

APPENDIX E

Bison-Related Educational Materials (tri-fold pamphlets)

Pamphlet #1

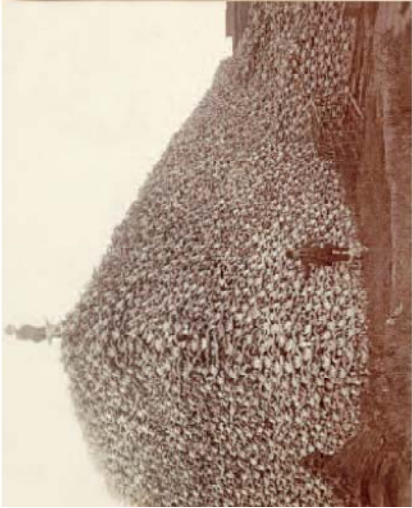
Understanding Bison as Wildlife Education Series

PART I



BISON RESOURCES:
Montana Fish, Wildlife & Parks
fwp.mt.gov
Yellowstone National Park
nps.gov/yell/
Bison education online resource
ibmp.info/bisoneducation.php

JASON SNAPE



Mid-1870s photo of a pile of bison skulls waiting to be ground into fertilizer.

A brief history
Several million bison (also called buffalo) once roamed freely on the plains of North America.
The western movement of settlers in the 1800s brought large-scale commercial hunting of bison (mostly for hides). Nearly 375,000 bison were killed each year.
Bison were driven to the edge of extinction. A census in Yellowstone National Park revealed fewer than 50 bison remained in 1902.
Bison poaching was difficult to control until 1894, when the Lacey Act—creating penalties for such crimes—was signed into law.
Conservation efforts to restore bison began in Yellowstone National Park and other places like the National Bison Range (MT), Wichita Mountains (OK), and Niobrara Valley (NE) between 1902 and 1913.
The U.S. Army safeguarded the small bison herd in Yellowstone National Park against poaching until 1918.
Early bison management involved feeding, culling, and herding the animals (much like cattle ranching).
The concept of preserving ecological processes, or letting nature take its course, was introduced in the National Park Service in the 1920's, and formally adopted as policy in 1967.
Today, the Greater Yellowstone Area is home to around 3,000 to 5,000 bison, depending on weather and management activities.

This series was created by
THE CITIZENS GROUP ON BISON EDUCATION
which is supported by Interagency Bison Management Partners



BISON BASICS

BIOLOGY, BEHAVIOR AND
A BRIEF HISTORY

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Bison biology

Bison are the largest land mammal in North America. As a native species, they play a unique role in the health and diversity of the ecosystem.

- ▶ Males, or bulls (left), weigh up to 2,000 pounds and measure up to 6 ½ feet at the shoulder.
- ▶ Females, or cows (right), weigh up to 1,200 pounds, and stand as tall as 5 ½ feet at the shoulder.
- ▶ A bison horn can reach 20 inches long. A bull's horns are larger in diameter than a cow's.
- ▶ A bison has a large, low-hanging head supported by a prominent hump above the shoulder and massive neck muscles used to plow snow away from feeding sites.



Male bison



Female bison



Scan this QR code to watch how a bison uses its head in winter:

View more videos and publications at our online bison resource:
<http://fbmp.info/bisoneducation.php>



- ▶ Bison have an incisor-like canine tooth on their lower jaw and no upper incisors allowing them to gather 15 to 30 pounds of food per day.



- ▶ Bison hair is denser than cattle hair, providing good insulation against extreme conditions. Bison don't begin to feel chilly until temperatures drop below -20° F.

- ▶ Bison are extremely agile. They can jump up to 6 feet high and reach speeds of 35 mph. They are also capable of climbing steep hills.

- ▶ If you see bison rolling in the dust, this is called wallowing. This activity creates a scent for mating, regulates body temperature, and protects against insects.



Bison wallowing

Bison social behavior:

Mature bulls three years and older usually stay by themselves or form small groups.

Cows, calves and immature bulls form groups of 20 to 100 during fall through spring and can congregate in even larger groups during the summer breeding season.

Bison tend to move frequently. Typically they travel 2 to 5 miles per day but occasionally will move up to 20 miles. Sometimes they remain in the same location for a few days, usually during snowstorms and cold temperatures.

While not normally aggressive, bison can become dangerous when they feel threatened, especially during the peak of the rut (mating season) or when they sense that a calf may be in danger.

The peak of the rut generally occurs during the last two weeks of July and the first two weeks of August. At this time, bison herds are at their largest, because lone males join back up with the rest of the group.



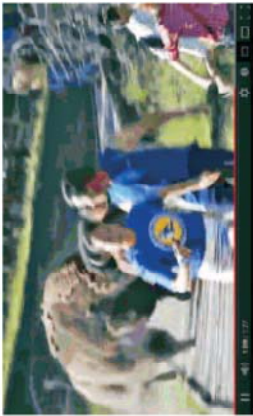
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Pamphlet #2

Understanding Bison as Wildlife Education Series

PART 2

Here is an example of what **NOT** to do:



Scanning this QR code will reveal an interaction between a group of young tourists and a bull bison in Yellowstone National Park. The bison in this video gave every indication he was agitated (as described in this brochure):



You'll notice that the bison turns and faces the group. Then his tail begins to move furiously. He also shakes his head repeatedly. Eventually his tail goes up into a question mark-like curl, signaling a possible charge. His warnings go unheeded. Luckily, no one was injured.

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JASON SAWYER

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STAYING SAFE
IN BISON COUNTRY

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Your responsibility when near bison:

WALKING

Give bison their space. Stay at least 25 yards away. Give them even more space during the summer rut (mating season) or if you notice a bison is agitated.



- ▶ Be aware of how close you are to bison so you don't startle one.
- ▶ Have an escape plan when close to bison and identify potential protective cover nearby (i.e., trees or a vehicle).
- ▶ If you find yourself too close to a bison, do not run. Instead, back away slowly.

CYCLING

- ▶ When biking near bison, move to the opposite side of the road and use a car as an escort if possible.

DRIVING

- ▶ Do not honk your horn or drive aggressively toward bison. If bison are on the road, be patient, drive slowly, and stay in your vehicle. Wait for bison to move along.



Handouts like the one at left are distributed at the gates of Yellowstone National Park to discourage visitors from engaging in dangerous situations with bison (below).

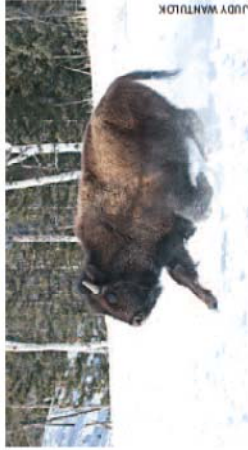


Signals a bison makes to indicate it may charge:

- ▶ stops what it's doing and looks at you or turns to face you;
- ▶ swings its head back and forth while staring at you;
- ▶ paws at the ground or hooks the ground with its horns;
- ▶ makes short bluff charges at you or snorts loudly; or
- ▶ moves straight toward you.

Other things to remember:

- ▶ Bison are especially quick and agile. Closely monitor changing behavior.
- ▶ Bison don't like fast-moving things near them, such as people who are running or bicycling.
- ▶ Bison don't like dogs. Keep dogs on a leash when bison are present and keep your distance.
- ▶ Keep your children with you and under control.
- ▶ Use a telephoto lens when photographing bison. That way you can maintain a safe distance.
- ▶ Throwing objects at bison may provoke an attack.



More information:

If you have questions or concerns about bison, call your local wildlife manager. You can find that phone number by calling (406) 444-2535.

Watch the tail for clues of bison behavior:



Position 1:
Bison is at rest and not agitated.



Position 2:
Bison is interested or curious.



Position 3:
Bison is agitated; this tail position is commonly used to warn other bison or people to move away. If you see this, you are too close.



Position 4: Bison is signaling that something is about to happen; this tail position might be used by two bison about to fight or a cow defending her calf. If you see this, you are too close.