, Reporting, Verification and Exchange of Data relating to fishing activities in the Agreement Area (Data Standards);
Record and reporting requirements including bycatch species retained or discarded, national scientific observer programs to collect from activities undertaken by vessels flying their flag etc.,
 - Ecological risk assessment of deepwater chondrichthyan species;
The Scientific Committee conducts ecological risk assessment by the Sustainability Assessment for Fishing Effects (SAFE) method in a regular basis and makes recommendation to the Meeting of Parties,
 - In accordance with the paragraph 12 and 13 of CMM 02 (2023), Japan submits the scientific observer report to the Secretariat. Only two cases of bycatches of *Centrophorus squamosus* by the midwater trawler flagged to Japan in 2021 and 2022 were reported.
 - In this RFMO, additional measures such as fishing gear regulation for deep sea sharks including gulper sharks have been under discussion.

- ii. South East Atlantic Fisheries Organisation (SEAFO)
 - Recommendation 1/2008 Banning of deep-water shark catches;
Prohibition of deep-water shark directed fisheries in the Convention Area until additional information becomes available to identify sustainable harvesting levels.
 - Conservation Measure 04/06 on the Conservation of Sharks;
Requirement of annual data reporting for sharks, full utilization defined as retention by the fishing vessel of all parts of the shark excepting head, guts and skins, to the point of first landing etc.,
 - In accordance with system of observation, inspection, compliance and enforcement (2022), Japan submits all information from scientific observer programme. There has been no bycatch of gulper sharks by fishing vessel flagged to Japan.
- iii. Northwest Atlantic Fisheries Organization (NAFO)
 - Article 12 – Conservation and Management of Sharks;
Requirement of reporting for all catches of sharks etc.,
 - There has been no bycatch of gulper sharks by fishing vessel flagged to Japan.
- iv. Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)
 - Conservation Measure 32-18 (2006) Conservation of sharks;
Prohibition of directed fishing on shark species, for purposes other than scientific research, alive release of any sharks from bycatch
 - There has been no bycatch of gulper sharks by fishing vessel flagged to Japan.
- v. North Pacific Fisheries Commission (NPFC)
 - CMM 2023-14 Conservation and Management Measure on sharks;
Prohibition on shark finning, on-board record of interactions with sharks, requirement of annual reporting of all shark catches to the extent possible by species etc.,
 - There is no record of the catch and landing of gulper sharks harvested in the Convention Area of NPFC from any activity including scientific research, and Gulper sharks are not listed in the NPFC bycatch species list. No case of bycatch was observed and there is no information of distribution around the Emperor Seamount area.
3. Lastly, Japan would like to take this opportunity to deliver its position that shark resources are very important, and we will continue to contribute to the sustainable use of these precious stocks through domestic regulations and

cooperation with other countries and organizations such as Regional Fisheries Bodies.



Respuesta de México a la Notificación a las Partes 2024/088 “Solicitud de información sobre los quelvachos (*Centrophoridae spp.*)”

25 de septiembre de 2024

a) Capturas, el uso y el comercio de los tiburones quelvachos y sus productos:

En México se distribuyen dos especies de la familia Centrophoridae (*Centrophorus granulosus* y *Centrophorus uyato*), ambas en el Atlántico.

De acuerdo a la Ley General de Pesca y Acuacultura Sustentables, en su Artículo 29 establece que el Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentables (IMIPAS, antes INAPESCA) será el órgano administrativo con personalidad jurídica y patrimonio propio, encargado de dirigir, coordinar y orientar la investigación científica y tecnológica en materia de pesca y acuacultura, así como el desarrollo, innovación y transferencia tecnológica que requiera el sector pesquero y acuícola.

Estudios recientes realizados por el IMIPAS a través del Programa Regional de Investigación Pesquera de Elasmobranchios en el Golfo de México y Mar Caribe, reportaron un total de 26 especies de tiburones en pesquerías dirigidas, de las cuales la captura del cazón espinoso (*Centrophorus uyato*) representó el 0.03% de la abundancia en número de individuos. De acuerdo con los resultados del análisis de productividad y susceptibilidad (PSA) para *C. uyato* se demostró que es una especie con bajo riesgo y vulnerabilidad ($V= 1.42$), derivado de su productividad biológica ($P= 1.60$) y su susceptibilidad ($S= 1.25$) (DOF, 09/06/2022). Asimismo, se ha determinado mediante los proyectos de investigación operando en la región, que es una especie que no representa un importante recurso comercial. Por otro lado, para el caso de la región del Pacífico mexicano, no se tienen registros acerca de la captura comercial de tiburones de la familia Centrophoridae.

La Procuraduría Federal de Protección al Ambiente (PROFEPA) y la Agencia Nacional de Aduanas de México (ANAM), señalan que no tienen registro de procedimientos, aseguramientos, decomisos o registros de verificación de movimientos transfronterizos de quelvachos (*Centrophoridae spp.*).

b) Medidas de conservación para las especies:

A escala internacional, México ha incorporado las siguientes medidas de conservación directa e indirectamente para los elasmobranchios; integrando voluntariamente 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).

A nivel nacional, las estrategias para el aprovechamiento sostenible y conservación a largo plazo de tiburones y rayas se basan en el Plan de Acción Nacional para el Manejo y Conservación de Tiburones, Rayas y Especies Afines en México (PANMCT, próximo a publicar

su actualización) (CONAPESCA-INP, 2004), la Norma Oficial Mexicana NOM-029-PESC-2006, Pesca responsable de tiburones y rayas. Especificaciones para su manejo (DOF, 14/02/2007); 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).

Dentro de los instrumentos creados para apoyar la Política Nacional de Pesca y Acuacultura se encuentran los Planes de Manejo Pesquero (PMP). La Ley General de Pesca y Acuacultura Sustentables (LGPAS) señala que el Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentables (IMIPAS, antes INAPESCA) es el encargado de elaborar dichos planes, es por ello que recientemente el IMIPAS 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). Estas fichas contienen el resumen de la información 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. 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 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.

Dentro de todos los instrumentos de conservación mencionados para México, las especies de quelvachos Centrophoridae: *Centrophorus granulosus* (Bloch y Schneider, 1801) y *Centrophorus uyato* (Rafinesque, 1810) conocidos comúnmente como cazón espinoso, son incluidos en dichas medidas de conservación.

Respuesta

Notificación a las Partes No. 2024/088

Solicitud de información sobre los quelvachos (*Centrophoridae spp.*)

La Secretaría invita a las Partes y organizaciones a proporcionar información sobre lo siguiente:

- **a) las capturas, el uso y el comercio de los tiburones quelvachos y sus productos, y**

Los Quelvachos (quelves), Gluper Sharks en inglés, corresponden al género *Centrophorus* spp. (Squaliformes, Centrophoridae), las cuales son muy similares entre sí, y difícil de diferenciar entre especies por parte de los pescadores, aunque en su mayoría las capturas reportadas pertenecen a las especies: *Centrophorus granulosus*, *Centrophorus squamosus* y *Centrophorus uyato*.

En general son especies demersales, con escasos desplazamientos tanto horizontales, como en vertical en la columna de agua. Las tres especies catalogadas como En Peligro según la lista roja de la IUCN (Gullart et al., 2015; Finucci et al., 2022a, 2022b). Junto a *Centrophorus lusitanicus*, las anteriores especies (es decir, *C. granulosus*, *C. squamosus* y *C. uyato*) están incluidas entre las especies reportadas como bycatch en las pesquerías de ICCAT (de Bruyn & Palma, 2015).

Salvo *C. squamosus*, *C. granulosus* y *C. uyato* presentan una amplia distribución global, por lo que son especies que pueden verse afectadas por diferentes flotas españolas en diferentes caladeros (Figuras 1-3).

Pueden comercializarse bajo el mismo nombre y pueden introducirse como carne fresca, seca-salada o seca y ahumada, mientras que las aletas entran en el comercio internacional. **El aceite que se extrae del hígado es muy apreciado, y alcanza un alto valor en el mercado de primera venta.**



Figura 1. Mapa de distribución de *Centrophorus granulosus*, extraído de: <https://www.iucnredlist.org/>



Figura 2. Mapa de distribución de *Centrophorus squamosus*, extraído de: <https://www.iucnredlist.org/>



Figura 3. Mapa de distribución de *Centrophorus uyato*, extraído de: <https://www.iucnredlist.org/>

Existen tres áreas dónde la captura de Quelvachos es más alta: Mediterráneo andaluz, CEEAF y SIOFA.

En el **Mediterráneo andaluz** los quelvachos representan un bycatch con capturas que oscilan en los últimos 10 años entre 840 y 5586 kilos (Figura 4).

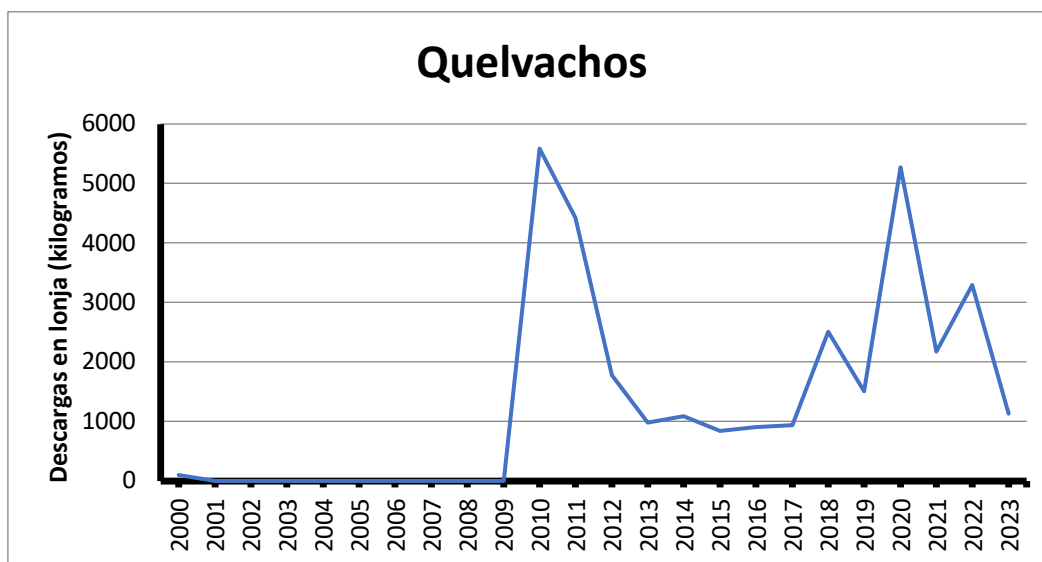


Figura 4. Descargas reportadas de Quelvachos+Quelve en las lonjas del Mediterráneo andaluz. Fuente: IDAPES: <https://www.juntadeandalucia.es/agriculturaypesca/idapes/servlet/FrontController?ec=observatorio>

En el área de **CEEAF** la especie que se captura más frecuentemente es *C. squamosus*, cómo en el Mediterráneo andaluz las capturas oscilan fuertemente entre los **979 a 5762 kilos** (Figura 5).

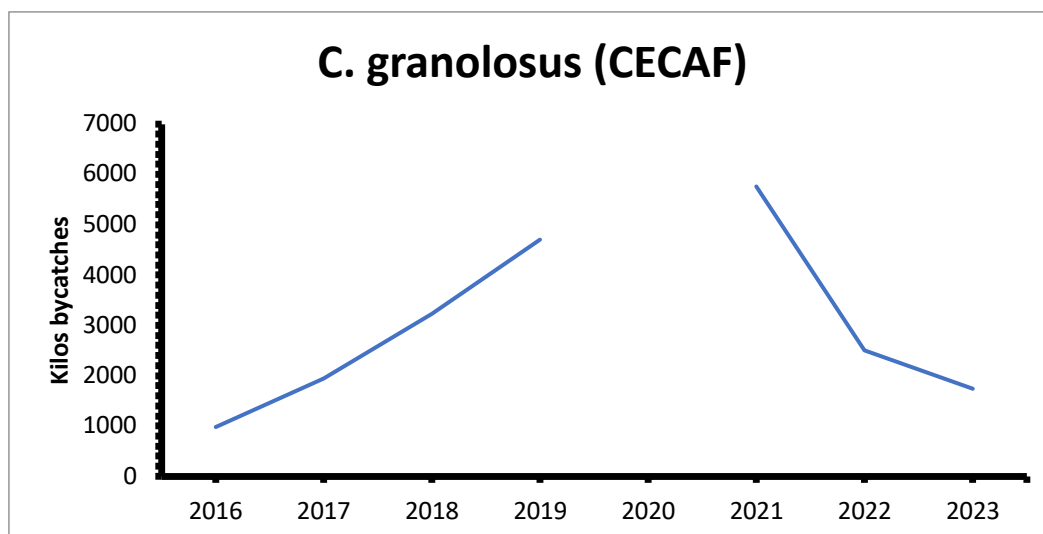


Figura 5. Descargas reportadas de *C. granulosus* en las pesquerías de CECAF. Fuente: Datos Observadores del equipo CECAF.

En el área de SIOFA *C. granulosus* y *C. squamosus* son la segunda y tercera especie con mayor bycatch en las pesquerías españolas de palangre de fondo (Figura 6).

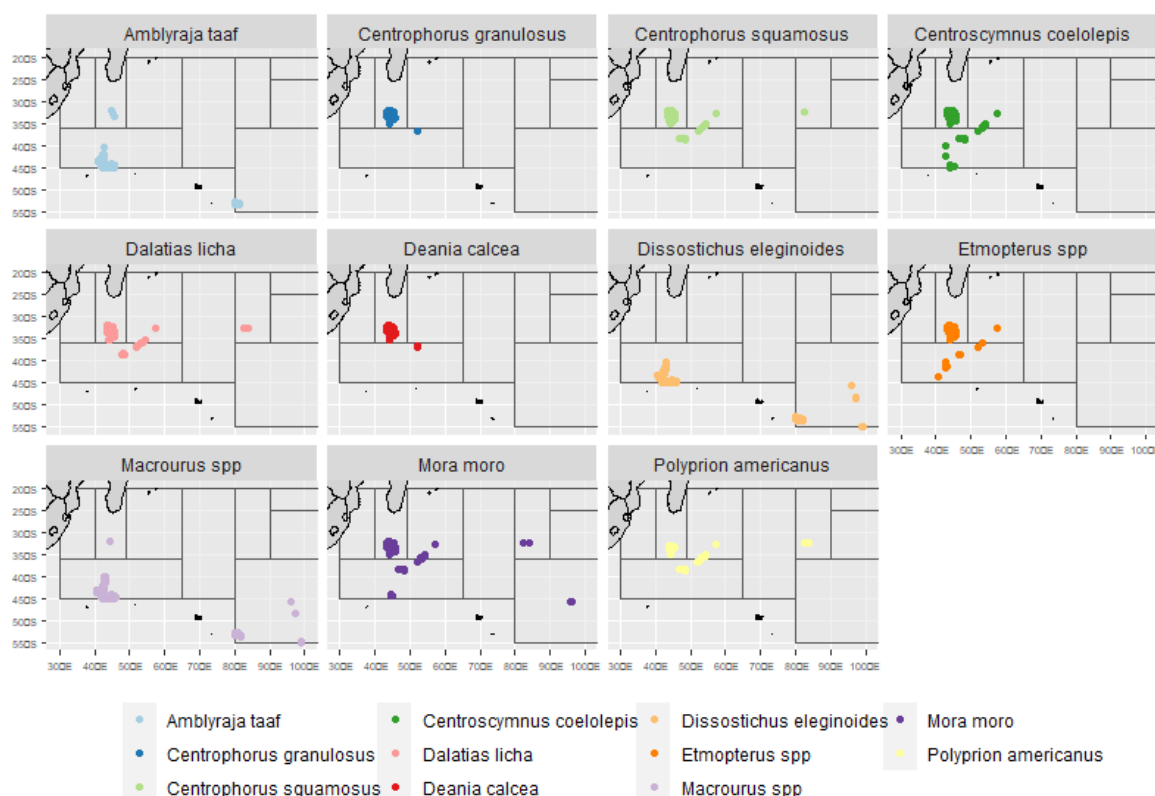


Figura 6. Distribución del bycatch en las pesquerías españolas de palangre de fondo en el área de SIOFA. Fuente: Rueda et al. (2023).

No existe una evaluación del Stock de estas especies en su área de distribución.

- **b) las medidas de conservación para las especies.**

España no aplica medidas de conservación sobre estas especies.

Referencias

de Bruyn, P. & Palma, C. (2015). Updated species list for sharks caught in ICCAT fisheries SCRS/2014/027 Collect. Vol. Sci. Pap. ICCAT, 71(6): 2557-2561.

Finucci, B., Bineesh, K.K., Cotton, C.F., Dharmadi, Kulka, D.W., Neat, F.C., Pacoureaux, N., Rigby, C.L., Tanaka, S. & Walker, T.I. (2020). *Centrophorus uyato*. The IUCN Red List of Threatened Species 2020a: e.T41745A124416090. <https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T41745A124416090.en>. Accessed on 11 September 2024.

Finucci, B., Bineesh, K.K., Cheok, J., Cotton, C.F., Dharmadi, Kulka, D.W., Neat, F.C., Pacoureaux, N., Rigby, C.L., Tanaka, S. & Walker, T.I. (2020). *Centrophorus granulosus*. The IUCN Red List of Threatened Species 2020b: e.T162293947A2897883. <https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T162293947A2897883.en>. Accessed on 11 September 2024.

Gualart, J., Walls, R.H.L. & White, W.T. (2015). *Centrophorus squamosus* (Europe assessment). The IUCN Red List of Threatened Species 2015: e.T41871A48954989. Accessed on 11 September 2024.

Rueda, L., Sarraalde, R., Rodríguez-Cabello, C. & Báez, J.C. (2023). Preliminary analysis of the Spanish longline fishery operating in SIOFA. Deepwater Sharks Workshop, SIOFA (WS2023-DWS). Tenerife, Spain, 20-21 March 2023

2024-09-10

**Response to notification No. 2024/088 Request for information on gulper sharks
(*Centrophoridae* spp.)**

Sweden would like to provide the following information on gulper sharks (*Centrophoridae* spp.):

a) catches, use of and trade in gulper sharks and their products

Sweden has not registered any catches, use or trade in gulper sharks or their products.
Gulper sharks have not been reported from Swedish waters.

b) conservation measures for the species.

Within the framework of Convention for the Protection of the Marine Environment in the North-East Atlantic (OSPAR), work has been undertaken to protect the most threatened cartilaginous fish. Two species of gulper sharks are included on the OSPAR List of Threatened and/or Declining Species & Habitats (OSPAR, 2021). OSPAR Recommendations for protection and conservation have been developed for *Centrophorus granulosus* and *Centrophorus squamosus*:

- Recommendation 2014/04 on furthering the protection and conservation of the leafscale gulper shark (*Centrophorus squamosus*) in the OSPAR maritime area
- Recommendation 2014/03 on furthering the protection and conservation of the gulper shark (*Centrophorus granulosus*) in Regions IV and V of the OSPAR maritime area

The recommendations include protection in national and international legislation, designation of marine protected areas, information on the status of threatened species, development of identification guides and campaigns to encourage increased reporting.

The North-East Atlantic Fisheries Commission (NEAFC) and OSPAR have together requested and received scientific information on deep-water sharks from the International Council for the Exploration of the Sea (ICES) in 2020 (ICES sr.2020.09) and ICES is providing NEAFC with scientific advice for gulper shark at regular intervals according to an established MoU between the organisations (NEAFC-ICES). In 2019, ICES advised for Leafscale gulper shark that “when the precautionary approach is applied there should be zero catches in each of the years 2020–2023.”

In international waters in the North-East Atlantic, bottom fishing is only allowed in defined bottom fishing areas, according to NEAFC Recommendation 19:2014. In addition, the EU Regulation 2016/2336 establishing specific conditions for fishing for deep-sea stocks in the North-East Atlantic and provisions for fishing in international waters of the North-East Atlantic, contains further specifications and regulations.



No. 0510.5/10724

Department of Fisheries
Kaset Klang, Chatuchak
Bangkok, Thailand 10900

25 September B.E. 2567 (2024)

Dear CITES Secretariat,

Subject: Information on Gulper sharks (Centrophoridae)

Reference is made to the Notification to the parties No. 2024/088 dated 12 August, 2024 at its 33rd meeting (AC33, Geneva, July 2024), the Animals Committee invited the Secretariat to issue a Notification to the Parties inviting Parties and organizations to provide information on Gulper sharks (Centrophoridae).

In this regard, the Department of Fisheries (DoF), Ministry of Agriculture and Cooperatives, would like to submit relevant information on Gulper sharks (Centrophoridae) as follows:

1. Gulper sharks (Centrophoridae) are included in order Squaliformes were found in Thai waters. The collaborative project between the Department of Fisheries and the FAO conducted by the Fridtjof Nansen survey vessel in the Andaman Sea between the 1 - 15 October 2018 reported that there are three species of Gulper sharks were found which are *Centrophorus granulosus* (Bloch and Schneider, 1801) *C. isodon* (Chu, Meng & Liu, 1981) and *C. uyato* (Rafinesque, 1810) (Tasapol et al., 2019). However, there were no reports from surveys and data collection by survey vessels of the Marine Fisheries Research and Development Division, nor were found in catch certificate of Thai fishing vessels operate outside Thai waters.

2. Utilization and commercial of Gulper sharks between 2014 and 2019, there was no export information and Thailand imported one species (*Centrophorus granulosus* Bloch and Schneider, 1801) for 114.81 tons (34.02 million Baht). However, there is no import of Gulper sharks (Centrophoridae) since 2020 onwards.

3. Conservation measures for Gulper sharks (Centrophoridae) are as follows:

3.1 Thailand has been a party to the Southern Indian Ocean Fisheries Agreement (SIOFA) since 21 May 2017. There is no Gulper sharks were catch by overseas fishing Vessels that operating in the Southern Indian Ocean. However, SIOFA has conservation and management measures for sharks in Centrophoridae in accordance with SIOFA under CMM 2023/12 on Sharks, which is management measure for Centrophoridae (the list of shark species is according to Annex I attachment CMM). In addition to Thai national laws and measures, the Department of Fisheries has enforced the Notification on Requirement and Regulations of Overseas Fishing Vessels which are Operating in the Area under the Southern Indian Ocean Fisheries Agreement (SIOFA) B.E. 2567 (2024) dated 7 May 2024 and regulations as follows:

(1) Clause 25 In the event of fishing vessel has incidental bycatch as appear in the Appendix of this Notification including VME organisms and deep-sea sharks. The master shall record the data by using the format of the Incidental catch logsheet of SIOFA. For each at-sea transshipment, the master shall deposit this report with the receiving vessel after the activity is finished.

If there is no at-sea transshipment, the format of "the Incidental catch logsheet of SIOFA" shall be submitted to the Port-In Port-Out Control Centre when port arrival.

(2) Clause 27 The licensees are prohibited from catching deep-sea sharks listed in the Appendix of this Notification as target species within the SIOFA Agreement area.

3.2 Thailand has been a party of the Indian Ocean Tuna Commission (IOTC) and there are five relevant resolutions on shark conservation and management, including:

(1) Resolution 18/02 on management measures for the conservation of blue shark caught in association with IOTC fisheries

(2) Resolution 17/05 on the conservation of sharks caught in association with fisheries managed by IOTC

(3) Resolution 13/05 on the conservation of Whale sharks (*Rhincodon typus*)

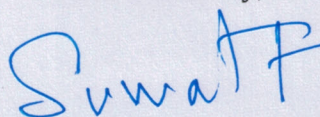
(4) Resolution 13/06 on a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries

(5) Resolution 12/09 on the conservation of Thresher sharks (family Alopiidae) caught in association with fisheries in the IOTC area of competence

In addition, the Department of Fisheries has enforced the Fisheries Department's Announcement on Criteria and Practices for Fishing Vessels Outside Thai Waters Operating in Areas Under the Responsibility of the Indian Ocean Tuna Commission B.E. 2567 (2024) dated 7 May 2024 and the Fisheries Department's Announcement on Criteria and Practices for Fishing Vessels Transporting Aquatic Animals Outside Thai Waters Operating in Areas Under the Responsibility of the Indian Ocean Tuna Commission B.E. 2567 (2024) dated 7 May 2567 to be consistent with the IOTC's shark conservation and management measures and to comply with international obligations.

Should you require further information, please do not hesitate to contact us.

Yours sincerely,



(Mr. Suwatt Wongsuwat)

Deputy Director-General

For Director-General

CITES Secretary-General
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Avenue de la Paix 8-14
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Rapport de la TUNISIE

Sur les requis de la famille des *Centrophoridae*

Suite à la notification 2024/088, en date du 12 août 2024, concernant la demande d'informations sur les requins de la famille des *Centrophoridae*, j'ai l'honneur de vous informer que la famille des *Centrophoridae* est représentée dans les eaux tunisiennes par une seule espèce, « *Centrophorus uyato* ».

a- les captures, l'utilisation et le commerce des requins de la famille des *Centrophoridae* et leurs produits

Ces poissons benthiques vivent à des profondeurs allant de 150 à 1 000 mètres. Elles sont capturées accidentellement sur les côtes nord de la Tunisie principalement par le chalut durant l'été et l'automne. Il n'existe pas de statistiques officielles sur les quantités débarquées.

Les *Centrophoridae* sont commercialisés sous l'appellation «Kalb bhar» uniquement sur les marchés locaux. Seulement la chair est vendue pour être consommée. Aucun produit secondaire (ailerons et huile) n'est exploité.

b- les mesures de conservations de ces espèces

L'État tunisien s'est engagé dans l'effort mondial de protection des poissons cartilagineux (requins et raies) et a pris de nombreuses mesures de conservation, notamment la ratification des accords internationaux et la mise en œuvre des mesures qui en découlent.

Parmi les outils législatifs adoptés par la République Tunisienne, on cite principalement :

- Plans d'action pour la conservation des poissons cartilagineux en Méditerranée
- Plans d'action de l'Organisation des Nations unies pour l'alimentation et l'agriculture (FAO) concernant les requins
- Recommandations de la Commission Générale des Pêches pour la Méditerranée concernant la conservation des requins et des raies dans la zone d'application de la CGPM (Recommandation GFCM/36/2012/3 et Recommandation GFCM/42/2018/2)

Au niveau local, il n'existe aucune loi régissant la pêche de ce type de poisson. Cependant, la loi réglementant la pêche maritime en Tunisie est en cours de révision pour inclure les espèces menacées dans la liste des espèces interdites à la pêche (espèces inscrites à l'Annexe II de la Convention de Barcelone).

**Organe de gestion de la CITES,
Tunisie**

**UK response to Notification 2024/088:
Request for information on gulper sharks (*Centrophoridae* spp.)**

At its 33rd meeting (AC33, Geneva, July 2024), the Animals Committee invited the Secretariat to issue a Notification to the Parties inviting Parties and organizations to provide information on gulper sharks (*Centrophoridae* spp.), having noted that the Animals Committee has identified gulper sharks as species of concern since 2004 and that there has been continuing decline in population of these species (see summary record AC33 Sum. 4).

The Secretariat invites Parties and organisations to provide information on the following:

A. Catches, use of and trade in gulper sharks and their products, and

Please note that there are taxonomic uncertainties with the genus *Centrophorus* and so the number of species recognised as valid may vary. For that reason, if a listing is proposed, then a nomenclature specialist from the Animals Committee should be consulted as early as possible in advance of submitting the proposal, in line with [Resolution Conf. 9.24 \(Rev. CoP17\)](#) on 'Criteria for amendment of Appendices I and II'.

The family Centrophoridae contains ca. 19 species within two genera (*Centrophorus* and *Deania*). Five of these species occur in deep water in the UK EEZ. These are primarily the species *Centrophorus squamosus* and *Deania calcea*. The species found in the UK EEZ are stated in the table below:

Scientific name	Common name	Red List category
<i>Centrophorus granulosus</i>	Gulper shark	EN (CR Europe & Med)
<i>Centrophorus squamosus</i>	Leafscale gulper shark	EN (EN Europe)
<i>Centrophorus uyato</i>	Little gulper shark	EN (Vu Europe)
<i>Deania calceus</i>	Birdbeak dogfish	NT (EN Europe)
<i>Deania profundorum</i>	Arrowhead dogfish	NT (DD Europe)

The UK had a deep-water fishery primarily for leafscale gulper shark *Centrophorus squamosus* and Portuguese dogfish *Centroscymnus coelolepis*, but this has been phased out. When the fishery was active, from the mid-1990s to mid-2000s UK registered vessels landed >1500 tonnes per annum. Our records state these landings as being for gulper shark and leafscale gulper shark, however please note that this data most likely relates to gulper sharks in general and not specifically the gulper shark, *Centrophorus granulosus* species. Since 2000, landings declined due to increasingly restrictive management measures. Please see table below:

Year	TAC ^[1]	UK allocation	Comments	Regulation
2003	NA	NA	No regulations affecting landings of sharks	2340/2002 of 16 December 2002
2004	NA	NA		

2005	6 763 t	1 538 t	TAC introduced	2270/2004 of 22 December 2004
2006	6 763 t	1 538 t		
2007	2 472 t	562 t	TAC stipulated for bycatch only	2015/2006 of 19 December 2006
2008	1 646 t	375 t	Bycatch only	
2009	824 t	187 t	Bycatch only	1359/2008 of 28 November 2008
2010	0 t	0 t	Bycatch of up to 10% of 2009 quota permitted	
2011	0 t	0 t	Bycatch of up to 3% of 2009 quota permitted	1225/2010 of 13 December 2010
2012	0 t	0 t		
2013	0 t	0 t		1262/2012 of 20 December 2012
2014	0 t	0 t		
2015	0 t	0 t		1367/2014 of 15 December 2014
2016	0 t	0 t		
2017	10 t	-	Exclusively for bycatch in longline fisheries targeting black scabbardfish. No directed fisheries.	2016/2285 of 12 December 2016
2018	10 t	-		
2019	7 t	-		2018/2025 of 17 December 2018
2020	7 t	-		
2021	-	-	Prohibited species	2021/91 of 28 January 2021
2022	-	-	Prohibited species	
2023	v	-	Prohibited species	2023/194 of 30 January 2023
2024	-	-	Prohibited species	UK-EU written record
[1] ICES Subareas 5-9 (EU and international waters)				

Since the TAC has been phased out, there have been no commercial landings from 2012 onwards. Landings in the above table from 2017-2020 are bycatch landings from longline fisheries targeting black scabbardfish (mostly our Iberian fleet). Landings have been prohibited since 2021 although the scale of any bycatch and discards is uncertain.

The UK has measures to limit the use of bottom trawls and gillnets in deepwater, which reduces fishing pressure on the species.

Regarding trade, there are several international scientific studies on this family of sharks and so the export of tissue samples from the UK is expected to take place.

These sharks are exploited primarily for liver oils which are used in cosmetic and pharmaceutical products. We do not have UK trade data for these sharks and their parts/derivatives. However, products containing ‘shark liver oil’ or ‘shark squalene oil’ can be purchased in the UK on the internet from domestic and international sellers.

It is known that international liver-oil trade is a major driver of targeted fisheries and retention of incidental catch for many deepwater sharks around the world, and specifically, gulper shark liver oil is in demand for its very high squalene content, and this family accounts for more than one-quarter of species taken for liver oil (Finucci et al., 2024).

B. Conservation measures for the species

As stated above, it is prohibited to fish for, retain on board, tranship or land sharks from the family *Centrophoridae* in the UK. If accidentally caught, specimens shall be promptly released and not harmed. Furthermore, there are measures in place to limit the use of bottom trawls and gillnets in deepwater to alleviate fishing pressure on species in this family.

Cayman Islands

Species record: 2 specimens (2018 and 2024)

Use: Not applicable

Trade: Not applicable

Conservation measures: All shark species have 100% protection under the National Conservation Act (2013, in force since 2015). Under this law, it is illegal to “take” any shark within Cayman’s coastal or offshore waters. “Take” means it is illegal to harm, possess or kill a shark with stiff penalties if convicted (NAC, 2013). The boundaries of Marine Parks extend to the 150ft depth contour which means that deep-sea fishing is unregulated and potentially unsustainable.

Comments: Please note, these records are evidence that gulper sharks occur in deep waters around the Cayman Islands, however this is no indication as to the status of this species because no systematic surveys targeting this species were conducted. Each record represents an opportunistic observation; one by a fisher (unintentional catch) and one by DoE deep sea research (baited remote underwater survey) funded by a Darwin Plus Grant 2022-2024 (from DEFRA). Taking into account this evidence from over 15 years of incidental public shark sightings and 2 years of deep sea research, it is reasonable to assume that this species occurs in relatively low abundances in Cayman. However, for a systematic assessment whether the gulper shark in Cayman is at risk of local extinction, further research is needed examining relative abundances and estimating the stock of this species.

U.S. Response:
CITES Notification 2024/088: Request for information on gulper sharks
(Centrophoridae spp.)

In fulfillment of the request for information specified in CITES Notification 2024/088, please find the following information attached:

- Table of U.S. LEMIS data for U.S. imports of gulper sharks (Centrophoridae spp.) from August 2014 to August 2024.
- Table with data from a longline survey conducted by federal researchers at the Southeast Fisheries Science Center of the U.S. National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service. The survey was conducted in the Gulf of Mexico. Due to taxonomic uncertainty, the data should be considered at the genus level (Centrophorous).
- Report from the Australian Government Fisheries Research and Development Corporation 2009/024 written by Williams, A. et al. (May 2012) entitled, “Mapping the distribution and movement of gulper sharks, and developing a non-extractive monitoring technique, to mitigate the risk to the species within a multi-sector fishery region off southern and eastern Australia.” This report discusses management measures that might be helpful for considerations for other gulper shark species in other areas.
- No captures of gulper sharks were found in a review of records from the U.S. fleets operating in the Western and Central Pacific Ocean.

Response to Notification 2024/088 concerning a request for information on gulper sharks (Centrophoridae spp.).

TRAFFIC provides the following information that has been compiled by TRAFFIC's Senior Fisheries Advisor, Glenn Sant, together with Dr Cassandra Rigby, Dr Brittany Finucci, Adjunct Professor Colin Simpfendorfer, Dr Madeline Green, and Dr Sherman, with whom TRAFFIC has been collaborating in shark related issues.

We bring attention to the following relevant information: the IUCN Red List of Threatened Species gulper shark species assessments; a Science paper on the first comprehensive analysis of deepwater sharks and rays threats, population declines, and measures to halt declines; and a table of Range States for each of the gulper shark species.

1. The IUCN Red List of Threatened Species is the world's most comprehensive information source on the global extinction risk status. Each species assessment provides information on catches, use of and trade in gulper sharks and their products, and conservation measures. The status of all fifteen species of gulper sharks has been assessed and is noted below. The assessments include information on each species' range, population trends, habitat and ecology, use and trade, threats, and conservation measures. Recently revised gulper shark assessments will be published on the Red List website (<https://www.iucnredlist.org/>) on 22 October 2024; there is no change to any of the species' status. We will submit a revised version of this Response after the revised assessments are published with links to each species assessment.

The fifteen species of gulper sharks, their English common names and Red List status are:

Scientific Name	Common Name	IUCN Red List Status
<i>Centrophorus atromarginatus</i>	Dwarf gulper shark	Critically Endangered
<i>Centrophorus granulosus</i>	Gulper shark	Endangered
<i>Centrophorus harrissoni</i>	Harrisson's dogfish	Endangered
<i>Centrophorus isodon</i>	Blackfin gulper shark	Endangered
<i>Centrophorus lesliei</i>	African gulper shark	Endangered
<i>Centrophorus longipinnis</i>	Longfin gulper shark	Endangered
<i>Centrophorus moluccensis</i>	Endeavour dogfish	Vulnerable
<i>Centrophorus seychellorum</i>	Seychelles gulper shark	Least Concern
<i>Centrophorus squamosus</i>	Leafscale gulper shark	Endangered
<i>Centrophorus tessellatus</i>	Mosaic gulper shark	Endangered
<i>Centrophorus uyato</i>	Little gulper shark	Endangered
<i>Centrophorus westraliensis</i>	Western gulper shark	Data Deficient
<i>Deania calceus</i>	Birdbeak dogfish	Near Threatened
<i>Deania profundorum</i>	Arrowhead dogfish	Near Threatened
<i>Deania quadrispinosa</i>	Longsnout dogfish	Vulnerable

2. A recently published (March 2024) paper in the scientific journal Science entitled "*Fishing for oil and meat drives irreversible defaunation of deepwater sharks and rays*" (Volume 383, Issue 6687, Pages 1135-1141). The abstract of the paper notes that "Deepwater sharks and rays are among the most sensitive marine vertebrates to overexploitation. One-third of threatened deepwater sharks are targeted, and half of the species targeted for the international liver-oil trade are threatened with extinction. Steep population declines cannot be easily reversed owing to long generation lengths, low recovery potentials, and the near absence of management. Depth and spatial limits to fishing activity could improve conservation when implemented alongside catch regulations, bycatch mitigation, and international trade regulation. Deepwater sharks and rays require immediate trade

and fishing regulations to prevent irreversible defaunation and promote recovery of this threatened megafauna group.”

The paper is available at: <https://www.science.org/doi/10.1126/science.ade9121>. If you are unable to download the paper, to obtain a copy, please contact the lead author Brit Finucci at: brit.finucci@niwa.co.nz.

3. Range States for all Centrophoridae spp. Sources: Ebert et al. 2021a, b and IUCN Red List Assessments where range in addition to Ebert et al. 2021a, b is supported by publications. ✓ = extant, ? = presence uncertain.

Range States	<i>C. atromarginatus</i>	<i>C. granulosus</i>	<i>C. harrissoni</i>	<i>C. isodon</i>	<i>C. lesliei</i>	<i>C. longipinnis</i>	<i>C. moluccensis</i>	<i>C. seychellorum</i>	<i>C. squamosus</i>	<i>C. tessellatus</i>	<i>C. uyato</i>	<i>C. westraliensis</i>	<i>D. calceus</i>	<i>D. profundorum</i>	<i>D. quadrispinosa</i>
Albania											✓				
Algeria											✓				
Angola		✓			✓				✓		✓		✓	?	
Anguilla		✓									✓				
Antigua and Barbuda		✓									✓				
Aruba		✓									✓				
Australia		✓	✓				✓		✓		✓	✓	✓		✓
Bahamas		✓							✓		✓				
Barbados		✓									✓				
Belgium									✓						
Belize		✓									✓				
Benin		✓			✓						✓		?	?	
Bosnia and Herzegovina											✓				
Brazil		✓							?						
Cabo Verde											✓				
Cameroon		✓			✓						✓		?	?	
Cayman Islands		✓									✓				
Chile									✓				✓		
China		✓		✓											
Colombia		✓									✓				
Comoro Islands											✓				
Congo					✓						✓		?	✓	
Congo Democratic Republic					✓						✓		?	✓	
Costa Rica		✓									✓				
Côte d'Ivoire		✓			✓						✓		?		

Range States	<i>C. atromarginatus</i>	<i>C. granulosus</i>	<i>C. harrissoni</i>	<i>C. isodon</i>	<i>C. lesliei</i>	<i>C. longipinnis</i>	<i>C. moluccensis</i>	<i>C. seychelloru m</i>	<i>C. squamosus</i>	<i>C. tessellatus</i>	<i>C. uyato</i>	<i>C. westraliensis</i>	<i>D. calceus</i>	<i>D. profundorum</i>	<i>D. quadrispi nosa</i>
Croatia											✓				
Cuba		✓									✓				
Curaçao		✓									✓				
Cyprus											✓				
Denmark									✓						
Dominica		✓									✓				
Dominican Republic		✓									✓				
Ecuador													✓		
Ecuador (Galápagos)									✓						
Egypt											✓				
Equatorial Guinea		✓			✓						✓		?	✓	
Faroe Islands									✓				✓		
France		✓							✓		✓		✓		
French Guiana		✓									✓				
Gabon		✓			✓				✓		✓		?	✓	
Gambia		✓			✓						✓		?	✓	
Germany									✓						
Ghana		✓			✓						✓		?		
Gibraltar									✓		✓		✓		
Greece											✓				
Grenada		✓									✓				
Guadeloupe		✓									✓				
Guatemala		✓									✓				
Guinea					✓								?	✓	
Guinea-Bissau					✓								?	✓	
Guyana		✓									✓				
Haiti		✓									✓				
Honduras		✓									✓				

Range States	<i>C. atromarginatus</i>	<i>C. granulosus</i>	<i>C. harrissoni</i>	<i>C. isodon</i>	<i>C. lesliei</i>	<i>C. longipinnis</i>	<i>C. moluccensis</i>	<i>C. seychelloru m</i>	<i>C. squamosus</i>	<i>C. tessellatus</i>	<i>C. uyato</i>	<i>C. westraliensis</i>	<i>D. calceus</i>	<i>D. profundorum</i>	<i>D. quadrispi nosa</i>
Iceland									✓				✓		
India	✓	✓					?		✓		✓				
India (Andaman Islands)	✓	✓					✓								
Indonesia	✓	✓		✓		✓	✓		✓				✓		
Ireland									✓		✓		✓		
Israel											✓				
Italy											✓				
Jamaica		✓									✓				
Japan	✓	✓					✓		✓	✓	✓		✓		
Lebanon											✓				
Liberia					✓								?		
Libya											✓				
Madagascar		✓			✓						✓		✓	✓	
Malaysia							✓								
Maldives		✓		?					✓	✓					
Malta											✓				
Martinique		✓									✓				
Mauritania		✓			✓				✓		✓		✓	✓	
Mauritius		✓							✓						
Mayotte		✓									✓				
Mexico		✓									✓				
Monaco											✓				
Montenegro											✓				
Montserrat		✓									✓				
Morocco		✓			✓				✓		✓		✓	✓	
Mozambique		✓			✓		✓				✓				✓
Myanmar		✓					✓				✓				
Namibia		✓							✓		✓		✓	✓	✓
Netherlands									✓						

Range States	<i>C. atromarginatus</i>	<i>C. granulosus</i>	<i>C. harrisoni</i>	<i>C. isodon</i>	<i>C. lesliei</i>	<i>C. longipinnis</i>	<i>C. moluccensis</i>	<i>C. seychelloru m</i>	<i>C. squamosus</i>	<i>C. tessellatus</i>	<i>C. uyato</i>	<i>C. westraliensis</i>	<i>D. calceus</i>	<i>D. profundorum</i>	<i>D. quadrispi nosa</i>
New Caledonia			✓				✓								✓
New Zealand			✓						✓				✓		✓
Nicaragua		✓									✓				
Nigeria		✓			✓						✓		?	✓	
Norway									✓		✓				
Oman	✓			?										✓	
Pakistan	?													?	
Palestine, State											✓				
Panama		✓									✓				
Papua New Guinea	✓	✓				✓	✓								✓
Peru													✓		
Philippines		✓		✓		✓	✓		✓					✓	
Portugal		✓							✓		✓		✓		
Portugal (Azores)									✓				✓	✓	
Portugal (Madeira)		✓							✓		✓		✓		
Puerto Rico		✓									✓				
Réunion							✓								
Saint Kitts and Nevis		✓									✓				
Saint Lucia		✓									✓				
Saint Vincent and the Grenadines		✓									✓				
Sao Tome and Principe		✓											?		
Senegal		✓			✓				✓		✓		?	✓	
Seychelles		✓		?				✓							
Sierra Leone					✓								?		
Somalia	✓	✓												✓	
South Africa		✓					✓		✓		✓		✓	✓	✓

Range States	<i>C. atromarginatus</i>	<i>C. granulosus</i>	<i>C. harrissoni</i>	<i>C. isodon</i>	<i>C. lesliei</i>	<i>C. longipinnis</i>	<i>C. moluccensis</i>	<i>C. seychelloru m</i>	<i>C. squamosus</i>	<i>C. tessellatus</i>	<i>C. uyato</i>	<i>C. westraliensis</i>	<i>D. calceus</i>	<i>D. profundorum</i>	<i>D. quadrispi nosa</i>
Spain		✓							✓		✓		✓	✓	
Spain (Canary Islands)		✓			✓				✓		✓		✓	✓	
Sri Lanka	✓	✓		?			?		?		✓				
Suriname		✓													
Sweden									✓						
Syrian Arab Republic											✓				
Taiwan, Province of China	✓	✓		✓		✓	✓		✓		✓		✓	?	
Thailand		✓					✓								
Togo		✓			✓						✓		?		
Trinidad and Tobago		✓									✓				
Tunisia											✓				
Türkiye											✓				
United Kingdom of Great Britain and Northern Ireland		✓							✓		✓		✓	✓	
United States of America		✓							✓		✓		✓	✓	
United States (Hawaii)										✓					
Vanuatu							✓								✓
Venezuela		✓							✓		✓				
Virgin Islands (British)		✓									✓				
Virgin Islands (United States)		✓									✓				
Western Sahara		✓			✓				✓		✓		✓	✓	

Sources:

Ebert, D.A., Dando, M. and Fowler, S.F. 2021a. *Sharks of the World*. A complete guide. Princeton University Press, New Jersey.

Ebert, D.A. and Dando, M. 2021b. Field guide to sharks, rays & chimaeras of Europe and the Mediterranean. Princeton University Press, Plymouth, U.K.