



Above, Marc Harvey shows the fossilized remains of a prehistoric mosasaur he found about 30 years ago in Alabama. Below, the fearsome mosasaur. Drawing by Carl Buell.

My, What Big Teeth You Have!

Lyle man donates his prehistoric find to an Alabama science center

By Jeanie Senior

The remains of a prehistoric creature that have spent the last 25 years in Klickitat County are going back home to Alabama, thanks to Marc Harvey of Lyle.

The 65-million-year-old fossilized mosasaur—a fierce marine reptile that lived in the Cretaceous period—will be part of the collection at the McWane Science Center in Birmingham.

In exchange for the donation, the



museum will produce a replica of the creature's skull for Marc, who expects the science center to make replicas of all the bones and reassemble the mosasaur skeleton.

It is bound to be scary looking.

A mosasaur was an efficient killing machine, with seven jaws that were articulated so it could open its mouth very wide, and an array of huge, pointed teeth. It swallowed its prey whole, much like a snake.

Marc, who stored the bones in several boxes, joked that he slept with a dinosaur under his bed. The mosasaur's jaws and teeth suggest the stuff of nightmares.

The mosasaur was a major find for Marc, who was hooked on paleontology at an early age. He spent holidays and weekends with a friend named Prescott, wading through swamps, creeks and cow pastures in Alabama.

They searched for fossils from the Cretaceous era 65 to 70 million years ago, when a vast portion of North America was under water.

One of their first discoveries was the remnants of a plesiosaur, a long-necked carnivorous aquatic reptile that lived from the start of the Jurassic period to the end of the Cretaceous period.

It was one of the only plesiosaurs to be found east of the Mississippi,

and it was a big one. The vertebrae were about six inches across.

Marc found 26 of them. He estimates the plesiosaur itself would have been about 35 feet long.

"Skeletons in this formation are never intact," says Marc. "It was a warm, shallow sea, and the deposits have been exposed for a long time. They tend to get disorganized."

Those bones were donated to the University of Alabama at Tuscaloosa.

Marc also found turtles, fossilized fish and a few individual mosasaur bones.

"It's just very rare to find a clump of bones together," he says.

He also found another, smaller mosasaur skull. It is mounted on a bookcase in his living room, where it is a real conversation starter.

After that, "it was probably a couple of years of constant looking before we found this," he says, referring to the mosasaur headed for the science center.

"I was wading in a creek in about six inches of water, and I looked down and noticed bones sticking out of a rock," he recalls. "I immediately recognized what I was standing on."

It took about two days to dig the fossilized bones from the creek, but longer to extract them.

"I excavated it in huge blocks with the rock, and took those home and excavated the bones out of there," he says. "I spent months on that."

Some of the "big stuff" could be removed from the stone with a hammer and chisel, but most of it required painstaking time spent with a dental pick.

What eventually emerged is about 80 percent of the mosasaur's skull and about 10 percent of the skeleton, including some vertebrae.

The mosasaur—which Marc says probably was about 25 feet long—"cleaned up very nicely."

Marc and Prescott figured out on their own what he had found.

"My friend and I were basically the local paleontologists back

then," says Marc. "There was nobody else. We had to do our own research."

The mosasaur "basically looked like a huge lizard with paddles instead of legs," Marc says.

The creature propelled itself through the water with the paddles and a long, muscular, flat tail.

It had a third eye on the top of its skull. Textbooks say mosasaurs were not dinosaurs, but lepidosaurs—reptiles with overlapping scales. Some experts consider them to be closely related to snakes.

The mosasaur is considered to be the ancient ancestor of the monitor lizard—member of a family that includes the Komodo dragon, the largest lizard in the world.

Fossilized mosasaur remains are fairly common, Marc says, "but we believe this is a rare species."

Other mosasaurs have not included enough bones so researchers could really identify the species, "so we think this probably will fill in some of the gaps."

Smitten by paleontology, Marc studied the subject at Prescott College in Arizona. He says it was an impractical career choice since there were no jobs for him. He worked for the Forest Service, then moved to the Northwest about 25 years ago, settling in Klickitat County.

After working for the city of The Dalles public works department

and for Bingen's public works department, Marc took a job 11 years ago with Full Sail Brewing Company in Hood River, initially as a brewer. Today, he is the environmental compliance manager for the employee-owned firm.

His wife, Brook, works for Columbia Gorge Community College in The Dalles, teaching basic college skills.

Their two sons are grown: Prescott, 24, works for a software company in Seattle, and Reed, 21, is an economics major at Western Washington University in Bellingham.

Marc's friend, Prescott, now works in medical research at a children's hospital, but he still hunts for specimens, some of which also are at the McWane museum.

Waiting for the science center to send an expert to pack the bones for shipping, Marc concedes it would be somewhat wrenching to say goodbye to the well-traveled mosasaur bones, which have made a number of moves with him during the past 30 years.

"I am somewhat attached to it," he says. "I toyed with the idea of assembling the bones myself, but I'm beginning to realize that day will probably never happen. I've been working on another mosasaur for the last 25 years."

Maybe now, Marc says, he will finish the work on that piece of ancient history. ■



Marc will keep this smaller mosasaur jaw he discovered.