The Quaternary Period of Earth history, including the Pleistocene (earlier, also called the “Ice Age”) and Holocene (later, also called Recent), is the interval of time from 1.8 million years ago to the present day. During the Pleistocene, from approximately 1.8 million to 13,000 years ago, continental glaciers extended from eastern Canada southward into what is today the United States. The most extensive of these, reaching into southern Illinois, and thus called the Illinois Glaciation, covered nearly 90 percent of the state prior to 130,000 years ago. In their growth and movement these glaciers ground up rocks from northern regions and upon melting, left this debris behind in deposits up to 400 feet (121 meters) thick. These deposits include windblown silt (termed loess), sand and gravel outwash, glacial lake deposits, and glacial till that, with cave fillings, and for later times archaeological sites, are the primary sources of Quaternary fossils throughout the state. These glaciations, characterizing the Pleistocene/Ice Age, were nevertheless interrupted by warm intervals, termed interglacials.

The Holocene, representing the last 13,000 years of the Quaternary Period is characterized by a warm climate and essentially modern plant and animal communities. Some mammals of Illinois from the Pleistocene have persisted to the present but others were replaced by species that evolved in the Holocene. The gray wolf, black bear, wapiti, caribou, and bison are known from Pleistocene fossils, indicating they are species that survived the large-mammal extinction event marking the close of that epoch 13,000 years ago. The modern bison evolved within the Holocene, but from Pleistocene ancestors. The gray wolf, black bear, wapiti, and bison continued to inhabit Illinois well into the 1800s, and the gray wolf may now be re-inhabiting the state.

The Pleistocene, from 1.8 million until 13,000 years ago, was a time of successive cold climates and vastly different animal communities, compared to those of today. The close of the Pleistocene and the beginning of the Holocene (also called the Megatherium) was a time of climatic warming. Only a few species were affected by this change, most persisted. However, some species, such as woolly mammoths and giant beavers, were completely extirpated. Please note that the animals associated with each illustration are not shown natural size.
**Survivors**

**Bison, Bos bison**

- Order: Artiodactyla (even-toed ungulates)
- Family: Bovidae (bovids)

The bison, or American buffalo, is the largest terrestrial mammal native to North America and the state. It is a herbivore, typically found in prairie grasslands, sabo grasslands, or steppe tundra. Bisons were once abundant in Illinois, but their population declined due to overhunting and habitat loss. Today, bison are protected and managed by the Illinois Department of Natural Resources (IDNR) and can be found in several state parks.

**American mastodont, Mammut americanum**

- Order: Artiodactyla (even-toed ungulates)
- Family: Mammutidae (mastodonts)

The American mastodont is an extinct species of mastodont that lived in Illinois during the Pleistocene epoch. It was larger than the modern-day elephant and was a grazing herbivore. Mastodonts were herbivores and grazed on grasses and other plants. They were known to inhabit Illinois for thousands of years, and their remains are commonly found in caves and other fossiliferous areas.

**Gray wolf, Canis lupus**

- Order: Carnivora (carnivores)
- Family: Canidae (canids)

The gray wolf is a large carnivore that roams the state, generally preferring areas with ample food sources. They are sociable and often live in packs, which can include animals of both sexes. The gray wolf is an apex predator and plays a vital role in the balance of nature. Their presence is regulated by the Illinois Department of Natural Resources (IDNR).

**Musk ox, Ovibos moschatus**

- Order: Artiodactyla (even-toed ungulates)
- Family: Bovidae (bovids)

The musk ox is a herbivorous species native to the subarctic regions of the Northern Hemisphere. It is a vital resource and has been protected under the Endangered Species Act. In Illinois, the musk ox is considered a rare species and is protected by state law.

**Caribou, Rangifer tarandus**

- Order: Artiodactyla (even-toed ungulates)
- Family: Bovidae (bovids)

The caribou is a large ungulate native to the Northern Hemisphere. It prefers cold, high-altitude environments and is known for its migratory behavior. Caribou are also known for their unique antlers, which they shed and grow annually.

**Wapiti, Cervus elaphus**

- Order: Artiodactyla (even-toed ungulates)
- Family: Cervidae (cervids)

The wapiti, also known as the elk, is a large ungulate native to North America. It is known for its large antlers, which are shed and grown annually. Wapitis are native to Illinois and are protected under state law.

**Flat-headed peccary, Pecari tajacu**

- Order: Artiodactyla (even-toed ungulates)
- Family: Suinae (swine)

The flat-headed peccary is a large ungulate native to the American Southwest. It is known for its distinctive appearance and is a common sight in the state's forests and woodlands. Peccaries are protected under state law and are considered a valuable resource.

**Gray sheep, Ovis canadensis nelsoni**

- Order: Artiodactyla (even-toed ungulates)
- Family: Bovidae (bovids)

The gray sheep is a herder species native to North America. It is known for its distinctive appearance and is a valuable resource in Illinois. Gray sheep are protected under state law.

**Mule deer, Odocoileus hemionus**

- Order: Artiodactyla (even-toed ungulates)
- Family: Cervidae (cervids)

The mule deer is a large deer native to North America. It is known for its distinctive appearance and is a valuable resource in Illinois. Mule deer are protected under state law.

**Harran’s muskox, Bootherium bombifrons**

- Order: Artiodactyla (even-toed ungulates)
- Family: Bovidae (bovids)

Harran’s muskox is a rare species native to Illinois. It is known for its distinctive appearance and is a valuable resource in Illinois. Harran’s muskox are protected under state law.

**Further Reading**