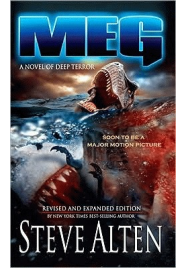
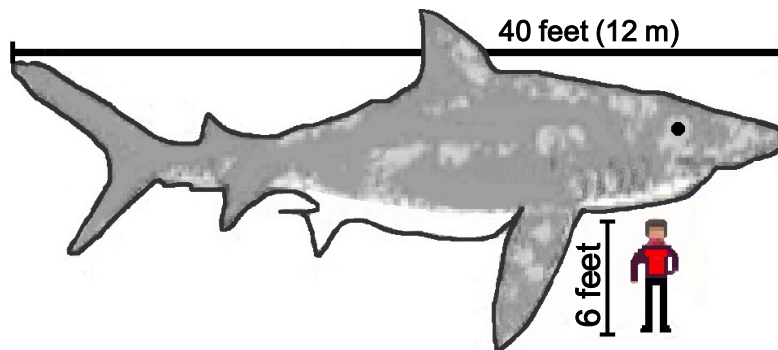


# MEG: A Novel of Deep Terror HISTORY



## MEGALODON (meaning "Giant Tooth")



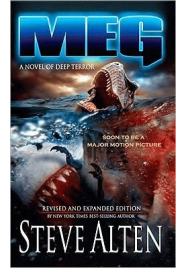
Megalodon was an ancient shark that may have been 40 feet (12 m) long or even more. (There are a few scientists who estimate that it could have been up to 50 or 100 feet (15.5 or 31 m) long!) This is at least two or three times as long as the Great White Shark, but this is only an estimate made from many fossilized teeth and a few fossilized vertebrae that have been found. These giant teeth are the size of a person's hand! No other parts of this ancient shark have been found, so we can only guess what it looked like. Since Megalodon's teeth are very similar to the teeth of the Great White Shark (but bigger and thicker), it is thought that Megalodon may have looked like a huge, streamlined version of the Great White Shark.

### MEGALODON'S DIET

Megalodon's diet probably consisted mostly of whales. Sharks eat about two percent of their body weight each day; this a bit less than a human being eats. Since most sharks are cold-blooded, they don't have to eat as much as we eat (a lot of our food intake is used to keep our bodies warm).

### TEETH AND JAWS

Shark fossils are extremely rare because sharks have no bones, only cartilage, which does not fossilize well. Their teeth, however, are very hard. Their teeth are made of a bone-like material coated with hard enamel and they fossilize very well. Megalodon teeth are similar to those of the Great White Shark, but are much bigger, thicker, and with finer serrations. Megalodon's jaws



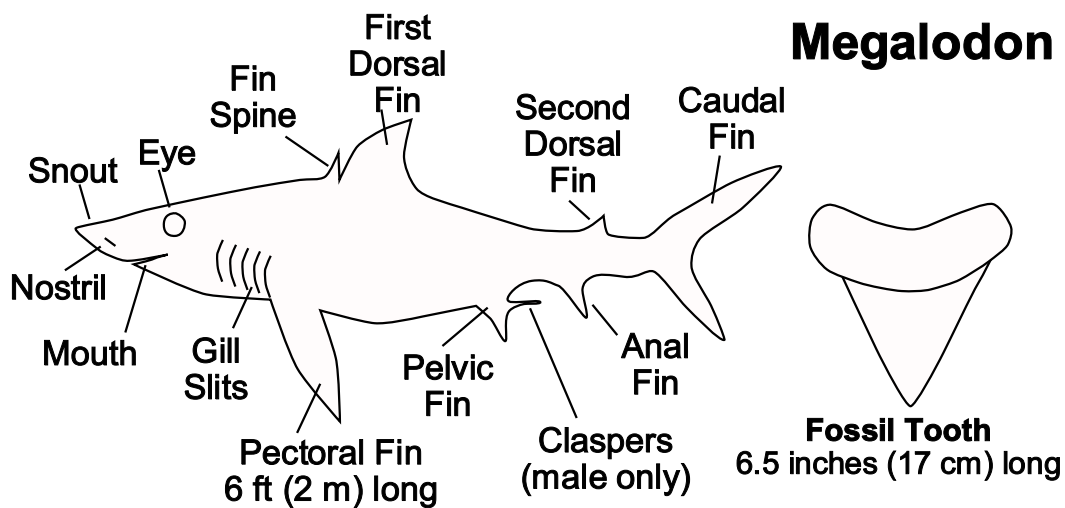
could open 6 feet (1.8 m) wide and 7 feet (2.1 m) high. The jaws were loosely attached by ligaments and muscles to the skull, opening extremely wide in order to swallow enormous objects. It could easily have swallowed a large Great White Shark whole!

Like most sharks, Megalodon's teeth were probably located in rows which rotated into use as they were needed. Most sharks have about three to five rows of teeth at any time. The front set does most of the work. The first two rows are used for obtaining prey; the other rows rotate into place as they are needed. As teeth are lost, broken, or worn down, they are replaced by new teeth. Megalodon may have had hundreds of teeth at one time. It did not chew their food like we do, but gulped it down whole in very large chunks.

### WHEN MEGALODON LIVED

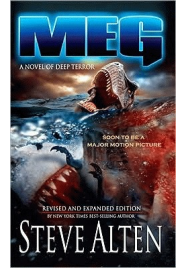
Megalodon lived roughly from 25 to 1.6 million years ago, during the Miocene and Pliocene epochs. It is now extinct, but the exact time of its extinction is hotly debated.

### MEGALODON ANATOMY



### MEGALODON FOSSILS

Fossilized Megalodon teeth up to 6.5 inches (17 cm) long have been found in Europe, India, Oceania (the general area around Australia including New Zealand, New Caledonia, etc.), North America, and South America.



## MEGALODON CLASSIFICATION

Carcharodon megalodon was named by Agassiz in 1843. There is some debate as to whether megalodon was an ancestor of the Great White Shark or was an evolutionary dead end.

**Kingdom** Animalia (animals)

**Phylum** Chordata

**Subphylum** Vertebrata (vertebrates)

**Class** Chondrichthyes (cartilaginous fish)

**Subclass** Elasmobranchii (sharks and rays)

**Order** Lamniformes

**Family** Lamnidae (genus Carcharodon) or Otodontidae (genus Carcharocles)

**Genus** Carcharodon (meaning “rough tooth”) or Carcharocles (There is currently some debate as to whether the megalodon’s genus should be Carcharocles or Carcharodon. Megalodon was once thought to be a direct ancestor of the Great White Shark, Carcharodon carcharias, and so was put in the same genus; new evidence indicates that it not ancestral to the Great White Shark, so Megalodon was assigned to a new genus, Carcharocles.)

**Species** Megalodon