



SHARK STEWARDS

RESTORING OCEAN HEALTH BY SAVING SHARKS

WHITE SHARK

(*Carcharodon carcharias*)

Order – Lamniformes
Family – Lamnidae
Genus – *Carcharodon*
Species – *Carcharias*

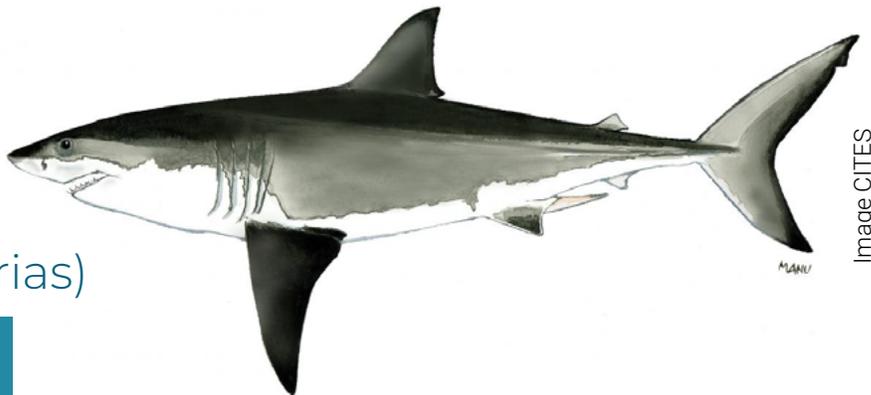


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The white shark, also referred to as “great white” and “white pointer”, is one of the largest species of sharks, with an estimated maximum size of about 20 feet (Fergusson et al. 2009). This species is considered to be intelligent, inquisitive and social.

GEOGRAPHICAL DISTRIBUTION AND HABITAT

The white shark is predominantly found in temperate seas and coastal oceans. However, the white shark is also been found in both tropical and cold, boreal waters. They can be found all over the globe: recorded in the Atlantic, Indian, and Pacific Oceans. White sharks spend most of their time in the upper part of the water column in nearshore waters; but they can range from the surfline to the open ocean, and from the surface to deep depths.

They often patrol small coastal archipelagos inhabited by seals, sea lions and walruses, where deepwater dropoffs come close to the shoreline. Mature sharks also perform long annual migrations, over 5000 miles in the Pacific.

DISTINGUISHING CHARACTERISTICS

1. Snout is conical
2. First dorsal fin is large and triangular
3. Caudal fin is lunate with a single keel on the caudal peduncle

BIOLOGY

→ Distinctive Features

The white shark’s body is fusiform with long gill slits. They have large first dorsal fins and small second dorsal and anal fins. They also have crescent-shaped caudal fins and distinctive triangular, serrated teeth.

→ Coloration

White sharks have a greyish-black or bronze dorsal surface and a pale white ventral surface. The boundary between these tones is distinct. Most specimens exhibit a black oval blotch at the axil of the pectoral fin.

FUN FACT

Adult white sharks in the Northeast Pacific migrate over 5000 miles annually, returning to the west coast late summer and fall to forage on seals.

We call this period Sharktober!

→ Size and Age

Estimates suggest that the maximum total length is about 20 ft and possibly up to 21 ft. Males mature at about 10-13 ft and females at about 14-16 ft (Fergusson et al. 2009). It is estimated that white sharks may live to 70 years or more (Hamady et al. 2014).

→ Food Habits

The white shark is a macropredator, known to be most active during the daytime. As adults, the main diet consists of seals, sea lions, elephant seals, dolphins, and fishes including other sharks and mobulid rays. Juveniles eat fish and rays until becoming sub adults at around 8-10 feet.

→ Reproduction

Females are ovo-viviparous (live birth from an egg) giving birth to 4-6 pups after a year gestation period. While in uteri, the embryonic white sharks swallow their own teeth, perhaps to reuse calcium and other minerals. They also practice oophagy, with more advanced embryos eating the eggs of their womb-mates.

→ Predators

As an apex predator, the white shark has very few natural predators. Besides humans, killer whales and larger sharks pose the only real predation threat.

FUN FACT

Great whites have a keen sense of smell: they are capable of smelling one drop of blood in 100 liters of water!

DANGER TO HUMANS

The white shark has been credited with more fatal attacks on humans than any other species of shark. This is due primarily to its size, power, feeding behavior and proximity to inhabited coastlines.

CONSERVATION

Listed as threatened by the IUCN, global population size estimates for this species are unknown but are on the decline. The Mediterranean population has been extirpated and other populations have been reduced by overfishing, killed as bycatch and for their fins. Research indicates that this species will decline globally unless measures for international protection are implemented. Some governments, such as those in South Africa, Australia, Mexico and the United States, already protect the white shark. Dive tourism is increasing and gives us hope for protecting remaining white shark populations.