

Triceratops skull and other fossils from the Little Missouri National Grassland exhibited at the Bismarck Airport

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From 1995 through 1997 the North Dakota Geological Survey and United States Forest Service conducted a field study to map fossil sites and collect significant fossils on lands administered by the Forest Service in North Dakota. Initial field work was in the Marmarth area (Slope County) where the Late Cretaceous (about 65 million years old) dinosaur fossil-bearing Hell Creek Formation is exposed in vast areas of badland terrain. The partial, disarticulated skull of a *Triceratops* dinosaur was one of the fossils found in 1995. *Triceratops* dinosaur fossils are fairly common in North Dakota indicating that many lived here during the Late Cretaceous, but skulls of these animals are rarely found.

The scientific name *Triceratops* refers to the three horns on the skull of this dinosaur. *Triceratops* skulls were huge, often 6 feet long in adult specimens. They had powerful jaws that ended in a parrot-like beak. The jaws contained batteries of small teeth adapted for shearing fibrous plants. These were giant animals, some about 30 feet long, and could weigh as much as 5 tons. They were among the main consumers of plants at that time. *Triceratops* was also one of the last dinosaurs to live on Earth before the extinction event that occurred at the end of the Cretaceous (K/T boundary extinction).

The skull was transported to the NDGS Johnsrud Paleontology Laboratory at the North Dakota Heritage Center in Bismarck. Johnathan Campbell, formerly with the NDGS, restored the skull and it was displayed in the Heritage Center for many years. In 2006, we replaced this skull with the skull and partial skeleton of another *Triceratops* from North Dakota in the Heritage Center's new Corridor of Time exhibit. We sought to find another place to display the Forest Service skull. I approached Greg Haug, manager of the Bismarck Airport, and asked him if he would like a dinosaur exhibit in the beautiful, new airport. He agreed the skull would be a good addition and estimated that upwards of 500,000 people would see it each year. Because the fossil was recovered from US Forest Service administered lands it belongs to the federal government (it is public property). The administration of the USDA Forest Service-Dakota Prairie Grasslands office in Bismarck was enthusiastic about the airport display and provided funding for construction of the display case and graphics. Brian Austin designed the display case and did the graphic art and master cabinet makers, Creative Wood Designs of Bismarck, made the case.

In addition to the skull, other *Triceratops* skeletal parts are exhibited including ribs, jaw fragments, and a vertebra. Other fossils displayed from the Hell Creek Formation collected from Little Missouri National Grassland areas in North Dakota are a *Tyrannosaurus rex* tooth (cast), *Edmontosaurus* (duck-billed dinosaur toe bone and a vertebra), *Melivius* (fish) vertebra, soft-shelled turtle shell pieces, *Metasequoia* (dawn redwood) leaves, conifer cones (South Dakota), and petrified wood. Several fossils from Paleocene (about 55 million to 60 million years ago) formations in North Dakota, from lands administered by the USFS-Dakota Prairie Grasslands, are also in the exhibit including the remains of: crocodiles (teeth, scutes, and coprolites), *Champsosaurus* (crocodile-like animal vertebrae and ribs), *Myledaphus* (fresh-water ray teeth), *Lepisosteus* (gar fish partial skeleton and scales), *Amia* (fresh-water dogfish scales), other fish vertebrae, *Titanoides* (bear-like mammal teeth, toe bone, and vertebra), *Campeloma* (fresh-water snail shells), *Viviparus* (fresh-water snail shells), fresh-water clam shells, *Cyclocarya* (nuts from a walnut tree), and leaf fossils.



Display case containing a Triceratops skull and other fossils in the lobby of the Bismarck airport.