

# SEA MONSTERS

A PREHISTORIC ADVENTURE

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In the new National Geographic giant-screen film *Sea Monsters: A Prehistoric Adventure*, fossils found all over the world give clues about the life of one prehistoric sea creature, nicknamed "dolly." But what *doesn't* the movie tell you about real dollies and other ancient beasts? NG KIDS went behind the scenes to find out.



## STYXOSAUR

*Styxosaurus snowii*

**WHAT THE MOVIE TELLS YOU** In the competition for food, you could say the styxosaur often won by a stretch. Its 20-foot-long neck—the longest ever found in the sea—allowed its massive body to hide in the murky depths so its small head could sneak up on unsuspecting prey.

**OTHER COOL STUFF** Styxosaurs swallowed hundreds of small rocks, possibly to stabilize themselves but more likely to help grind up their meals, says Mike Everhart of the Sternberg Museum of Natural History in Kansas. That's an ancient twist on rocky road for dessert!

## CRETOXYRHINA

*Cretoxyrhina mantelli*

**WHAT THE MOVIE TELLS YOU** Like today's great white shark, the 20-foot-long cretoxyrhina had razor-sharp teeth that cut victims into chunks.

**OTHER COOL STUFF** Cretoxyrhina never ran out of teeth! Worn-out teeth were replaced by new ones. Good thing, because cretoxyrhina would even eat bones. "If the shark couldn't digest them, it would throw them up," Everhart says.

The creatures in the movie are computer-generated, but all the water and backgrounds are real. They were filmed in the Bahamas, and the digital sea monsters were added later.



## TYLOSAUR

*Tylosaurus proriger*

**WHAT THE MOVIE TELLS YOU** The movie's mega monster is the 29-foot-long tylosaur, the unchallenged ruler of the ocean. It ambushed its prey, crushing victims with its sharp, cone-shaped teeth. Like a snake, it could open its jaws wide enough to swallow prey whole.

**OTHER COOL STUFF** Tylosaur had a nose for nastiness. Many scientists think its long bony snout had dozens of nerve endings that sensed prey in murky waters. As soon as the meal was detected, the nerves triggered a bite response to quickly seize the prey.

## XIPHACTINUS

*Xiphactinus audax*

**WHAT THE MOVIE TELLS YOU** This 17-foot-long fish had fangs that seized prey so it could swallow its victims whole. But this fierce predator sometimes got choked up. Many xiphactinus fossils have been found with undigested gillieus fish in their rib cages—a sign that the prey may have choked the sea monster.

**OTHER COOL STUFF** Shaped like a torpedo, xiphactinus was a fast swimmer that may have reached speeds of 20 miles an hour.



## DOLLY

*Dolichorhynchops osborni*

**WHAT THE MOVIE TELLS YOU**

The dolly and her two pups are the movie's stars. Living 82 million years ago, these dolphin-size air-breathers hunted fish and squid in shallow waters. But they had to brave dangerous, unknown seas when their prey migrated into deeper water.

**OTHER COOL STUFF** "Dollies literally flew through the water using their large, flat paddles like wings," Everhart says. But they had to be careful. Dollies that dived too deep and surfaced too quickly could suffer a deadly condition called "the bends," according to Kenneth Carpenter of the Denver Museum of Natural History and Science in Colorado.

