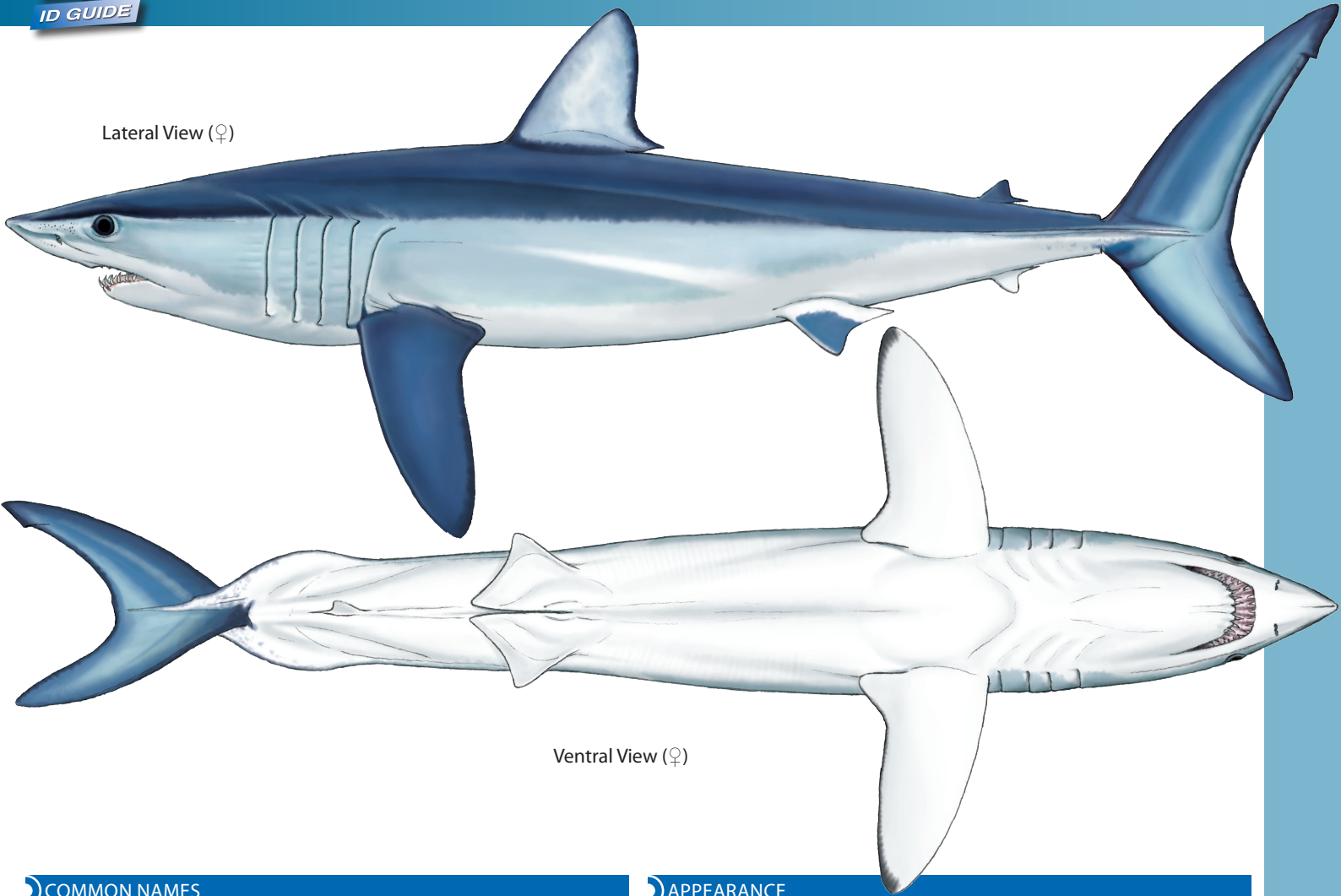


Lateral View (♀)



Ventral View (♀)

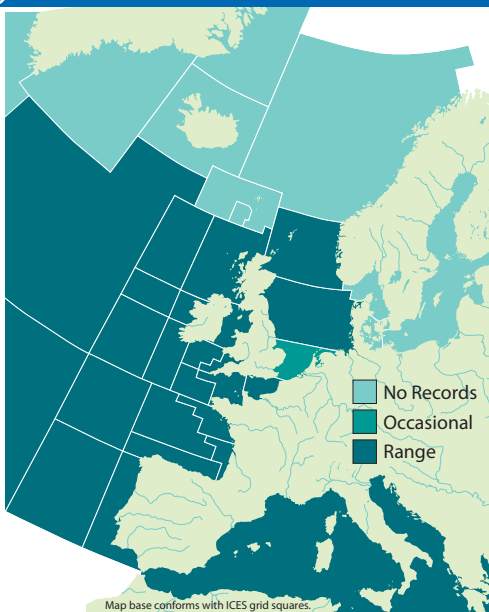
COMMON NAMES

Shortfin Mako Shark, Mako, Short-finned Mako, Blue Pointer, Mackerel Shark, Blue Dynamite, Bonito Shark, Taupe Bleu (Fr), Marrajo Dientuso (Es).

SYNONYMS

Isurus spallanzani (Rafinesque 1810), *Oxyrhina spallanzani* (Bonaparte, 1839), *Oxyrhina glauca* (Müller & Henle 1839), *Oxyrhina gomphodon* (Müller & Henle, 1841), *Isuopsis dekayi* (Gill 1862), *Lamna spallanzanii* (Günther, 1870), *Oxyrhina spallanzani* (Moreau, 1881), *Isurus mako* (Whitley 1929), *Isurus africanus* (Smith 1957).

DISTRIBUTION



The Shortfin Mako Shark is found worldwide in temperate and tropical seas. In the east Atlantic, it is known from Norway to South Africa, including the Mediterranean. It is also known from the western Atlantic, the Pacific and the Indian Oceans (Passarelli *et al.*, Unknown).

APPEARANCE

- Robust, streamlined shark.
- Large first dorsal fin set behind pectoral fins.
- Tiny second dorsal and anal fins, roughly equal in size.
- Lunate caudal fin with strong keel.
- Large, dark eyes.
- Maximum length 400cm.
- Grey to vivid blue colouring on dorsal surface.
- Paler/white ventral surface, including the snout and mouth.

Large, robust and streamlined, the Shortfin Mako Shark is extremely hydrodynamically shaped and can attain the highest recorded speed of any shark species. The snout is distinctly conical with large dark eyes. The teeth are long and blade-like without serrations or basal cusps, distinguishing the Shortfin Mako Shark from similar species such as the Porbeagle Shark, *Lamna nasus*, and the Longfin Mako Shark, *Isurus paucus*. The foremost teeth of the lower jaw are visible even when the mouth is closed. The second dorsal fin and anal fin are extremely small. The tail is crescent shaped with almost equal upper and lower lobes. A distinct caudal keel is present. Colouration of the dorsal surface varies from grey to vivid blue. The ventral surface is paler to white (Passarelli *et al.*, Unknown). The largest recorded size for the Shortfin Mako Shark is 400cm total length and 505.8kg in weight (Carpenter, 2009).



SIMILAR SPECIES

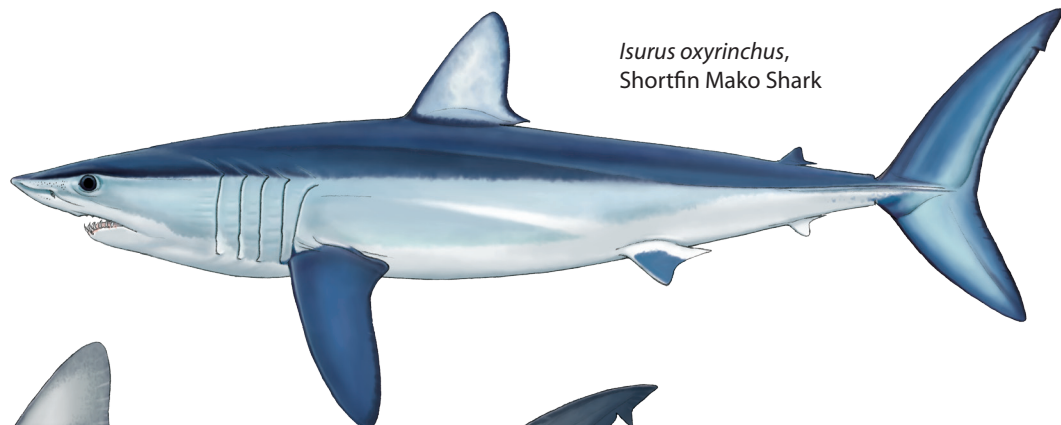
Isurus paucus, Longfin Mako Shark

Lamna nasus, Porbeagle Shark

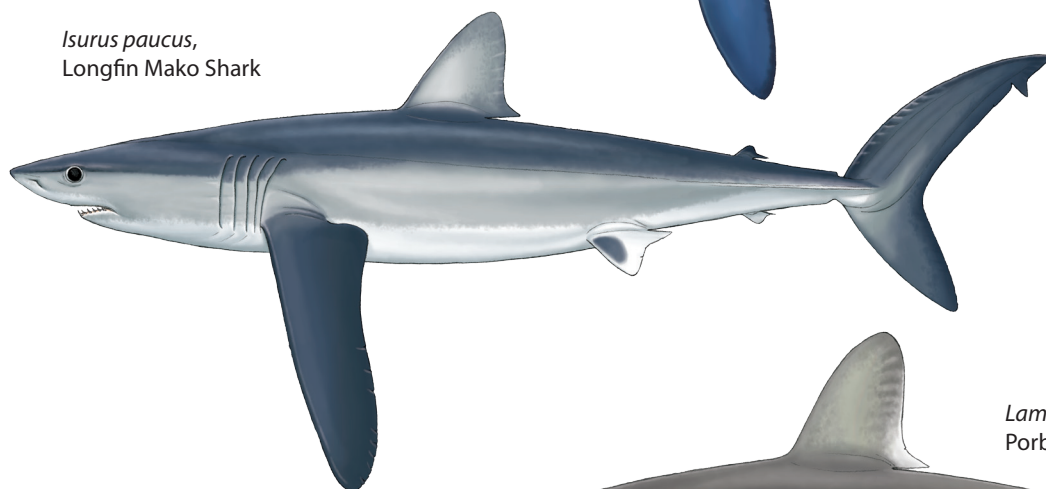
Prionace glauca, Blue Shark

Carcharodon carcharias, White Shark

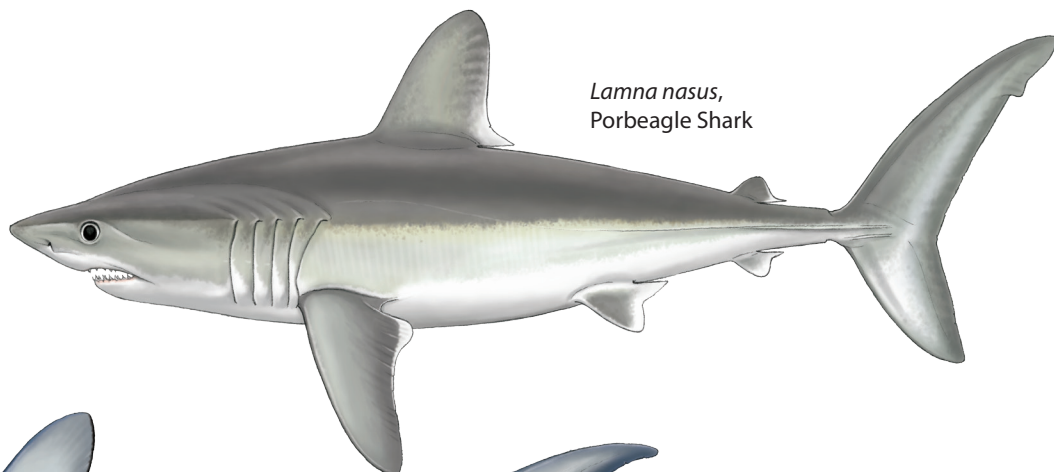
Isurus oxyrinchus,
Shortfin Mako Shark



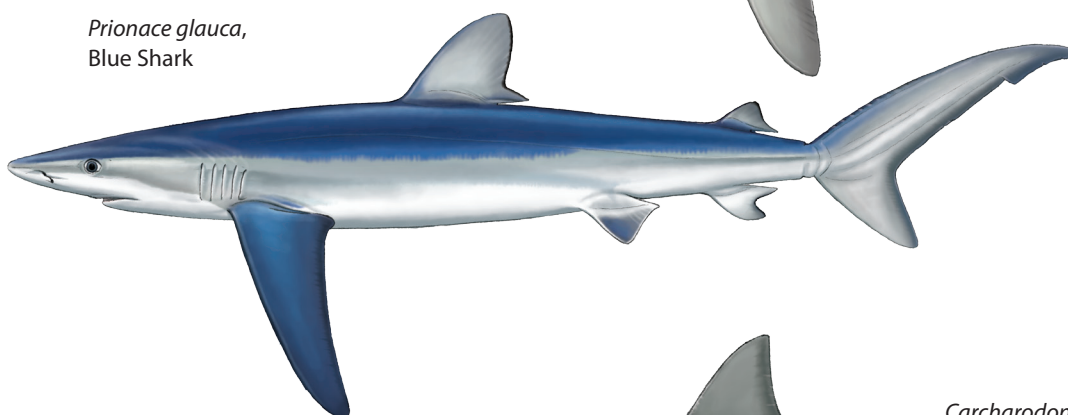
Isurus paucus,
Longfin Mako Shark



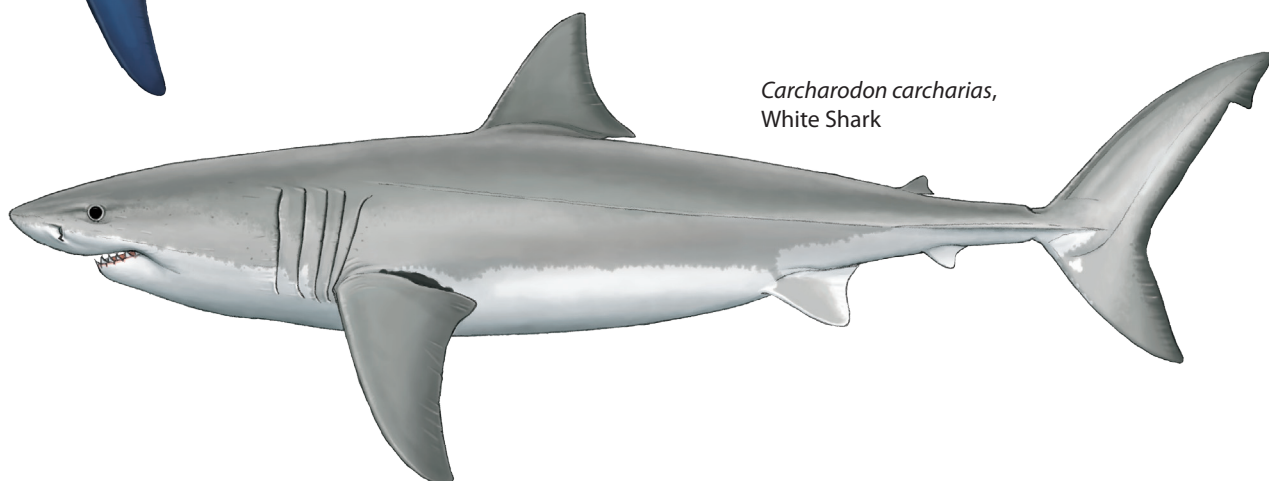
Lamna nasus,
Porbeagle Shark



Prionace glauca,
Blue Shark



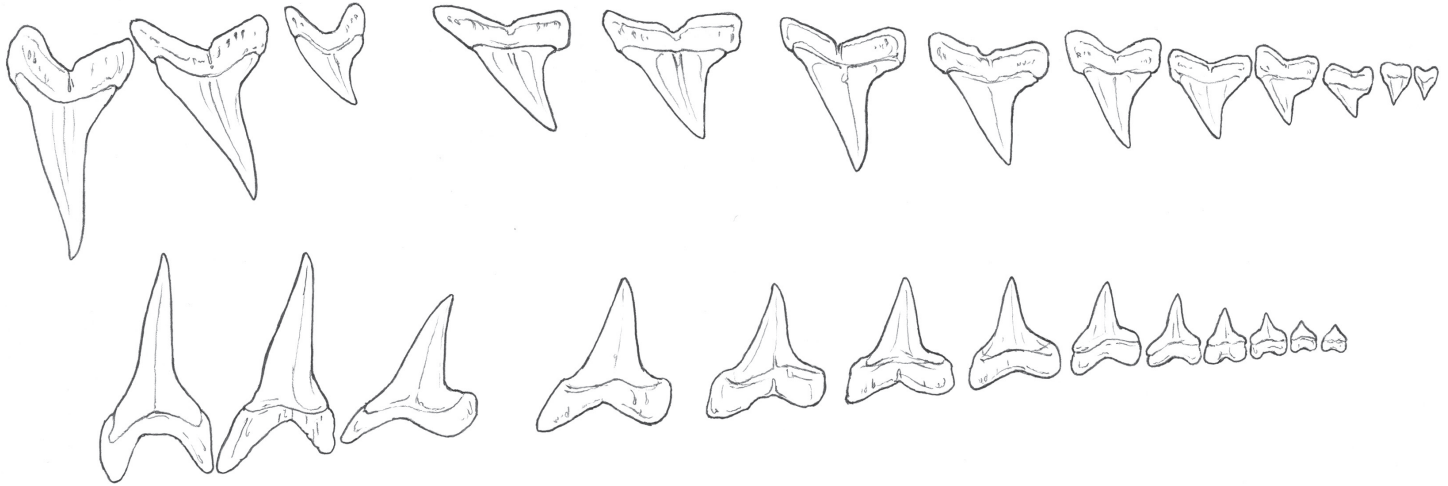
Carcharodon carcharias,
White Shark



(Not to scale)

TEETH

The teeth are single cusped and awl-shaped without serrations (Comapagno, 2001). The tips of the lower front teeth are visible even when the mouth is shut (Passarelli *et al.*, Unknown). Larger specimens (>3m) have broader, triangular upper teeth (Martin, Unknown).



ECOLOGY AND BIOLOGY

HABITAT

The Shortfin Mako Shark is predominantly encountered in temperate seas but also in the cooler, deeper water of the tropics where it has been recorded at depths of 400m. There are some records from depths of 740m (Passarelli *et al.*, Unknown). It rarely occurs in waters below 16°C (Stevens, 2000). It is a solitary species but is known to form loose aggregations, possibly at times and in places where food is in excess. Studies of driftnet bycatch suggested that, if it does form groups, they are segregated by sex. Very little mixing between populations seems to occur, such as between the east and west Atlantic. It is known to make long migrations of up to 5,500km but this appears to be rare. Tagged individuals have moved between the northeast USA and the coast of Spain (4,540km), between New Zealand and Fiji (5,500km) and between California and the central Pacific Ocean (2,780km) (Martin, Unknown).

REPRODUCTION

Both male and female Shortfin Mako Sharks reach sexual maturity at an age of 4–6 years. This corresponds to a total length of 200cm for males and 275cm for females (Passarelli *et al.*, Unknown). Mating is thought to occur around late summer and autumn and gestation lasts 15–19 months. It is ovoviviparous and the embryos are nourished through oophagy at later stages of development. There are normally between 4 and 25 pups to a litter, with larger females producing more and bigger young (Martin, Unknown). The young are normally born between 68 and 70cm in length. Due to having such a long gestation period, it is thought that the Shortfin Mako Shark only reproduces every 2–3 years (Passarelli *et al.*, Unknown). In the eastern Atlantic the area around the Strait of Gibraltar is thought to be an important nursery area, despite being heavily fished by the swordfish longline fleet (Stevens, 2000).

DIET

The Shortfin Mako Shark feeds primarily on bony fish such as mackerels, tunas, bonitos, anchovies, herrings, grunts, lancetfishes, cod, ling, whiting, Australian Salmon, yellowtails, sea basses, porgies and swordfish. It is also known to feed on other sharks such as the Blue Shark, *Prionace glauca*, requiem species, *Carcharhinus* spp. and hammerhead sharks (*Sphyrna* spp.) Other stomach contents have included squid, salp, turtles and occasionally marine mammals (Martin, Unknown).

COMMERCIAL IMPORTANCE

The Shortfin Mako Shark is an important target species used for its flesh, fins and liver oil. It is also taken as bycatch in high-seas fisheries using longlines and driftnets to target tuna and billfish (Stevens, 2000).

THREATS, CONSERVATION, LEGISLATION

While there is no directed fishery in name, the Shortfin Mako Shark is a high value species that is retained when caught. It is predominantly captured by Portuguese and Spanish vessels operating in ICES sub-areas VIII, IX and X. EC vessels also take the Shortfin Mako Shark in FAO Area 34. Data from non EC vessels is difficult to obtain, although Japanese and Taiwanese tuna longliners operating in the North Atlantic are known to take 300–500 tons of the species a year (CPOA Shark, 2009).

As for most sharks, population trends for the Shortfin Mako Shark are hard to quantify as catches are generally inadequately recorded and do not include sharks finned and discarded at sea. There is also confusion with the Porbeagle Shark, *Lamna nasus*, and the Blue Shark, *Prionace glauca*, as well as the White Shark, *Carcharodon carcharias*, to a lesser extent. However, from logbook data it would appear that populations have declined by 33–50% in the Atlantic (Stevens, 2000).

In the northeast Atlantic, the Shortfin Mako Shark is covered by EC Regulation No. 1185/2003 which prevents the removal of its fins at sea and the subsequent discard of the body. This applies to all vessels operating in EC waters, as well as to EC vessels operating anywhere (CPOA Shark, 2009). Some countries issue Special Fishing Permits allowing sharks to be landed with their fins unattached, including the UK.

IUCN RED LIST ASSESSMENT

Vulnerable (2008).

HANDLING AND THORN ARRANGEMENT

- Handle with care.
- Large shark with powerful jaws.
- Abrasive skin.
- Known to attack boats when provoked.

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Illustrations: Marc Dando.

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