

## The Great white Shark *Carcharodon carcharias*



The White Shark is believed to have evolved about 65 million years ago in the late Devonian period. It, along with its evolutionary brother, *Carcharodon megalodon*, were the top predators in the world's oceans until Megalodon, a 20 meter shark almost identical to the White Shark, only bigger, went extinct. Now the White Shark is the largest and most successful predatory fish in the oceans.



The White Shark averages about 5.2 meters long from snout to tail, with the largest White Shark ever caught being 11.12 meters long and is preserved in the Natural history museum in London. The body of the White Shark is possibly one of the most recognizable shapes in the world, its torpedo shape and large dorsal fin made famous by movies like *Jaws*. The white belly of the shark and its dark back enable it to camouflage both from below and above.

### **Maturity and Reproduction**

Females mature at between 4.5-5.0 meters and at around 18 years old. Males mature at about 3.6-3.8 meters and 10 years old. (Malcolm et al. 2001) Female White Sharks only reproduce every 2-3 years; and the gestation period can exceed 12 months possibly even 18 months. Litter sizes have been recorded between 2-10 pups per litter. Female White Sharks give birth to live young which are completely independent at birth. When they are born the pups are about 1 to 1.5 meters long. It is not known how long the sharks live for but estimates are in the order of 30 years.



## Diet

Adult White Sharks are known to have a diet of fish, such as snapper, mackerel and tuna, they also eat other sharks, dolphins, and marine mammals, such as sea lions and fur seals. White Sharks have been recorded to surface to feed on floating whale carcasses. The main prey in South Australian waters are the Australian Sea-Lion and New Zealand Fur Seals (pictured). The seals are large and rich in blubber therefore the White Shark feeds on mammal prey infrequently. (FSRF 2004)



## Distribution

■ Global white shark distribution



The White Shark has been found in every ocean and sea in the world, however, it seems to prefer cool temperate waters such as those of South Africa, Southern Australia Southern South American and waters near California. These are where the white shark is most abundant. However, it can also be found in other cool temperate waters. It lives in the open waters near the continental shelf, moving in closer to shore to feed.

## Senses

White Sharks rely heavily on vision to seek prey and provide other information on its surrounding environment. The eyes of White Sharks are also extremely sensitive and are able to magnify the amount of available light, just like cats. The white shark also has extremely good smell and hearing.



The White Shark also has electro reception, which is an acute sensitivity to electrical fields. Electro reception assists in capturing prey, as the shark is temporarily blind at the moment of strike it may rely on electrical cues to keep track of its prey.

## Attacks

The White Shark is most well known for its attacks on humans. In the past 200 years there have been 193 fatal shark attacks in Australia, that's less than one a year, and not all of those were White sharks. There is more chance of being struck by lightning than being attacked by a white shark, indeed it is much more dangerous driving to the beach than swimming in it.

For more information go to:

[http://www.elasmo-research.org/education/white\\_shark/overview.htm](http://www.elasmo-research.org/education/white_shark/overview.htm)

<http://www.sharkfoundation.net/>