



# AT HOME ON THE RANGE

**GRADE LEVEL:** 6-8

**SUBJECT:** History

**NATIONAL STANDARD(S):**

(6-8) Hund: 1.1, 1.6

(7-8) USH: 9.2, 9.4, 10.3

**THEME:** Bison

**FOOD AND FIBER TOPIC:** II-A,C,D,E

## LEARNER OBJECTIVES:

The student will learn how ranchers on the western frontier helped save the bison from extinction.

## VOCABULARY

**Appalachians**—Mountain system of eastern North America extending from southern Quebec in Canada to central Alabama.

**beefalo**—A species cross between bison and domestic or exotic cattle of any breed.

**bison**—Large shaggy-maned bovine mammal with large head, short horns, large chest and a large fleshy hump over the shoulders.

**buffalo**—Any of several oxlike Old World mammals of the family Bovidae having massive, downward-curving horns.

**bovine**—Of, relating to, or resembling a ruminant mammal of the genus *Bos*, such as an ox, cow, or buffalo.

**calve**—To give birth to a calf.

**cattalo**—A cross between bison and domestic cattle.

**feed supplements**—Something added to an animal's diet to complete nutritional requirements and add weight.

**government preserves**—Areas maintained by the government for the protection of wildlife or natural resources.

**Great Plains**—High grassland region of central North America, extending from the Canadian provinces of Alberta, Saskatchewan and Manitoba south into Texas.

**longhorn**—The descendants of cattle with long curving horns which the Spanish explorer Coronado originally brought to the North American continent.

**Rockies**—Mountain system of North America extending from New Mexico to northwestern Alaska.

## BACKGROUND

The American bison belongs to the same family of mammals as domestic cattle—the Bovidae or Bovine family. Early explorers often mistook bison for beef cattle. The Spanish explorer Cabeza de Vaca called bison “Indian cattle,” and early French explorers called them “boeuf,” (pronounced buff), the French word for beef. The English took that name and changed it to buffalo, the name most people now have for bison. In fact, the true buffalo is related to bison and cattle but is an ox-like animal that comes from Europe and Asia. The water buffalo is one example.

Because bison have so much in common with domestic cattle, pioneering ranchers on the Great Plains thought it would be worthwhile to capture and protect small herds from the hide hunters that wiped them out between 1871 and 1873. Since the bison had adapted to the harsh conditions of living on the Great Plains, some cattlemen hoped they could develop heartier breeds of cattle by breeding bison with their cattle.

Bison go off to calve by themselves and need no assistance from man. The calves are immediately on their feet after birth and easily keep up with their mothers on a steady run. Bison work together in herds to protect each other against predators and the environment. They can weather storms and help their newborn calves survive in blizzards. Bison stand facing the winter winds instead of moving with the wind like cattle do. Their heavy winter coats protect them from the bitter cold. Bison can root through heavy snow to get to the grass below. If necessary, they can eat snow to survive. Some live to be 40-50 years old.

Bison have poor eyesight but a keen sense of smell. They appear slow and awkward but can outrun and outmaneuver most horses. They are incredibly fast, can pivot on their hind and front feet, and can jump over a fence with ease.

Private ownership of bison has quadrupled in the last 20 years. Farmers and ranchers can place bison on range and pastureland that is not suitable for growing crops. Their numbers have grown so large on government preserves that government officials have started to sell the excess animals at public auctions. Many people buy these animals to start their own herds. One privately owned ranch is the Flying D Ranch in Montana, owned by media magnate Ted Turner.

Bison once ranged a much larger territory than the Great Plains, which many still think of as the bison's sole ancestral home. The rich forage of the tallgrass prairies, to the east of the Great Plains, probably supported the densest herds. But bison also inhabited forested areas, since they browse on leaves as well as graze on grass. Bison roamed as far east as the Appalachians. When English settlers first arrived in Georgia, they encountered "innumerable" bison. There were also bison in the Rockies, as there still are today—in Yellowstone National Park; at the National Bison Range in Moiese, Montana; and in Grand Teton National Park.

Bison now play an important part in restoring prairie ecosystems in places like the Oklahoma's Tall Grass Prairie Preserve. On that preserve, large herds fertilize the land with their droppings while their hooves plow or turn the soil. In turn, the prairie's rejuvenated grasses feed them.

Bison meat has a flavor similar to that of beef. It has a similar protein content as well but is lower in fat and cholesterol. That's because bison get all their food from grazing and do not get feed supplements feeds like cattle do. A three-ounce serving of bison meat is 21.7 percent protein and contains 1.9 grams of fat, 93 calories, and between 43 milligrams and 100 grams of cholesterol. Bison meat is considered a gourmet item and is usually more expensive than beef. On the shelf it is a darker red than beef and is sometimes mistaken for old beef.

## **STEP-BY-STEP INSTRUCTIONS**

1. Hand out student worksheets. Have students read the information about bison on Student Worksheet A before completing Student Worksheet B.

2. Have students locate the Great Plains on a map of the United States. Share the background material.
3. Lead a discussion in which you ask some of the following questions.
  - Would European settlement have been possible on the Great Plains if the bison had not been nearly wiped out? (Probably not, since there were so many of them and because of their roaming tendencies.)*
  - Why did killing the bison help the government control the Plains tribes? (The Plains tribes depended on the bison for food, clothing, shelter, etc. Without the bison the tribes would not be so strong and would have to depend on the government to meet their needs.)*
  - Why do you think ranchers and other conservationists thought it was important to save the bison from extinction? (The bison provided valuable food and were able to survive the harsh conditions of the Great Plains.)*
  - List some reasons that other kinds of conservation—soil conservation, water conservation, wildlife conservation—would be good for the farmer or rancher.*
  - What replaced bison as the means for survival on the Great Plains? (cattle ranching and then agriculture)*
  - The Plains tribes built their culture around the bison. Can you think of something in our own culture that has the same importance that the bison did to the Plains Indians? (Lead the discussion toward the importance of agriculture to our culture. What kind of culture could we have without agriculture?)*

## RELATED ACTIVITIES

Have students use the numbers found in the reading on Student Worksheet A to graph the decline of the bison population from 1492 to 1873 and its rise from 1873 to 1995.

## RESOURCES

### *Student Books*

- Bains, R. (1985). Indians of the Plains. Troll.
- Brandenburg, J. (1996). An American Safari: Adventures on the North American Prairie. Walker & Co.
- Freedman. (1988). Buffalo Hunt. Holiday.
- Gregory, K. (1993). The Legend of Jimmy Spoon. Odyssey.
- Levine, E. (1986). If You Traveled West in a Covered Wagon. Scholastic.
- Miller, B. M. (1995). Buffalo Gals: Women of the Old West. Lerner.
- Meyer, C. (1992). Where the Broken Heart Still Beats: The Story of Cynthia Ann Parker. Gulliver/Harcourt.
- Seuss, Dr. (1971). The Lorax. Random.
- Staub, F. (1996). America's Prairies. Carolrhoda.
- Swanson, D. (1995). Buffalo Sunrise: The Story of a North American Giant. Whitecap.
- Wallace, B. (1992). Buffalo Gal. Holiday House.

### *Teacher Resources*

“America and the Buffalo,” Kansas Heritage Center, 1000 Second Ave., PO Box 1207, Dodge City, KS 67801-1207, 316-227-1616, Fax 316-227-1695 (23- by 29-inch one-color map showing the distribution of the buffalo herds from 1500 to 1899, Stock No. 230, \$1.50, plus \$2 for shipping and handling).

American Bison Association, PO Box 1660 Denver, CO 80216, 303-292-2833.  
The National Bison Association, 4701 Marion St., Suite 100, Denver, CO 80216  
Phone (303) 292-2833, Fax (303) 292-2564 <http://www.nbabison.org/>

***Related Internet Websites***

Buffalo/Bison -- information about the role buffalo played in the American expansion westward, the full use of buffalo products, and the near extinction of the species.

Pictures included. <http://www.americanwest.com/bison/>

American West: links to American History sites and to American Indian and other western topics. <http://www.americanwest.com/>

Oh, Give Them A Home: Bison and Native Americans in North America -- National Wildlife Federation and the Intertribal Bison Cooperative: <http://www.nwf.org/news/bisback.html>

**EVALUATION**

A teacher's answer sheet is provided.

**EVALUATION**

This lesson adapted from Oklahoma Ag in the Classroom, Department of Agricultural Education, Communications and 4-H Youth Development, Oklahoma State University, Stillwater, OK 74078.

Name \_\_\_\_\_

# At Home on the Range

# A

Read the information below, and use it to answer the questions on Student Worksheet B.

**B**ison once roamed the Great Plains in numbers so great the early explorers could not count them. One explorer said there were so many they made the countryside look like one big buffalo robe. Bison have lived in all parts of North America, but the largest herds lived on the Great Plains—from the Mississippi River to the Rocky Mountains. The strong grasses that grew there provided the best food for them.

Historians estimate there were 60 million bison in North America in 1492. When European settlers first began moving onto the Great Plains in the 1800s, there were still about 30 million. By that time several Native American tribes had built their cultures around the bison. These tribes depended on the bison for food, shelter, tools and fuel.

The bison has been called the most important wild animal in the development of the West. Bison provided food for early explorers and for settlers crossing the Great Plains. Settlers who chose to stay on the Great Plains hunted bison for food until they could get their farms established. Since there were very few trees on the Great Plains, they made fires from bison droppings for warmth and for cooking.

By the 1800s many people in the Eastern United States had tasted bison meat. Some liked it even better than beef and were willing to pay good prices for it. Many hunters began to think hunting bison on the Great Plains would be a good way to earn a living.

More and more hunters began coming onto the Great Plains to kill bison. Some began taking just the bison's tongue, hump and hide because those were the easiest to get. They would leave the rest of the carcass on the Plains

to rot. The Plains tribes who depended on the bison to feed their families began to get worried that these hunters were killing too many bison and wasting too much meat. Many people from back East became upset, too, because the wasted meat could have fed many hungry people all over North America.

Some people wanted the bison wiped out, though, because they thought it would help the government control the Plains tribes.

In the 1870s a German tanner found an easy way to make leather from bison hides. After that many companies began paying high prices for the hides. The hunters discovered they could make much more money if they killed many bison at one time, took their hides, and left what was left to rot.

Between 1871 and 1873, 2,000 hide hunters slaughtered thousands of bison. By the end of the 19th Century, there were only 541 bison left on the Great Plains.

By this time cattlemen had started moving large herds of longhorn and other cattle onto the Great Plains. Some of the ranchers saw the value of the bison and rounded up some of the younger ones to protect them and save them from extinction. One rancher, Charles Goodnight of Texas, thought bison could be crossed with cattle to produce a breed that would do well on the Great Plains. For awhile he was very successful with his cattalo. Modern breeders have been successful with a similar mix, which they call beefalo.

Because of the efforts of cattlemen and other conservationists, like Charles Goodnight, the bison is no longer an endangered species. Over 140,000 bison now roam on private and public lands in North America.



Adapted from Oklahoma Ag in the Classroom.

Food & Fiber Systems Literacy  
Agricultural Education, Communications and 4-H Youth Development  
Oklahoma State University, Stillwater, OK

Name \_\_\_\_\_

# At Home on the Range

# B

Read the information on Student Worksheet A to answer the questions below.

1. What two geographical formations mark the boundaries of the Great Plains?

The \_\_\_\_\_ and the \_\_\_\_\_ mark the boundaries of the Great Plains.

2. Why were there more bison on the Great Plains than anywhere else?

\_\_\_\_\_  
\_\_\_\_\_

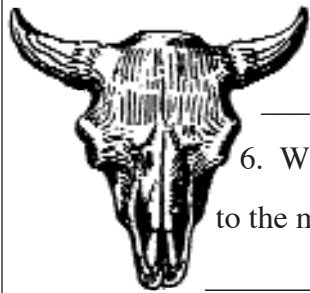
3. Between 1492 and the 1800s the bison population in North America had been cut by \_\_\_\_\_ percent.

4. Why was the bison called “the most important wild animal in the development of the West?”

\_\_\_\_\_  
\_\_\_\_\_

5. White hunters first began killing bison and using all their meat, but later they began taking just the bison’s \_\_\_\_\_,

\_\_\_\_\_ and \_\_\_\_\_.



6. What technological development caused the price of bison hides to rise and led to the massive slaughter of bison between 1871 and 1873?

\_\_\_\_\_

7. What is the main reason the bison herds were wiped out on the Great Plains? Circle the answer.

- a. The Plains Indians killed too many.
- b. Too many settlers and explorers liked the taste of bison meat.
- c. Hide hunters wanted to make more money.
- d. The government was trying to get rid of the Indians.

8. Which of the following saved the bison from extinction? Circle the answer.

- a. Hide hunters
- b. Explorers
- c. Historians
- d. Ranchers and other conservationists



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# At Home on the Range (answers) B

Read the information on Student Worksheet A to answer the questions below.

1. What two geographical formations mark the boundaries of the Great Plains?

The Mississippi River and the Rocky Mountains mark the boundaries of the Great Plains.

2. Why were there more bison on the Great Plains than anywhere else?

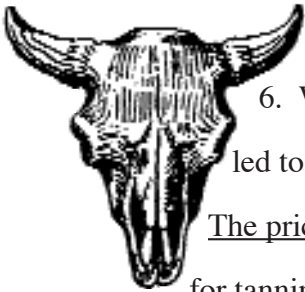
The strong grasses growing on the Great Plains was the best food for them.

3. Between 1492 and the 1800s the bison population in North America had been cut by 50 percent.

4. Why was the bison called “the most important wild animal in the development of the West?”

Bison provided food for the settlers and explorers to eat and fuel to help keep them warm.

5. White hunters first began killing bison and using all their meat, but later they began taking just



the bison’s hide, hump and tongue.

6. What technological development caused the price of bison hides to rise and led to the massive slaughter of bison between 1871 and 1873?

The price of bison hides rose after some German tanners developed a better method for tanning bison hides.

7. What is the main reason the bison herds were wiped out on the Great Plains? Circle the answer.

- a. The Plains Indians killed too many.
- b. Too many settlers and explorers liked the taste of bison meat.
- c. Hide hunters wanted to make more money.
- d. The government was trying to get rid of the Indians.

8. Which of the following saved the bison from extinction?

- a. Hide hunters
- b. Explorers
- c. Historians
- d. Ranchers and other conservationists

