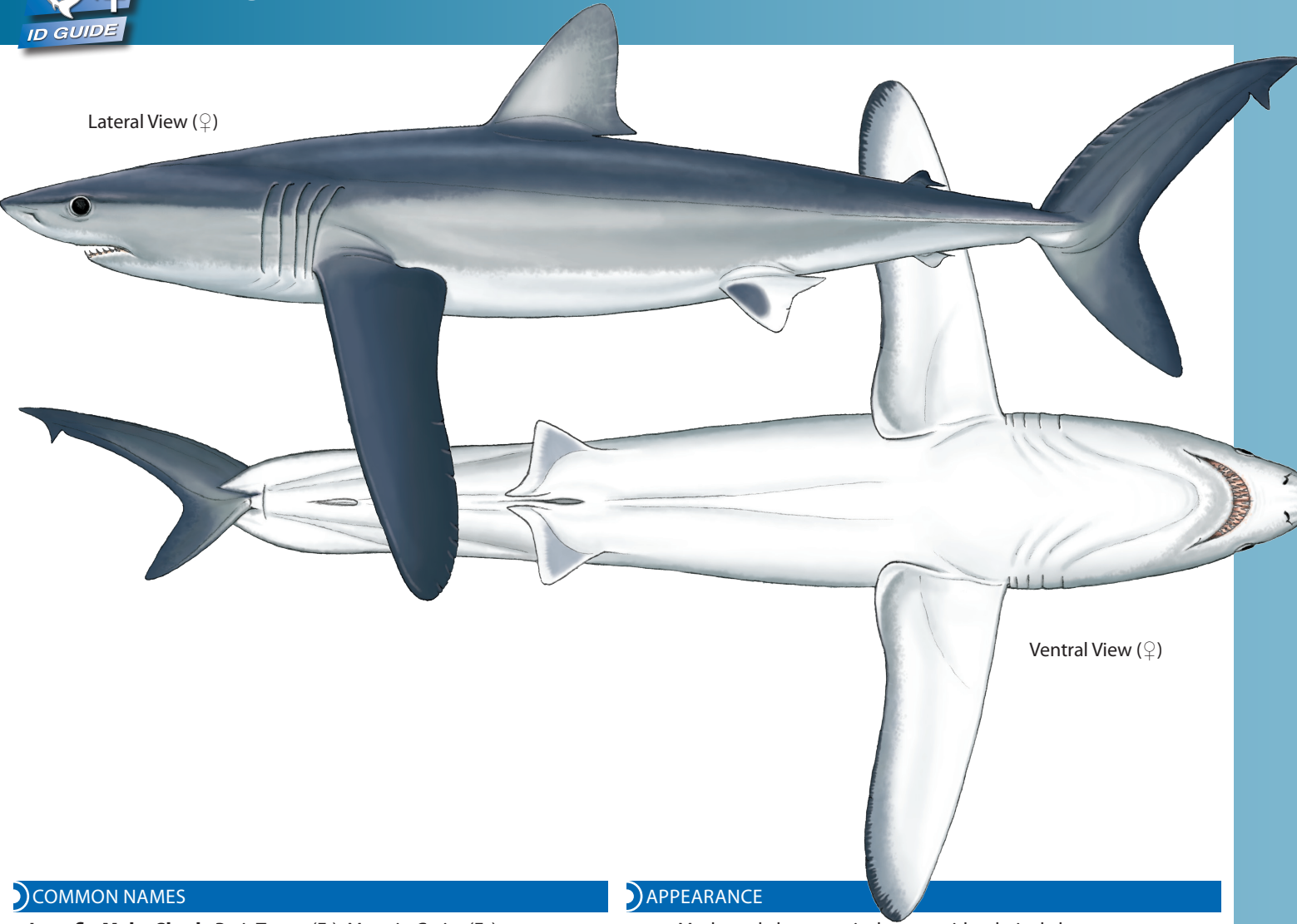


Lateral View (♀)

Ventral View (♀)



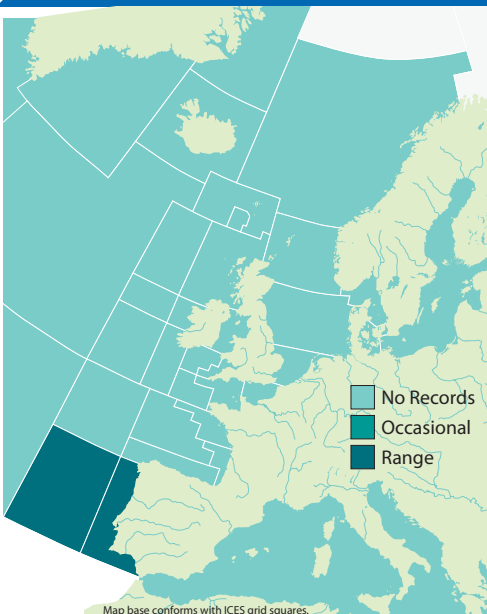
COMMON NAMES

Longfin Mako Shark, Petit Taupe (Fr), Marrajo Carite (Es).

SYNONYMS

Lamiostoma belyaevi (Glikman, 1964), *Isurus alatus* (Garrick, 1967).

DISTRIBUTION



The distribution of the Longfin Mako Shark is not fully understood but it is probably circumglobal in tropical and warm temperate waters. In the east Atlantic it has been reported from northern Spain to the gulf of Guinea, with two specimens caught north-west of the Azores on swordfish longlines (Queiroz *et al.*, 2006).

APPEARANCE

- Moderately long, conical snout with relatively large eyes.
- Pectoral fins at least as long as head with broad tips.
- Large first dorsal fin with light free rear tip.
- Minute second dorsal and anal fins.
- Strong caudal keels and lunate caudal fin.
- Dark blue or grey-black dorsolaterally.
- White ventrally
- Underside of snout and mouth dark in adults to pectoral origins.

The Longfin Mako Shark is a slender, pelagic species reaching a maximum length of 417cm and is the second largest species in the Lamnidae family, smaller only than the White Shark, *Carcharodon carcharias* (Martin, Unknown). It can be distinguished from the Shortfin Mako Shark, *Isurus oxyrinchus*, by its larger pectoral fins which are at least as long as its head (measured from the pectoral origins to the tip of the snout) and the underside of the snout and mouth which are dark in adults. The first dorsal fin is large and upright with a light free rear tip, although this is not as prominent as in the Porbeagle Shark, *Lamna nasus*, and may not be seen in all specimens. The second dorsal and anal fins are minute. There is a strong caudal keel and a lunate caudal fin (Compagno, 2001).

Dorsolaterally it is dark slate-blue or grey-black, ventrally white. The underside of the snout and jaw is dark in adults and large juveniles spreading to the origins of the pectoral fins, although it can be pure white in young individuals. In adults, the dark colour of the flanks spreads onto the abdomen and there are dark margins to the underside of the pectoral fins. The dark colouration also expands onto the ventral surface along the caudal peduncle. These changes in colour are well defined but irregular (Wilson and Ford, Unknown).

SIMILAR SPECIES

Isurus paucus, Shortfin Mako Shark

Lamna nasus, Porbeagle Shark

Prionace glauca, Blue Shark

Carcharodon carcharias, White Shark

Isurus paucus,
Longfin Mako Shark

Isurus oxyrinchus,
Shortfin Mako Shark

Lamna nasus,
Porbeagle Shark

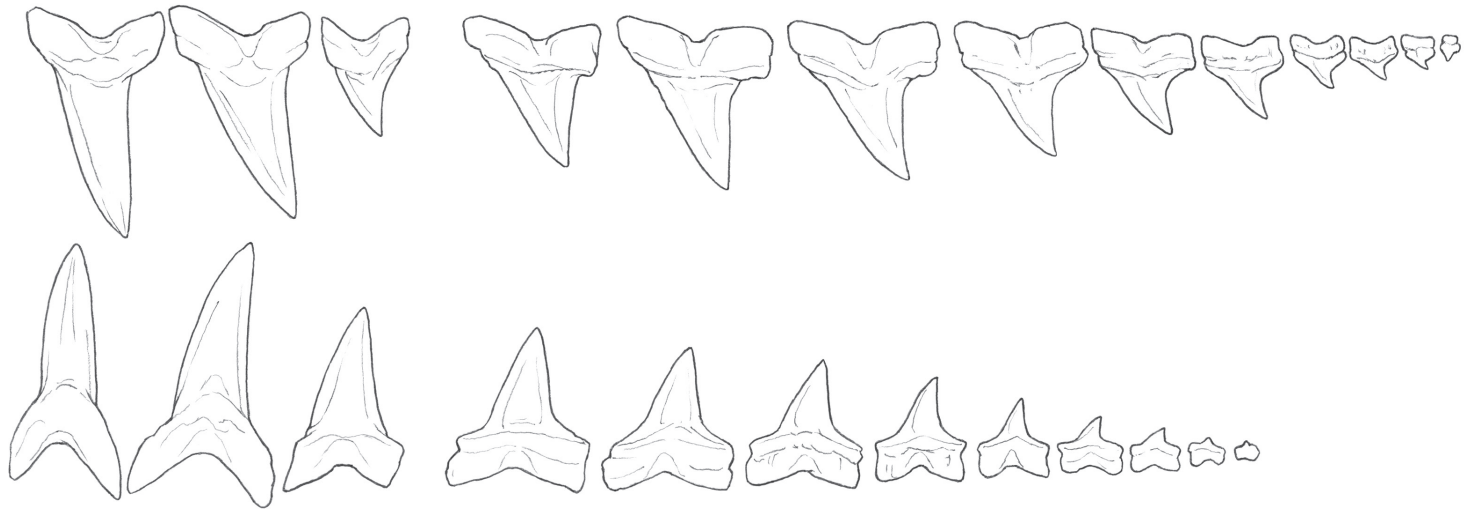
Prionace glauca,
Blue Shark

Carcharodon carcharias,
White Shark

(Not to scale)

TEETH

Large, slender, monocuspid teeth in both jaws. 24–26 uppers, 22 – 26 lowers (Wilson and Ford, Unknown).



ECOLOGY AND BIOLOGY

HABITAT

The Longfin Mako Shark is a little known epipelagic shark that apparently spends the majority of its time at depth, although both sightings at the surface and its diet suggest a great depth range. Like other Lamniformes, it has a 'rete mirabile' system that allows it to maintain its body temperature above that of the surrounding water (Martin, 1992). This is a rare trait among fishes, only the mackerel sharks (Lamnidae), tunas (Thunnini) and billfishes (Xiphiidae, Istiophoridae) having evolved the ability (Weng and Block, 2004).

EGGCASE

N/A

DIET

The Longfin Mako Shark presumably feeds on schooling fish and pelagic cephalopods. A specimen has been found with a swordfish bill embedded in its abdomen, but it is not known if they make up a significant part of its diet (Compagno, 2001). It has been speculated that, rather than a predation event, it was merely an accidental collision as the two predators circled or attacked the same prey, presumably schooling fish (Martin, Unknown).

REPRODUCTION

Little is known of the life history of the Longfin Mako Shark. The smallest sexually mature female so far recorded measured 245cm total length, the smallest sexually mature male 229cm total length. It is an aplacental viviparous species utilising oophagy to nourish embryos. Litters of 2–8 young have been reported each measuring 97–120cm. It has been suggested that females move towards land to pup (Reardon, 2006).

COMMERCIAL IMPORTANCE

There is no commercial market for the meat of the Longfin Mako Shark across much of its range although it can be utilised for human consumption. The fins are not of the highest value but are known to enter the shark fin trade. It may be an important bycatch species for high seas fishing fleets (Reardon *et al.*, 2006).

THREATS, CONSERVATION, LEGISLATION

Population trends are hard to quantify as catches are inadequately monitored, reported and generally do not include animals finned and discarded at sea. Confusion with other species, particularly the Shortfin Mako Shark, *Isurus oxyrinchus*, also leads to difficulties in detecting population trends. However, it faces significant fishing pressure across its range and is taken as bycatch in the same fishing gear as the Shortfin Mako Shark, a species which has declined by up to 50% in the North Atlantic. Combined with its large size, low fecundity and naturally low abundance, the Longfin Mako Shark is extremely vulnerable to anthropogenic pressure (Reardon *et al.*, 2006).

IUCN RED LIST ASSESSMENT

Vulnerable (2006).

HANDLING AND THORN ARRANGEMENT

- Handle with care.
- Sharp teeth.
- Abrasive skin.

REFERENCES

- COMPAGNO, L., DANDO, M., FOWLER, S. 2005. *Sharks of the World*. HarperCollins Publishers Ltd.
- QUIEROZ, N., ARAÚJO, S., RIBEIRO, P. A., TARROSO, P., XAVIER, R., SANTOS, A. M. 2006. A first record of Longfin Mako, *Isurus Paucus*, in the mid-North Atlantic. *Journal of Marine Biology*. Published Online www.mba.ac.uk.
- MARTIN, R. A. 1992. *Fire in the Belly of the Beast*. ReefQuest Centre for Shark Research. www.elasmo-research.org.
- MARTIN, R. A. Unknown. *Biology of the Longfin Mako (Isurus Paucus)*. ReefQuest Centre for Shark Research. www.elasmo-research.org.
- REARDON, M. B., GERBER, L., CAVANAGH, R. D. 2006. *Isurus paucus*. In: IUCN 2009. IUCN Red List of Threatened Species. Version 2009.1. www.iucnredlist.org.
- WENG, K. C., BLOCK, B. A. 2004. Diel Vertical Migration of the Bigeye Thresher Shark (*Alopias superciliosus*), a Species Possessing Orbital Retia Mirabilia. *Fish. Bull.* 102: 221–229.
- WILSON, T., FORD, T. Unknown. *Longfin Mako*. Florida Museum of Natural History. www.flmnh.ufl.edu/fish/.

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 amendments 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