SCIENCE & TECHNOLOGY

Scientists Model an Ancient Shark Able to Eat Whales in a Few Bites

August 21, 2022

Scientists used the ancient remains of bones and teeth to recreate a big shark that lived in the oceans millions of years ago.

The creature was so huge a recent study estimated it could have eaten something the size of a killer whale in just five bites.

For the recently published study, researchers used **fossil** evidence to create a three-dimensional (3D) model of the megalodon — one of the biggest fish of all time.

The study was published in *Science Advances*. It said megalodon was around 16 meters from nose to tail — bigger than a school bus. It is also several times the size of today's great white shark.

Megalodon's large mouth meant it could feed on big creatures. Once it filled its stomach, it could travel the oceans for months at a time, the researchers suggested.

The megalodon was a strong swimmer, too.

Its average swimming speed was faster than sharks today and it could have traveled across several oceans with ease, scientists said.

John Hutchinson, a co-writer of the study, described the megalodon as a "superpredator." He added, "There is nothing really matching it."

It has been difficult for scientists to get a clear picture of the megalodon, said study co-writer Catalina Pimiento.

The skeleton is made of soft **cartilage** that does not become a fossil very often, Pimiento said. So the scientists used the few fossils that are available, including a rare collection of back bones that has been at a **museum** in Belgium since the 1860s.

Researchers also brought in many megalodon teeth, each as big as a closed human hand, Hutchinson said. Special images of modern great white sharks helped researchers recreate the rest of the creature.

Researchers estimate that the megalodon would have weighed around 70 tons, or as much as 10 elephants.

Even other high-level hunters may have been food for the megalodon, which had a mouth almost 2 meters wide, Pimiento said.

Megalodons lived an estimated 23 million to 2.6 million years ago.

Since megalodon fossils are rare, these kinds of models require a "**leap** of imagination," said Michael Gottfried who studies ancient bones at the Michigan State University.

Gottfried was not involved in the study. But he said the study's findings are reasonable based on what is known about the large shark.

I'm John Russell.

Maddie Burakoff reported on this story for the Associated Press. John Russell adapted it for VOA Learning English.

Words in This Story

fossil – *n.* the mineralized remains of an animal or plant that lived in the distant past

cartilage – *n.* a strong but flexible material found in some parts of the body (such as the nose, the outer ear, and some joints)

fossilize – *v.* to become a fossil or to cause (something) to become a fossil

museum – *n.* a building in which interesting and valuable things (such as paintings and sculptures or scientific or historical objects) are collected and shown to the public

leap – *n.* a long or high jump