

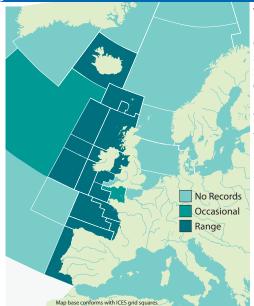
COMMON NAMES

Black Dogfish, Aiguillat (Fr), Tollo Negro (Es), Tollo Negro Merga (Es).

)SYNONYMS

Spinax fabricii (Reinhart, 1825).

DISTRIBUTION



The Black Dogfish is found in the east Atlantic from southern Iceland to Senegal and from Guinea to Namibia. It is also known in the western North Atlantic and has been observed in the western South Atlantic (Burgess and Bester, Unknown).

)APPEARANCE

- Two dorsal fins with grooved spines.
- First dorsal fin small and set well behind the pectoral fins.
- Second dorsal fin larger.
- No anal fin.
- Heterocercal caudal fin.
- Teeth with narrow cusps and cusplets in both jaws.
- Max TL at least 84cm, possibly to 107cm.

A medium sized deep sea shark, the Black Dogfish is the only member of the Centroscyllium genus known from the North Atlantic. The first dorsal fin is small and set well behind the pectoral fins. The second dorsal fin is noticeably larger and is set slightly behind the pelvic fins. Both have white, grooved dorsal spines. The dorsal lobe of the caudal fin is larger than the ventral lobe (Compagno, 1984).

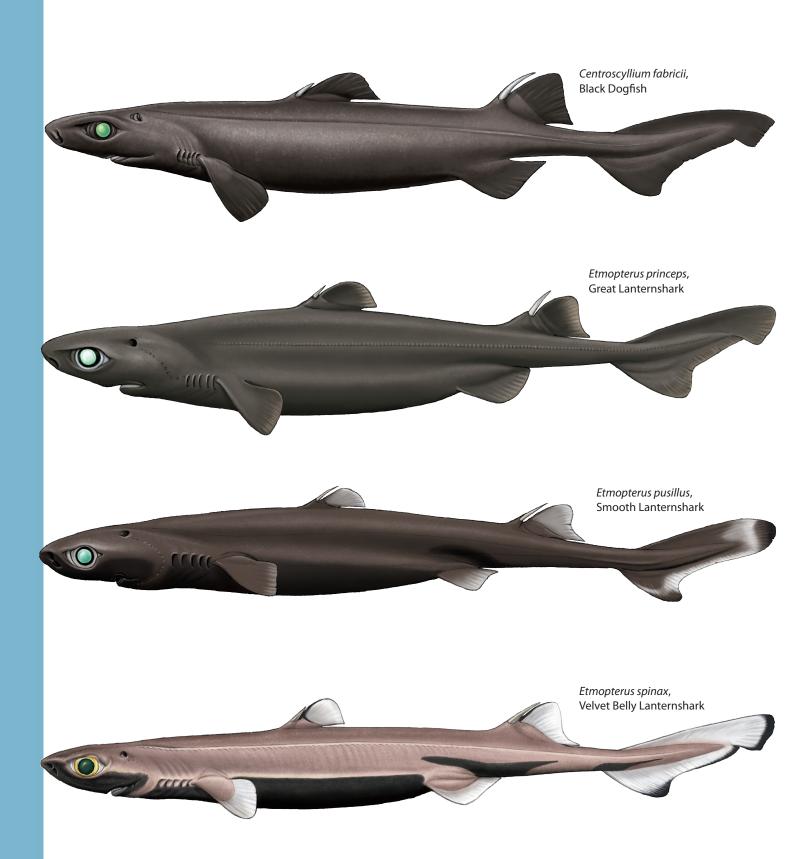
The teeth have narrow cusps and cusplets in both jaws. It has luminescent organs scattered in its skin, although they are not arranged in regular arrays as they often are in other deepwater elasmobranchs. The maximum reported total length is 84cm, although it may grow as large as 107cm (Compagno, 1984). Adults are uniform black/brown without any obvious markings. Juveniles are dark black ventrally and lighter brown dorsally with white edged dorsal, pectoral and pelvic fins (Burgess and Bester, Unknown).





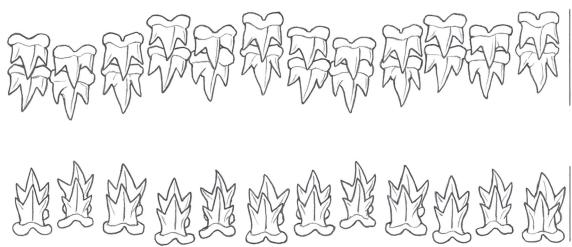
SIMILAR SPECIES

Etmopterus princeps, Great Lanternshark Etmopterus pusillus, Smooth Lanternshark Etmopterus spinax, Velvet Belly Lanternshark



)TEETH

The teeth have narrow cusps and cusplets in both jaws (Compagno, 1984).



ECOLOGY AND BIOLOGY

)HABITAT

The Black Dogfish is taken primarily in depths of 550–1,000m and temperatures of 3.5–4.5°C, although it has been found from 180-1,653m and in water as cold as 1°C (Burgess and Bester, Unknown; Martin and MacKinlay, 2002). It is a benthic species normally confined to the outer and upper continental shelf, although it has been taken near the surface in Arctic waters and during periods of unusual cold. (Burgess and Bester, Unknown).

N/A

)EGGCASE

DIET

The Black Dogfish is known to consume cephalopods, benthic and pelagic crustaceans, euphasiids, schyphozoans and small fish such as redfish (Sebastes) (Burgess and Bester, Unknown). In the northwest Atlantic the main prey items are *Acanthephyra* spp. and *Pasiphaea tarda*. It appears that, on the Grand Bank and Flemish Cap at least, intermediately sized Black Dogfish feed primarily on fish while larger specimens prey more on schyphozoans (jellyfish) (González *et al.*, 2007).

) REPRODUCTION

Male Black Dogfish mature at a total length of around 55cm, females at around 65cm. There does not appear to a defined breeding period with pregnant females found year round. The gestation period is unknown but is likely to be lengthy, similar to other deepsea elasmobranchs. Development is ovoviviparous and litters of 4–40 individuals have been recorded. These pups measure around 15cm total length (Burgess and Bester, Unknown).







COMMERCIAL IMPORTANCE

The Black Dogfish is taken as bycatch in deepwater fisheries but not in large enough numbers to support a commercial fishery. Most are discarded at sea but some are landed and processed for fishmeal (Burgess and Bester, Unknown). In some cases, the liver and fins are removed at sea and the carcass is discarded (Clarke *et al.*, 2005).

THREATS, CONSERVATION, LEGISLATION

The Black Dogfish has a wide distribution throughout the temperate Atlantic. In the northeast Atlantic it is regularly taken as bycatch in deepwater fisheries, though its wide distribution offers it refuge in areas where fisheries are not so well developed. While data is incomplete, recent population trends appear stable (Gibson *et al*, 2006)

In ICES sub-areas V, VI, VII, VIII and IX a Total Allowable Catch (TAC) of 1,646 tons (2008) applies to the deepwater sharks Centroscymnus coelolepis, Centrophorus granulosus, C. squamosus, Deania calcea, Dalatias licha, Etmopterus princeps, E. spinax, Centroscyllium fabricii, Galeus melastomus, G. murinus and all Apristurus spp. Additionally, these species have a TAC of 20 tons in sub-area X and a TAC of 49 tons (including Deania histricosa and D. profondorum) in sub-area XII (CPOA Shark, 2009).

IUCN RED LIST ASSESSMENT

Least Concern (2008).

Near Threatened in northeast Atlantic.

HANDLING AND THORN ARRANGEMENT

- · Handle with care.
- · Large dorsal spines.
- · Abrasive skin and sharp teeth.



REFERENCES

- BURGESS, G., BESTER, C. Unknown. Black Dogfish. Florida Museum of Natural History. http://www.flmnh.ufl.edu/fish/.
- CLARKE, M. W., BORGES, L., OFFICER, R. A. 2005. Comparisons of Trawl and Longline Catches of Deepwater Elasmobranchs West and North of Ireland. *J. Northw. Atl. Fish. Sci.* Vol. 35: 429-442.
- COMPAGNO, L. J. V. 1984. Sharks of the World: An Annotated and Illustrated Catalogue of Shark Species Known to Date. Volume 4, Part 1. Hexanchiformes to Lamniformes. FAO. Rome, Italy.
- COMPAGNO, L., DANDO, M., FOWLER, S. 2005. Sharks of the World. HarperCollins Publishers Ltd. London, UK.
- CORTÉS, E. 1999. Standardized diet compositions and trophic levels of sharks. *ICES Journal of Marine Science*. Vol. 56: 707-717.

COTTON, C. 2009. Personal Communication.

- EBERT, D. A., CROZIER, P., BLASDALE, T., MCCORMACK, C. 2008. *Centroscyllium fabricii*. In: IUCN 2010. IUCN Red List of Threatened Species. Version 2010.1. www.iucnredlist.org.
- GIBSON, C., VALENTI, S. V., FOWLER, S. L., FORDHAM, S. V. 2006. The Conservation Status of Northeast Atlantic Chondrichthyans; Report of the IUCN Shark Specialist Group Northeast Atlantic Regional Red List Workshop. VIII + 76pp. IUCN SSC Shark Specialist Group.
- GONZÁLEZ, C., TERUEL, J., LÓPEZ, E., PAZ, X. 2007. Feeding Habits and Biological Features of Deep-Sea Species of the Northwest Atlantic: Large-eyed Rabbitfish (*Hydrolagus mirabilis*), Narrownose Chimaera (*Harriotta raleighana*) and Black Dogfish (*Centroscyllium fabricii*). Northwest Atlantic Fisheries Organization.
- MARTIN, R. A., MACKINLAY, D. 2002. Biology of Deep Sea Elasmobranchs. Symposium Proceedings, International Congress on the Biology of Fish. Fisheries and Oceans, Canada.

YANO, K. 1995. Reproductive Biology of the Black Dogfish, Centroscyllium fabricii, Collected from Waters off Western Greenland. J. Mar. Biol. Ass. UK. Vol. 75: 285–310. Text: Richard Hurst. Illustrations: Marc Dando.

Citation

Shark Trust; 2010. An Illustrated Compendium of Sharks, Skates, Rays and Chimaera. Chapter 1: The British Isles and Northeast Atlantic. Part 2: Sharks.

Any ammendments or corrections, please contact: The Shark Trust 4 Creykes Court, The Millfields Plymouth, Devon PL1 3JB **Tel**: 01752 672008/672020 **Email**: enquiries@sharktrust.org

For more ID materials visit www.sharktrust.org/ID.

Registered Company No. 3396164. Registered Charity No. 1064185