



Lesson Title: The Bison, Grazing, and the Great Plains

Grades: 4-6

Duration of Unit: 2 - 50 minute periods.

STAGE 1 – DESIRED RESULTS

Montana State Standards:
ELA 4-5. Reading Informational Text
3. Key Ideas and Details: Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text. Include texts by and about American Indians.
ELA 6. Reading Informational Text
3. Key Ideas and Details: Analyze in detail how a key individual, event, or idea is introduced illustrated, and elaborated in a text.

Socials Studies Standard 3: Students apply geographic knowledge and skills (e.g., location, place, human/environment interactions, movement, and regions), Benchmarks 3.3 and 3.4.
Social Studies Content Standard 4: Students demonstrate an understanding of the effects of time, continuity, and change on historical and future perspectives and relationships. Benchmarks 4.2, 4.6, and 4.7.

IEFA Essential Understanding 4: Reservations are lands that have been reserved by the tribes for their own use through treaties, statutes, and executive orders and were not “given” to them. The principle that land should be acquired from the Indians only through their consent with treaties involved three assumptions:
I. Both parties to treaties were sovereign powers.
II. Indian tribes had some form of transferable title to the land.
III. Acquisition of Indian lands was solely a government matter not to be left to individual colonists.

<u>Understanding(s) /Big Ideas:</u> Students will understand the role of bison in the exploration and development of the great plains. Students will understand what led to the decline of bison, and the historical, political, and economic factors involved.	<u>Essential Question(s):</u> The 5 W’s? Who, what, where, when, and why of bison on the great plains, and what led to their decline? What effect did this have on the Plains Indians? Was there any political, economic, or historical reason behind the decline of the bison?
<u>Students will know:</u> Many factors added to the decline of bison on the great plains area of the United States, and that civilizations were deeply affected by the decline of bison.	<u>Students will be able to:</u> Students will be able to apply foundational skills and strategies to comprehend, interpret, analyze, and evaluate information on the story of the development of the great plains and the effect this had on Plains Indians.

STAGE 2 – ASSESSMENT EVIDENCE

<u>Performance Task(s):</u> Students will be asked to verbally evaluate information on the history of bison on the great plains from 1400 to current day. Students will take a reading comprehension quiz.	<u>Other Evidence:</u> Students will use maps to identify the area of the great plains.
STAGE 3 – LEARNING ACTIVITIES	

Learning Activities:

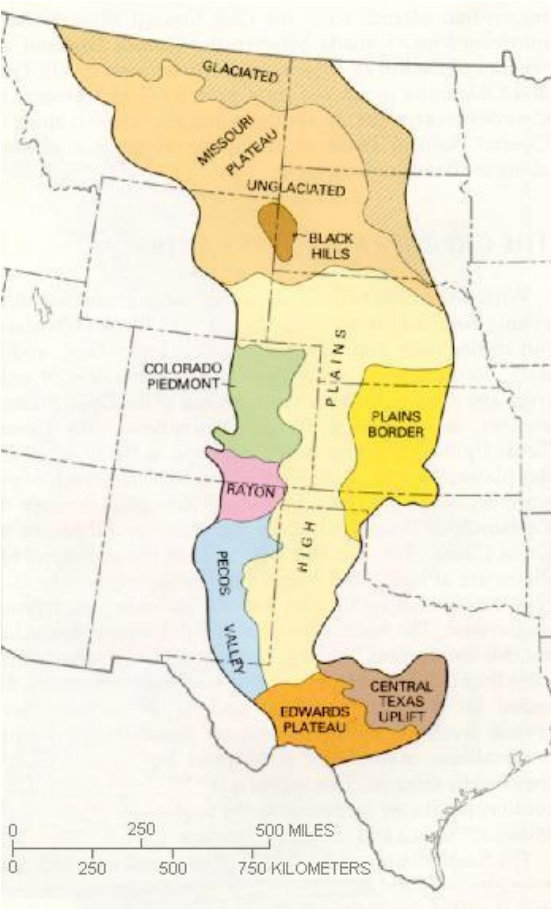
Activity Procedures

1. Hand out student worksheets A and B. Have students read the information about bison.
2. Have students locate the American Great Plains on a map of the United States. Share any background material.
3. After students have read the worksheets lead a discussion in which you ask the “**Questions for Discussion**” below. Accept all reasonable answers.
4. After all discussions, handout student quiz B.

Question for Discussion:

- Would settlement have been possible in parts of the Great Plains if the bison had not been nearly wiped out?
Probably not since there were so many bison and because of their roaming tendencies.
- Why would killing the bison help 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 other sources to meet their food and shelter 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. The bison also tilled the land which allowed regeneration of plant life for many animals.**
- What replaced bison as the means for survival on the Great Plains? **Cattle ranching and farming.**
- 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 for food, fiber, and shelter. What kind of culture could we have without agriculture?**
- In today’s world who governs the bison on Indian reservations? Why?
Indian reservations are sovereign nations, and have the right to manage bison on their lands.

Rangeland, Bison, and the Great Plains



<http://library.ndsu.edu/exhibits/text/gr eatplains/text.html>



View of the Great Plains near the Missouri River of Montana

Country  [United States](#)

Region [North America](#)

Coordinates  [37°N 97°W](#)[37°N 97°W](#)

Length 3,200 [km](#) (1,988 [mi](#))

Width 800 [km](#) (497 [mi](#))

Area 1,300,000 [km²](#) (501,933 [sq mi](#))



Map of the Great Plains ^[1]

Website: [Library of Congress](#)

Background

The American bison belongs to the same family of mammals as domestic cattle-the Bovidae 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 use for the American 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 nearly 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 and thick hides 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 to 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 feet and their 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 pasture land that is not suitable for growing crops. Their numbers have grown so large on government reserves that government officials have started to sell the excess animals at public auctions. Many people buy these animals to start their own herds.

Bison are also playing an important part in restoring our prairie ecosystems in places like the Tall Grass Prairie Preserve in Osage County, Oklahoma. The large herds fertilize the land with their droppings while their hooves plow it. In turn, the prairie’s grasses feed the bison.

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 supplementary 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.

Student worksheet B

Name _____

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

Bison 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 1800's, 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 for warmth and for cooking from bison droppings. By the 1800's, 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.

In the 1870's, 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 the rest 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 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 and on Indian reservations.

Student Quiz B

Name: _____

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

1. What two geographical formations 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 correct 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 correct answer.
 - a. Hide hunters
 - b. Explorers
 - c. Historians
 - d. Ranchers and other conservationists
9. Who has the right to manage bison on each Indian Reservation?
 - a. All Indians of Montana
 - b. The Indian tribe owning the reservation
 - c. The Governor of the state
 - d. All of the above

(Answer Key)

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.
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"This project was a coordinated effort by Montana Department of Natural Resources & Conservation, Montana Department of Agriculture, and Agriculture in Montana Schools to educate students about the value of Montana Rangeland. Contributions and support for this project was also given by the USDA Natural Resources Conservation Service and Montana Weed Control Association."

For more information please contact:

<http://www.aginmontanaschools.org/> or <http://dnrc.mt.gov/cardd/camps/default.asp>

Parts of this lesson adapted from Oklahoma and Utah Agriculture in the Classroom.