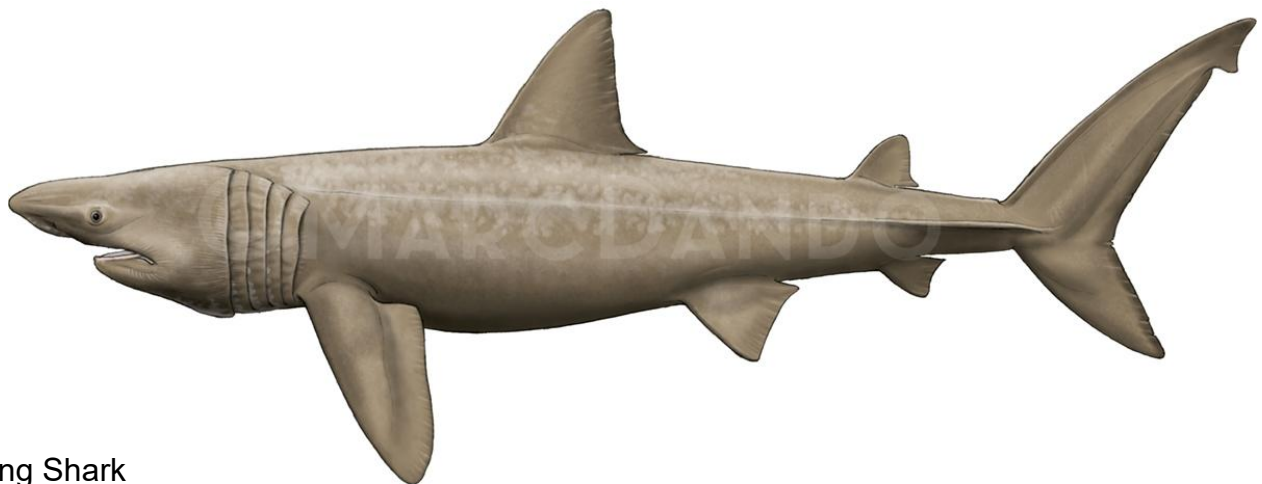


Fact Sheet

BASKING SHARK
REQUIN PÈLERIN
TIBURÓN PEREGRINO



Basking Shark
Cetorhinus maximus

BASKING SHARK

Class: *Chondrichthyes*

Order: *Lamniformes*

Family: *Cetorhinidae*

Species: *Cetorhinus maximus*

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This fact sheet was produced by the Advisory Committee of the Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MOU).

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1. Biology

Basking Shark (*Cetorhinus maximus*) is a large (up to 12 m) subtropical to temperate water species. It is a filter-feeder, and often forages around frontal systems and other oceanographic features with high densities of zooplankton. It can undertake considerable vertical (>1000 more than m) and horizontal movements (>over 9 000 km) (Skomal et al. 2009). Basking Shark has a low fecundity (~ca 6 pups per litter, every 2–4 years), and females attain sexual maturity at a late age (possibly 16–20 years) and size (>8 m) (Matthews 1950; Compagno 1984; Sims 2008).

2. Distribution

Basking Shark occurs in subtropical, temperate, and boreal waters of the North and South Atlantic (including the Mediterranean Sea), and North and South Pacific (Compagno 1984). It is mostly absent from the Indian Ocean and equatorial waters; however, transequatorial movements have been documented in the western Atlantic (Skomal et al. 2009; Braun et al. 2018).

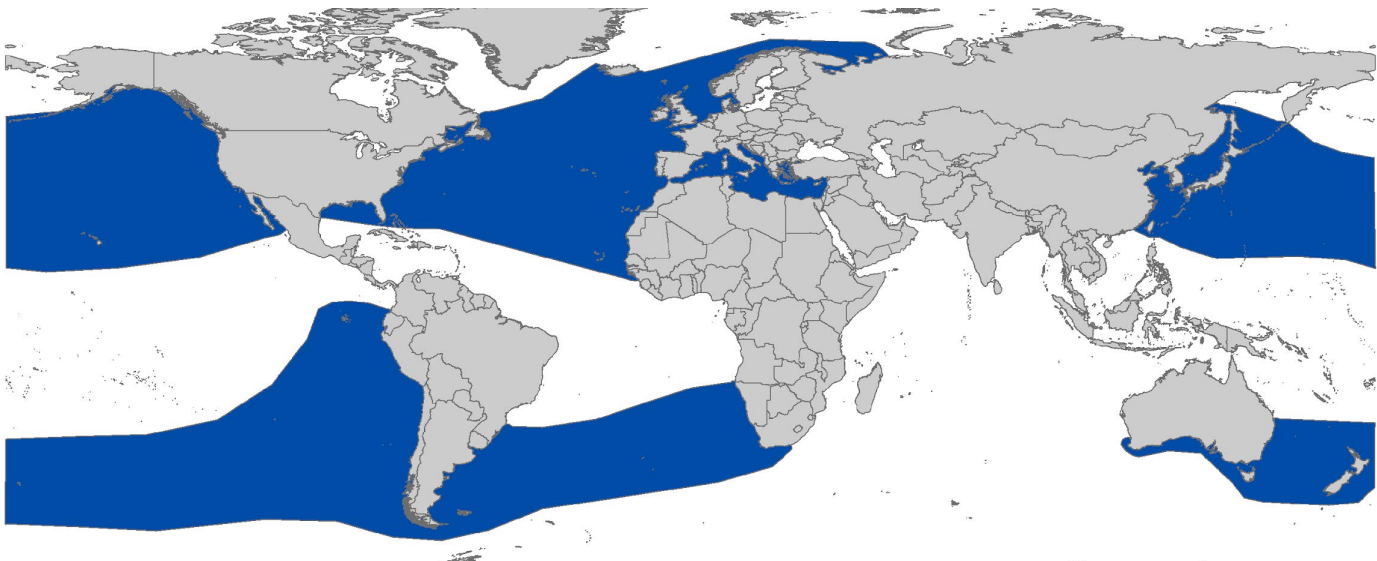


Figure 1: Distribution of Basking Shark (*Cetorhinus maximus*)¹.

3. Critical Sites

Critical sites are those habitats that may have a key role for the conservation status of a shark population, and may include feeding, mating, pupping, overwintering grounds and other aggregation sites, as well as corridors between these sites such as migration routes. Aggregation sites are documented in some areas including the western English Channel, off Scotland and Isle of Man in the Northeastern Atlantic (Sims 2008; Witt et al. 2012; Doherty et al. 2017); Lower Bay of Fundy and off Massachusetts in the Northwestern Atlantic (Kenney et al. 1985; Southall et al. 2008; Sims 2008; Curtis

¹ Map obtained from the International Union for Conservation of Nature (IUCN) on 20 November 2017.

et al. 2014; Hoogenboom et al. 2015; Crowe et al. 2018); Monterey Bay and off British Columbia in the Northeast Pacific (Compagno 1984; Squire 1990); and off New Zealand's South Island in the Southwest Pacific (Francis and Duffy 2002). Satellite tagging studies have revealed migration patterns and overwinter habitats in the Northwest and Northeast Atlantic, including mesopelagic waters of the Sargasso Sea and off the northern coasts of the Caribbean Islands and South America (Skomal et al. 2009; Braun et al. 2018), and continental slope waters off the western U.K., Bay of Biscay, and Iberian Peninsula (Doherty et al. 2017). However, critical sites and migration corridors have not been accurately defined in other regions.

4. Population Status and Trends

Most information available on the population status and trends is based on historical landings data and sightings databases. Stock units have not been fully defined and there are no accurate assessments of population size. The few available estimates of regional population sizes are highly uncertain (Campana et al. 2008; Westgate et al. 2014; Gore et al. 2016). The current IUCN Red List status for the global population is 'Vulnerable' (Fowler 2009). More details of the population status and trends can be found in the IUCN assessmentⁱⁱ.

5. Threats

- **Fisheries:** Basking Sharks were previously taken in target fisheries using strike nets and harpoons. They remain an incidental bycatch in gillnet and trawl fisheries and may also become entangled in ropes deployed with static gears (Francis and Duffy 2002; Campana et al. 2008).
- **International trade:** Given the high value associated with some body parts (e.g. fins), there is the potential for illegal trade (Magnussen et al. 2007).
- **Boat/Vessel strikes:** As Basking Sharks are large-bodied and occur in surface waters, there is the potential for vessel strike or propeller damage (Witt et al. 2012).

6. Key Knowledge Gaps

- Stock structure is uncertain.
- Recent and accurate estimates of population sizes, trends, and demographic structure are lacking.
- Information to better define migration routes and/or critical habitats for each life stage is incomplete.
- Information on discards and post-release survivorship is lacking.
- Life-history data are very limited.

ⁱⁱ The IUCN Red List of Threatened Species uses a set of criteria to evaluate the extinction risk of species and subspecies. For more information see <https://www.iucnredlist.org/>.

7. Key Management and Conservation Gaps

- Knowledge of population size and trends is available.
- Reporting and monitoring of bycatch levels, including post-release survivorship, is incomplete.
- Critical habitats have not been fully identified and delineated.

8. Suggestions for Conservation and Management Action

- a) Incorporate conservation measures for Basking Shark into national legislation of all Parties/Signatories (in compliance with the obligations of the for the Appendix I listed species of CMSⁱⁱⁱ and in line with the objectives of the Sharks MOU)**
- Implement relevant international conservation and enforcement measures, as required under CMS and CITES^{iv}.
- b) Improve the understanding of Basking Shark through strategic research, monitoring and information exchange, including distributional data and population status**
- Identify critical sites for Basking Shark.
 - Collate data from national/regional sightings schemes to ascertain their utility for monitoring population size, and consideration of fishery-independent monitoring, if current data are uninformative.
 - Enhance data collection from bycatch and stranded specimens and collaborative use of biological data, such as on their life-history (noting that the protected status of this species can restrict the collection of data and biological material from dead bycatch).
 - Improve reporting and monitoring of bycatch levels, including post-release survivorship, and consideration of bycatch avoidance measures where relevant.

ⁱⁱⁱ Convention on the Conservation of Migratory Species of Wild Animals (CMS).

^{iv} Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

9. Legal Instruments

Instrument:	Description:
Barcelona Convention Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean	Annex II: Endangered or threatened species; Parties shall ensure the maximum possible protection and recovery of, while prohibiting the damage to and destruction of, these species.
Bern Convention Convention on the Conservation of European Wildlife and Natural Habitats	Appendix II: Strictly protected fauna species; Contracting Parties shall ensure the special protection of these species through particularly prohibiting deliberate killing, taking, disturbance, trade and possession.
CCAMLR Commission for the Conservation of Antarctic Marine Living Resources	CCAMLR implements a comprehensive set of binding ecosystem-based measures in order to support the conservation of Antarctic marine living resources and the management of fisheries in the Southern Ocean.
CCSBT Commission for the Conservation of Southern Bluefin Tuna	CCSBT adopted WCPFC Conservation and Management Measure (CMM 2010-07)
CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora	Appendix II: Fishing states are required to demonstrate that any exports were derived from a sustainably managed population, enabling exports and imports to be monitored through a permit system.
CMS Convention on the Conservation of Migratory Species of Wild Animals	Appendix I: Migratory species threatened with extinction; CMS Parties strive towards strictly protecting these species, conserving or restoring the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them.

Instrument: **Description:**

Appendix II: Migratory species that have an unfavourable conservation status and need or would significantly benefit from international cooperation; CMS Parties shall endeavour to conclude global or regional agreements to benefit these species.

EU
European Union

Council Regulation (EC) No 1185/2003: Establishes a general prohibition of the practice of 'shark finning', whereby a shark's fins are removed and the remainder of the shark is discarded at sea.

Council Regulation (EU) 2018/120: Prohibits for Union vessels to fish for, to retain on board, to transship or to land Basking Shark in all waters. The regulation also prohibits third-country vessels to fish for, to retain on board, and to tranship Basking Shark in Union waters.

FAO
Food and Agriculture
Organization

IPOA Sharks: International Plan of Action for Conservation and Management of Sharks based on which states should adopt and implement a national plan of action for conservation and management of shark stocks (NPO Sharks) if their vessels conduct directed fisheries for sharks or if their vessels regularly catch sharks in non-directed fisheries.

GFCM
General Fisheries
Commission for the
Mediterranean

Rec. GFCM/36/2012/3: Shark species listed under Annex III of the Barcelona Convention cannot be retained on board, transshipped, landed, transferred, stored, sold or displayed or offered for sale and must be released unharmed and alive to the extent possible.

NEAFC
North East Atlantic
Fisheries Commission

NEAFC considers and designs recommendations and measures to ensure the protection and conservation of shark species related to fisheries in its region.

SEAFO
South East Atlantic
Fisheries Organization

In order to ensure long-term conservation of all living marine resources in its region, SEAFO considers and adopts conservation and management measures to protect shark species in the region as necessary.

Instrument:	Description:
Sharks MOU Memorandum of Understanding on the Conservation of Migratory Sharks	<u>Annex 1</u> : Signatories should endeavor to achieve and maintain a favorable conservation status for these species based on the best available scientific information and taking into account their socio-economic value.
SPRFMO South Pacific Regional Fisheries Management Organization	Considering both the precautionary approach and an ecosystem approach to fisheries management, SPRFMO adopts, as necessary, protocols and conservation measures meant to safeguard shark species related to fisheries in the area.
UNCLOS United Nations Convention on the Law of the Sea	<u>Annex I</u> : States whose nationals fish in the region for the highly migratory species listed in Annex I shall cooperate directly or through appropriate international organizations to ensure the conservation and optimum utilization of such species throughout the region, both within and beyond the exclusive economic zone.

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About the Sharks MOU

The Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MOU) is the first global instrument for the conservation of migratory species of sharks, rays, skates and chimaeras.

The Sharks MOU is an instrument of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) that engages all relevant stakeholders in addressing threats to migratory species in concert with all other aspects of wildlife conservation and management.

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