

Skeleton of the Oligocene (30 million-year-old) horse, *Mesohippus*, is a featured exhibit at the new North Dakota Cowboy Hall of Fame in Medora

By John W. Hoganson

Developers of the recently opened North Dakota Cowboy Hall of Fame contacted me about having a fossil exhibit in the new Hall in Medora. Of course, what would be more appropriate than an exhibit interpreting the evolution of the horse? Most people are under the false impression that horses did not inhabit North America until they were introduced by the Spaniards during the early days of conquest. But horses are indigenous to North America. Fossil remains of the earliest horse, referred to as *Hyracotherium* (or sometimes *Eohippus*), have been recovered from early Eocene (about 50 million years old) rocks in North America. In fact, they were some of the most abundant mammals that lived during that time. The fossil record of horses in North Dakota extends back to the Oligocene, about 30 million years ago, when the diminutive horse, *Mesohippus* roamed western North Dakota. *Mesohippus* was tiny, about the size of a sheep. The adults were only about 20 inches tall at the shoulder. They also had three toes on each foot compared to the modern horse *Equus* that has one. *Mesohippus* was also probably more of a browsing herbivore compared to the modern grazing horse. We have found many *Mesohippus* fossils in North Dakota but no complete skeletons. Consequently, the *Mesohippus* skeleton on exhibit at the Cowboy Hall of Fame is an exact cast replica.

We have also found the remains of 50,000-year-old horses in North Dakota indicating that horses lived here during the last Ice Age. By that time, horses had attained the size and aspect of modern-day horses and are placed in the modern horse genus, *Equus*. Horses did become extinct in North America some time near the end of the Ice Age, several thousand years ago. Why they became extinct in North America and not in the Old World is a matter of debate. Spanish conquistadors did have horses with them when they arrived in the southwestern part of what is now the United States in the 1500s, but most scholars believe that Native Peoples in the southwest probably did not have extensive access to horses until the 1600s. Apparently the Mandan in North Dakota acquired horses by about 1750. The importance of the horse to Plains Indians cannot be overstated. In this respect, some scholars have referred to the period from the time Native Peoples obtained horses until the near extermination of the buffalo about 1880 as the "Horse Culture Period." The importance of the horse on the Great Plains extends to the days of pioneers and settlers and is equally prominent today in Cowboy culture.



Skeleton (cast) of the 30-million-year-old horse, *Mesohippus*, on display at the new North Dakota Cowboy Hall of Fame in Medora.

Architectural sketch of the new North Dakota Cowboy Hall of Fame in Medora.

