

# The Great White Shark

Separating Myth from Fact



# Old Souls

- The Great White Shark, or *Carcharodon carcharias*, belongs to a group species that have existed for over 350 millions years.



# Fact Check

- Quick Facts:
- Kingdom: Animal
- Phylum: Cordata
- Class: Chondrichthyes
- Sub-Class: Elasmobranchii
- Order: Lamniformes  
Family: Lamnidae  
Genus: *Carcharodon*  
Species: *C. carcharias*



# How the Beast Eats

- White sharks are predatory animals that begin life by feeding on fish, rays, and other sharks, and as they grow, switch to feeding on marine mammals.
- Their first prey is normally small harbor seals but as they mature they become large enough to eat sea lions, elephant seals, and small toothed whales.
- They attack from below, with a sudden and swift strike inflicting a large and often times fatal first bite. They prey often dies from this first initial massive trauma or blood loss.
- Occasionally great whites will scavenge on dead whale carcasses, feasting on the fat rich whale blubber.



# Where it takes it's Meals

- Great white sharks live in coastal and offshore waters which have water temperature between 12 and 24 °C (54 and 75 °F), with greater concentrations off the coasts of [Australia](#), [South Africa](#), [California](#), the [northeastern US](#), [Mexico's Isla Guadalupe](#), and [New Zealand](#) and the waters of the [Mediterranean](#).
- The white shark lives mainly in the upper part of the water column, near the shore. However, it ranges from the surf line to well offshore and from the surface and to depths of over 250m (775ft). This shark commonly patrols small coastal islands inhabited by seals, sea lions and walruses.
- One of the major centers of great whites is The Farallon Islands, a national wildlife refuge about 27 miles off San Francisco.
- Four species of pinnipeds, northern elephant seal, the California sea lion, the Steller sea lion, and the harbor seal, live around and breed on these islands, making a plentiful food resource for the white sharks



# Something Truly Amazing

- Seal Island is a small land mass located 5.7 km off the northern beaches of False Bay, near Capetown in South Africa.
- This area is called seal island due to the large population of Cape Fur Seals that inhabit the area.
- Due to the high population of seals, great whites are highly attracted to the area.
- What makes this truly remarkable is the predatory behavior of the great whites in this area. The sharks literally launch themselves out of the water and fly into the air, clearing several meters and completely destroying their unsuspecting prey.



# Separating the Myth

- Contrary to what is espoused in movies like *Jaws*, sharks are not man eaters.
- Ralph Collier, president of the Shark Research Committee sets out to dispell the myth of Great Whites.
- "In the 20th century, there were 108 authenticated, unprovoked shark attacks along the Pacific Coast of the United States, when you consider the number of people in the water during that hundred year period, you realize deadly strikes are very rare
- Films like *Jaws* propagate the image of great whites as mindless hunters prowling dark, coastal waters for hapless swimmers—an animal whipped to frenzy by the scent of human blood. Yet not only do most people survive their encounters, many suffer only moderate injuries. Swimmers dragged underwater by great whites are sometimes left with puncture marks, but the animals often don't inflict more severe wounds.
- Collier argues that sharks are not even the most dangerous predator in the oceans, man is.



# Sources

- <http://www.flmnh.ufl.edu/fish/sharks/innews/defanging2004.html>
- <http://www.ucmp.berkeley.edu/vertebrates/Doug/shark.html>
- <http://animals.nationalgeographic.com/animals/fish/great-white-shark/>