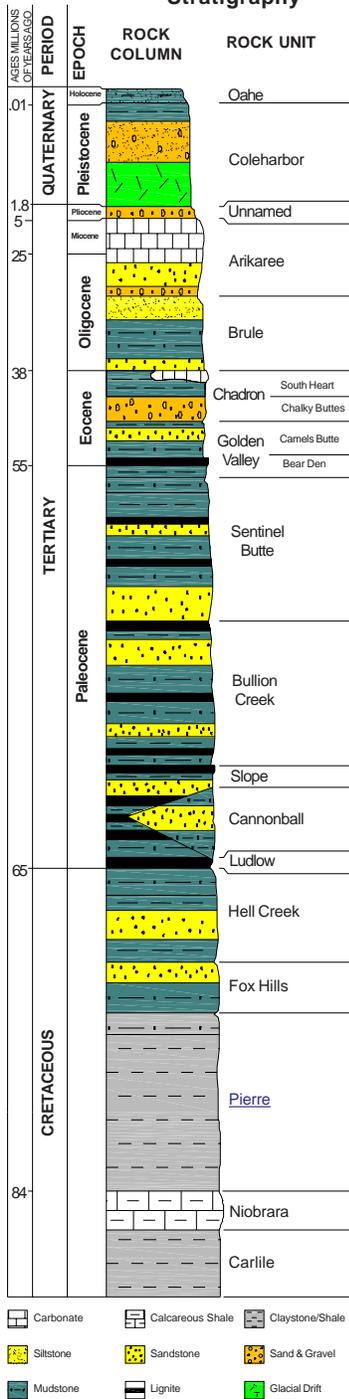


## North Dakota Stratigraphy



Locations where fossils have been found

# Plioplatecarpus

### Common Name:

Mosasauro

### Classification:

**Class:** Reptilia

**Order:** Squamata

**Family:** Mosasauridae



This skeleton is of one of the mosasaurs called *Plioplatecarpus* that inhabited the Pierre Sea about 75 million years ago. It was discovered in 1995 by Mike Hanson and Dennis Halvorson on Orville and Bev Tranby's farm in the Sheyenne River valley near Cooperstown, Griggs County, North Dakota. Study of the nearly complete skull and other parts of the skeleton indicate that this is a new species of *Plioplatecarpus* that has not been found anywhere else in the world. The skeleton is 23 feet long. North Dakota State Fossil Collection ND 97-115.1.

Beverly and Orville Tranby and Bev's sisters, Gloria Thompson, Jacqueline Evenson, and Susan Wilhelm, donated this fossil to the North Dakota State Fossil Collection for exhibit and study at the North Dakota Heritage Center.

### Description:

*Plioplatecarpus* was one of the marine reptiles called mosasaurs. Mosasaurs were huge marine lizards, up to 40 feet in length, that inhabited the world's oceans during the Cretaceous. The name mosasauro means Meuse Reptile and refers to the initial discovery of fossils of these animals in the 1770s along the Meuse River near the town of Maastricht in the Netherlands. Mosasaurs are related to monitor lizards, such as the Komodo dragon that lives in Indonesia today. Unlike their terrestrial lizard relatives, the limbs of mosasaurs were modified to form flippers. Mosasaurs swam by moving the back part of their bodies and flattened tails from side to side. Their flippers were used primarily for steering rather than for propulsion as the animal glided through the water. Mosasaurs were active predators and among the main carnivores in the Cretaceous oceans. They had a good sense of sight and a poor sense of smell. They probably preyed on other mosasaurs, fish, turtles, and invertebrates, such as cephalopods. Although mosasaurs were not dinosaurs, they became extinct at the same time as the dinosaurs, about 65 million years.



This painting, by David Miller, is a depiction of an animal community that lived in the shallow-water, subtropical Pierre Sea that covered North Dakota about 75 million years ago. The scene is based on fossils found in the [Pierre](#) Formation at a fossil site near Cooperstown, Griggs County. The large, predatory mosasauro, *Plioplatecarpus*, is attacking the diving seabird, *Hesperornis*. *Hesperornis* has just captured a salmon-like fish, *Enchodus*. In the background, a carcass of another decaying *Plioplatecarpus* is being scavenged by a frenzied group of dogfish sharks, *Squalus*. The large sand-tiger shark, *Carcharias*, cruises near the sea floor.