

Hunter's find leads to discovery of prehistoric sea creature

13 April 2017, by Matt Volz



This undated image provided by Ken Olson shows a drawing of the plesiosaur (marine reptile). A fossil found by an elk hunter in Montana nearly seven years ago has led to the discovery this new species of prehistoric sea creature. The new species of elasmosaur is detailed in an article published Thursday, April 13, in the *Journal of Vertebrate Paleontology*. The creature lived about 70 million years ago in the inland sea that flowed east of the Rocky Mountains from Canada to the Gulf of Mexico. (Ken Olson via AP)

A fossil found by an elk hunter in Montana nearly seven years ago has led to the discovery of a new species of prehistoric sea creature that lived about 70 million years ago in the inland sea that flowed east of the Rocky Mountains.

The new species of elasmosaur is detailed in an article published Thursday in the *Journal of Vertebrate Paleontology*. Most elasmosaurs, a type of marine reptile, had necks that could stretch 18 feet, but the fossil discovered in the Charles M. Russell National Wildlife Refuge is distinct for its much shorter neck—about 7½ feet.

"This group is famous for having ridiculously long necks, I mean necks that have as many as 76

vertebrae," said Patrick Druckenmiller, co-author of the article and a paleontologist with the University of Alaska Museum of the North. "What absolutely shocked us when we dug it out—it only had somewhere around 40 vertebrae."

The smaller sea creature lived around the same time and in the same area as the larger ones, which is evidence contradicting the belief that elasmosaurs did not evolve over millions of years to have longer necks, co-author Danielle Serratos said.

Elasmosaurs were carnivorous creatures with small heads and paddle-like limbs that could grow as long as 30 feet. Their fossils have been discovered across the world, and the one discovered in northeastern Montana was well-preserved and nearly complete.

The refuge adjacent to the Missouri River is popular with hunters for its big game and remote setting.

David Bradt, a ranch manager from Florence, Montana, said he was hunting elk unsuccessfully in November 2010 when he walked into a canyon to splash some water on his face.



This July 7, 2011 photo provided by the U.S. Fish and Wildlife Services shows workers and paleontologists move dirt to keep the creek flowing, a constant challenge at a dig site for a fossil found in Montana nearly seven years ago that has led to the discovery this new species of prehistoric sea creature. The new species of elasmosaur is detailed in an article published Thursday, April 13, in the *Journal of Vertebrate Paleontology*. The creature lived about 70 million years ago in the inland sea that flowed east of the Rocky Mountains from Canada to the Gulf of Mexico. (Erin Clark / U.S. Fish and Wildlife Services via AP)

In the creek, the water ran over what he thought was petrified wood sticking out of a rock. He pulled back the brush, saw vertebrae and knew it was fossilized bones.

He thought it was a dinosaur and was floored when he learned it was a sea creature.

"It's about the size of a cow, and I'm thinking it's a triceratops," he said. "I didn't know there was an ocean there."

Bradt took photographs and reported the find to the U.S. Fish and Wildlife Service and the Museum of the Rockies in Bozeman.

It took three days to excavate the fossil, but much longer to clean and study it before the determination could be made that it was a new species, Druckenmiller said.

He said the inland sea that stretched the width of Montana to Minnesota and from Canada to the Gulf of Mexico was teeming with marine reptiles, but relatively few of their fossils have been excavated.

"It's a total bias—just more people out there are interested in land-living dinosaurs than marine reptiles," he said. "There would be a lot more known if more people were studying them."

© 2017 The Associated Press. All rights reserved.

APA citation: Hunter's find leads to discovery of prehistoric sea creature (2017, April 13) retrieved 18 January 2021 from <https://phys.org/news/2017-04-hunter-discovery-prehistoric-sea-creature.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.