



# THE MUSEUM GAZETTE

## Animals in the Museum of Westward Expansion

Visitors to the Jefferson National Expansion Memorial are often curious about the animal displays in the museum. Since the National Park Service is sensitive to the preservation of animals, it is important that our animal exhibits have educational value. Many visitors have never seen the animals we display except in photographs and drawings. The exhibits help provide an understanding of each animals' importance in the history of westward expansion.

### THE GRIZZLY BEAR

(Genus/species/subspecies) *Ursus arctos horribilis*  
WEIGHT RANGE: 323-1496 lbs. (147-680 kg)  
HEIGHT AT SHOULDERS: @ 4.5 ft. (130 cm)  
LENGTH: @ 6-7 ft. (180-213 cm)  
LIFESPAN: 15-34 years

Known by such names as "Moccasin Joe" and "silvertip," the grizzly is a subspecies of Brown Bear. Once found throughout western North America, the present range of the grizzly includes only Canada, Alaska and four of the lower 48 states. Individual grizzlies require a large habitat, making them vulnerable to pressure from the encroachment of humans.

The grizzly is a solitary animal with mating season the only time two grizzlies tolerate each other. Each mature female grizzly mates every other year in late June or early July, and on average gives birth to two cubs between January and March. The cubs are very small at birth, about the size of a rat, and weigh only about one pound. In preparation for winter, a grizzly puts on as much as four

hundred extra pounds and becomes lethargic. Some say that grizzlies are not true hibernators, although their failure to eat and relieve themselves during the "winter sleep" period seems to fulfill the definition of "hibernation".

While the grizzly is the most unpredictable and dangerous of all bears, it normally avoids humans and has been responsible for only 14 human fatalities since the turn of the century. Attacks occur when a bear is protecting a food source, cubs, or when surprised. Thought by many to be a carnivore, 90% of the diet is comprised of vegetation.

### THE PLAINS BISON

(Genus/species/subspecies) *Bison bison bison*  
WEIGHT RANGE: Males - 991-2000 lbs. (460-900 kgs)  
Females - 793-1013 lbs. (360-460 kgs)  
HEIGHT AT SHOULDERS: Males - @ 6 ft. (180 cm)  
Females - @ 5 ft. (150 cm)  
LENGTH: Males - @ 10-12 1/2 ft. (304-380 cm)  
Females - @ 7-8 ft. (210-240 cm)  
LIFESPAN: @ 25 years

The Bison is the largest terrestrial mammal in North America, and is commonly called the American Buffalo. Between 60 and 125 million Bison roamed North America by the 15th century, with a range that included much of the United States, Canada, Alaska and northern Mexico. Humans hunted Bison for 12,000 years without adverse effects on the animal's population, until

the arrival of European-Americans, to whom the Bison were a nuisance. Within a century less than 1000 animals remained.

Bison are members of the family Bovidae, and are relatives of domesticated cattle, sheep and goats, all of who are primarily grazers. To digest grasses, the Bison possesses a four-chambered stomach, which allows the ingestion of large quantities of grass and, at a later time, regurgitation back to the mouth for further chewing.

The thick coat of the Bison provides excellent insulation against harsh winters. They are good swimmers due to great buoyancy, and can run at speeds up to 32 miles per hour. Bison herds number from four to twenty individuals, and they occasionally form bands of several thousand animals. Bison stay segregated by gender except during mating season, when bulls attempt to form harems of 10 to 70 cows. A nine-month gestation period usually produces a single calf, although twins can occur.

The bison was at the center of the Plains Indian lifestyle. They ate the muscles and organs, used the skin for clothing and shelter, made thread and rope from tendons, and glue and tools from the hooves and bones.

The Bison displayed in the Museum of Westward Expansion was an eight-year-old, 1700-pound bull, killed as part of a herd reduction at the Theodore Roosevelt National Park in North Dakota.

#### THE BEAVER

(Genus/species/) *Castor canadensis*

WEIGHT RANGE: 40 - 60 pounds - some over 100 pounds (18-27 kgs.)

HEIGHT: 11 3/4" - 17 3/8" (300-440 mm)

LENGTH: 35 1/2" - 46" (900-1170 mm)

LIFESPAN: 10-11 years in the wild

The beaver was the most widely sought natural resource in North America during the 1700s and 1800s, and was largely responsible for the exploration and geographic knowledge of the western United States and Canada. Pelts were made into robes, coats, and especially hats.

Unregulated trapping caused the disappearance of the beaver from much of its original range. Subsequently, beaver were protected from exploitation, and today they inhabit all of their historical range throughout northern Mexico, the United States, and Canada. So successful was the repopulation of the beaver that in some areas they are again considered a destructive pest.

The largest rodent in North America, the beaver is known by its distinctive tail, which is used as a rudder while swimming and to slap the water as a danger signal. Nineteenth century trappers enjoyed eating the beaver's flesh, especially the somewhat fatty tail, which was considered a delicacy.

Beaver are herbivorous and feed on the cambium layer of tree bark. Large orange incisors can be used to fell a tree 5" in diameter within three minutes. Webbed hind paws allow the beaver to swim at speeds up to 6 M.P.H., even while carrying branches in the forefeet. A beaver can hold its breath for up to fifteen minutes, a useful defense mechanism. When submerged, valves close off ears and nostrils, skin flaps seal the mouth, and clear membranes slide over the eyes. A beaver waterproofs itself by combing castoreum, an oily secretion from glands near the tail, through its fur with the nails of its hind foot. Castoreum serves as a way for a Beaver to mark its family territory.

A beaver family consists of a monogamous adult pair and their young, called "kits". Kits remain with the parents about two years, then prior to the birth of a new litter are sent away to start their own families. Beavers live in lodges constructed in the middle of ponds created by damming creeks and streams, or sometimes by burrowing into riverbanks. Each lodge or burrow may have several underwater entrances to a living area above the water line.

The beaver displayed in the museum were trapped at the Marine Corps base at Quantico, Virginia, due to damage caused to a dike by their burrowing. Each beaver weighed about 25 to 30 pounds and was estimated to be 2 or 3 years old.

## THE HORSE

(Genus/species/) *Equus caballus*

WEIGHT RANGE: @ 1200 pounds (544 kgs.)

HEIGHT: 14 Hands (one hand= 4")

LIFESPAN: Up to 30 years

The Horse is essential to any study of the westward expansion of the United States. The introduction of the horse to North America by the Spanish, and the subsequent proliferation of horses among the Plains tribes during the years 1650 - 1700, changed their lifestyle dramatically, as bison hunting became more efficient and movement was expedited.

The horse displayed in the museum is a true Appaloosa. Recognized as a distinct breed in 1950, characteristics include a white sclera around the iris of the eye, striped laminated hooves, areas of mottled skin, and sparse distribution of hair on the mane and tail. Although prized for its appearance, the spotted pattern was the least important trait to Native Americans, who bred horses for speed, sureness of foot, and ease of control.

## THE LONGHORN

(Genus/species/) *Bos taurus*

WEIGHT RANGE: @ 1600 pounds (726 kgs.)

LIFESPAN: to 25 years

Physiologically, Longhorn cattle are like the bison, but the importance of the Longhorn to the history of westward expansion is very different. Early American settlers thought the Longhorn to be indigenous to North America, but in fact the Longhorn is the direct descendant of a type of cattle raised in Spain by the Moors. Settlers from the eastern United States brought cattle with them which eventually interbred with the original Spanish Longhorns. The "new" Longhorn, heavier, rangier, with a greater variance in color and longer horns, eventually took over.

Despite the Longhorn's reputation for producing a lower quality and quantity of beef, cowboys preferred them as they did well on the trail due to long legs, tough hooves, and the ability to walk nearly sixty miles between watering places. These characteristics were important, since cattle were

easy to propagate but difficult to transport to market. Prior to the Civil War most Texas beef went to market in New Orleans. After the Civil War, as northern cities grew, their need for beef increased. The Texas cattle industry exploded, and the era of long cattle drives to northern railroad centers began, ending quickly as railroads made their way West. As the cattle drives ended, so did the popularity of the Longhorn. Beef cattle no longer needed the characteristics for long drives; taste and mass became more important attributes. The Longhorn in the museum is a steer, slaughtered for beef that was donated to various boys homes in Texas.

It is our hope that each of the animal displays in the museum provides insight and perspective into the important contributions of animals to the settlement of the West.

