Yellowstone

National Park P.O. Box 168 Yellowstone NP, WY 82190

Bison Natural History



Classification and history

The terms "bison" and "buffalo" are both acceptable names for the animal scientifically classified as <u>Bison bison</u>.

The genus <u>Bison</u> crossed the Bering Strait from Eurasia sometime during the late Pleistocene era. Studies indicate bison have inhabited the greater Yellowstone area since pre-historic times.

During the late 1800s, the Yellowstone bison herd became increasingly isolated as bison were being exterminated in other parts of the country. In 1902, 21 animals were transported to Yellowstone National Park and, eventually, interbred with the remnant native bison population here. The present Yellowstone bison herd numbers between 3,000 and 4,000 animals. Although there are over 150,000 bison in public and private herds in the United States and Canada, the Yellowstone herd remains a national symbol of wildlife preservation efforts and a focus of scientific interest.

Habitat/Forage

Bison are most often seen grazing in open meadows and along river valleys. Thermal areas are favorite winter feeding grounds due to the easy accessibility of plants growing on the

warmer soil. Sedges and, to a lesser extent, grasses constitute the Yellowstone bisons' preferred diet. In Yellowstone, bison seldom forage on shrubs and forbs.

Behavior

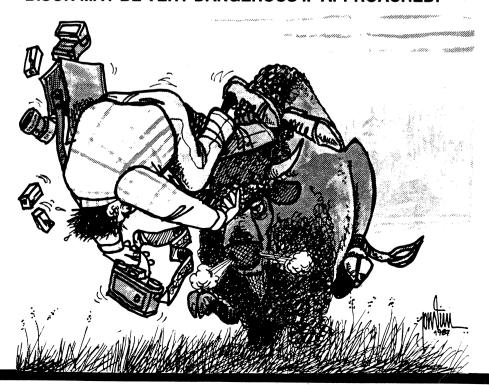
Bison are quite gregarious, especially when there is plenty of forage. A bison's temperament is often described as stolid, but they are not stupid. While bison may be made to do some things initially, it is generally agreed that bison can be made to do "only what they"

want to do." Old males (bulls) are often the least tolerant of human activity.

Despite their size and seemingly slowmoving habits, bison are surprisingly agile and can be quick to react.

WARNING!

BISON MAY BE VERY DANGEROUS IF APPROACHED!



Maturity/Life expectancy

The majority of females (cows) reach sexual maturity by 3-1/2 years of age. Males mature sexually at approximately the same time as females, but more dominant older bulls usually will not allow younger bulls to become part of the active breeding population until they are at least six years of age.

In the harsh Yellowstone climate, relatively few members of the population reach "old age," which begins at 12 to 15 years of age. Rarely will a wild Yellowstone bison reach the age of 20 years old.

Breeding/Calving

The rut (breeding activity) season occurs between mid-July and mid-August. Typically, bison calves are born in the spring. Calving can begin by mid-April, but most births occur

during May. There are always a few out-of-season births. Most births occur singularly; reports of twins are extremely rare.

Mortality

In the past, winterkill was the main cause of mortality for bison in Yellowstone. Winterkill results from the combined effects of climatic stress, forage availability, and physiological condition of individual animals. Bison expend most of their body fat in early to mid-winter. As winter progresses, some bison cannot acquire enough of the nutrients needed to survive the remainder of the season. The old, young, and sick generally are the first victims of winterkill.

The role of winterkill has lessened in recent years as bison have learned to use groomed road surfaces for winter travel routes. These travel routes allow bison to conserve their energy resources and enable many more bison to survive the winter period. This is an example of natural ecological processes being impacted, albeit unintentionally, by human activities.

Predation is not a significant cause of death among bison in Yellowstone. Historically, wolves were the only meaningful natural predator of bison.

Ecological role of bison

Bison play an important role in Yellowstone's ecosystem. They are the largest ungulate in the park and consume huge quantities of grasses and sedges. In return, they contribute to new generations of plants by distributing seeds, by breaking up soil surfaces with their hooves and wallows, and by fertilizing the soil with their waste products. While bison are not a significant prey for predatory animals, winterkilled bison are utilized by many species of mammals, birds, and insects.

