



BISON

ANTIODACTYLA
Family: Bovidae
Genus: *Bison*
Species: *bison*



Range: Yellowstone National Park and other protected areas in US, while others are in W Canada

Habitat: open grassy prairie near water

Niche: terrestrial diurnal herbivore

Wild diet: Gramma and blue grass, wild wheat

Zoo diet: Alfalfa hay, grain, omelene and 'natural' graze

Life Span: (Wild) 15-25 years

(Captivity) up to 40 years

Sexual dimorphism: M is 1/3 larger than F

Location in SF Zoo: Golden Gate Park

APPEARANCE & PHYSICAL ADAPTATIONS:

Pelage of head, neck, shoulders and forelegs is long and shaggy, remainder of body covered with short, lighter colored hair. Colors of adults vary from light brown to almost black while calves are reddish brown. Features include heavy head, short neck, usually a bearded chin and shoulder hump. Short curving horns are found on both sexes and pelage is molted twice annually.

Their heavy coat and size help them withstand the extreme weather conditions of the plains. Senses of hearing and smell are highly developed while eyesight is poor.

Weight:	M 2000 lbs
	F 1100 lbs
HRL:	12.6 ft
SH:	M 6.5 ft / F 5.5 ft
TL:	3 ft.

There is a long gap between front and back teeth and upper incisors are either reduced or lost. Molars are low or crowned with cusps and cutting ridges.

STATUS & CONSERVATION

Bison are listed under CITES - Appendix I, and the sub species *B. b. athabasca* is listed as endangered by the U.S. Endangered Species Act. With numbers of more than 60 million animals in pre-Columbus times *B. bison* disappeared from east of the Mississippi early in the 20th century. By 1890 fewer than 1,000 individuals survived on the continent, mainly in Canada. Since then conservation efforts have increased the herds to over 500,000. As of 1996 there was c. 3500 in Yellowstone National Park. Due to a Montana lawsuit and winter kill by March 1997 the population was estimated to be approximately 1,200 to 1,500 animals.*

COMMUNICATION AND OTHER BEHAVIOR

Calls include grunts, groans, squeaks, bellows that carry up to 3 miles, hisses and tongue clicking. Adult females and their young, up to three years of age, exist in groups of 57 (on average). Mature males move alone or in small groups for most of the year, but join the female groups during the mating season. Bison are able to distinguish large objects from a distance of 1 km and moving objects 2 km away. Bison can communicate vocally through grunts and snorts. It is likely that chemical cues are used in communicating reproductive states. Can run c. 37 mph and swim rivers over half mile wide. Daily movements of about 3 miles are average, with a group circulating in a home range 30-100 square kilometers in size depending on the season.

COURTSHIP AND YOUNG

Bulls must compete with each other for cows, and will tend many. Precocial calf is able to run within 3 hours of its birth. Breeding occurs from late June through September. Males are usually about 6 years when they are ready to breed.

Estrous: Polyestrous - 9-28 hrs. during 3 week period

Gestation: 270 - 300 d

of Mammae:

of Young: 1

Sexual Maturity: F-2-3 / M-3 years

Weaning Age: 7 - 10 months

Weight at birth: 66 lbs

MISCELLANEOUS

Plains Indians relied on the bison for their food, shelter, clothing, ornaments and ceremonies. So as the bison were eradicated so also were the plains Indians. American Indians have also referred to these powerful animals as "tatanka."

Early French explorers called them "les boeufs," meaning oxen. Over the years, the name has gone through several changes from "buffle" to "buffelo" and finally to its present "buffalo." Bison is the correct scientific and common name, but buffalo has been used and accepted for many years.

*A new bison management plan was developed stated all bison entering Montana along Yellowstone's north boundary would be shot or shipped to slaughter. In addition, all bison entering Montana through the park's west boundary would be tested for brucellosis. Any bison testing positive for brucellosis would be shot or shipped to slaughter.

Sources:

Last Revision: 11/94

Biological Values 1982, Brainard ed., 1986 / Crandall 1964 / Fowler 1978 / Mays 1977 / Grzimek 1990 / Novak, ed. 1991 / Schmidt & Gilbert 1978

Present Revision: 10/07

Collins Guide to the Rare Mammals of the World © 1987 by Burton & Pearson p 192

Macdonald © 1964 p 553-5

http://animaldiversity.ummz.umich.edu/site/accounts/information/Bison_bison.html

http://www.ultimateungulate.com/Artiodactyla/Bison_bison.html

http://www.nps.gov/thro/tr_buffs.htm