



## Great White Shark - *Carcharodon carcharias*

One of the greatest apex predators of the ocean, the Great White Shark (*Carcharodon carcharias*), also known as the great white, white pointer and white shark is the only known surviving species of its genus. Renowned for its size, the largest individuals approach 6m in length and over 2000kgs in weight. Females are generally larger than males.

Great Whites are found throughout the world in coastal and offshore waters that range between 12 and 24°C. They are epipelagic but have also been recorded at depths of 1200m. One of the densest known populations is found around Dyer Island, South Africa, where a lot of shark research is done.

The Great White Shark has a large, conical snout. It has a large dorsal fin on its back followed by a much smaller one. The upper and lower lobes on the caudal fin are roughly the same size. The Great White, like other marine creatures, displays countershading where the underside is white and dorsal side is a darker shade of grey or blue. This colouration acts as an amazing camouflage for prey. From above, the darker shade blends in with the sea and from below it exposes a minimal silhouette against the sunlight. Great White Sharks have rows of serrated teeth behind the main ones, ready to replace any that break off.

Great White Sharks are carnivorous and prey upon fish, other sharks, cetaceans, pinnipeds, sea turtles and seabirds. They are ambush hunters, taking prey by surprise from below. Although the Great White is typically regarded as an apex predator in the wild, it is in rare cases preyed upon by the larger killer whale. While Great White Sharks have killed humans, they typically do not target them. Many of the incidents seemed to be 'test-bites'. Great White Sharks also test-bite buoys, flotsam, and other unfamiliar objects, and they might grab a human or a surfboard to identify what it is.

Little is known about the Great White Shark's behavior in the way of mating habits. Great White Sharks are ovoviviparous, which means eggs develop and hatch in the uterus and continue to develop until birth. The great white has an 11-month gestation period. The shark pup's powerful jaws begin to develop in the first month. The unborn sharks participate in intrauterine cannibalism; stronger pups consume their weaker womb-mates.

Very little is known about the actual numbers of Great White Sharks throughout the world, but as it appears uncommon compared to other widely distributed species, it is considered vulnerable by the IUCN and under the Australian EPBC Act. It is included in Appendix II of CITES, meaning that international trade in the species requires a permit. As of March 2010, it has also been included in Annex I of the CMS Migratory Sharks MoU, which strives for increased international understanding and coordination for the protection of certain migratory sharks.

### Did you know?

Great white Sharks, like all other sharks, have an extra sense that enables them to detect the electromagnetic field emitted by the movement of living animals. Every time a living creature moves, it generates an electrical field and great whites are so sensitive they can detect half a billionth of a volt. Even heart beats emit a very faint electrical pulse which Great Whites can detect if they are close enough.