



MINNESOTA ZOO™  
Changing how you see the world

# Influence and Impact of Beavers on Minnesota 4-6 Activities

## MN Graduation Standards supported:

### Grade 4 Strand 1. A.

The student will understand how science is used to investigate interactions between people and the natural world.

### Grade 4 Strand III. A.

The student will investigate the impact humans have on the environment.

## Vocabulary:

### Renewable resource:

is any **natural resource** that is depleted at a rate slower than the rate at which it regenerates. A resource must have a way of regenerating itself in order to qualify as renewable.

**Voyageur:** a man empowered by a fur company to transport goods and men to and from remote stations

## Introduction:

Beavers live in each county of Minnesota. This is a credit to conservationists and the beaver for making a comeback as the beaver was near to extinction in the 1930's. Beavers were one of the main draws for Europeans into the Minnesota area. Early explorers followed the rivers and lakes into the interior of the United States and found a wealth of furs for hunting and trading. Europeans brought the beaver pelts back into Europe to be made into the felt stovepipe hats that were the fashion for men. The trappers would trap during the winter months when the beaver stayed in their homes more than during the summer.

Soon voyagers came to trap the rivers and lakes where the beavers lived. During the summer, beavers forage far distances for their food. Beavers are herbivores eating aquatic plants like pond weeds, water-lilies, cattails, and the soft tissue of new wood and bark of hardwood trees, including birch, aspen, willow, cottonwood, and alder.

In the fall, the beaver begin to build their lodge, a dome shaped home, by piling up parts of trees and filling in mud to make insulation. They make the lodge so that they are able to enter from underwater. The top floor is used for sleeping.

The beavers also store a cache of food close to their lodge so they can easily get food during winter.

From April to June, two to four kits are born. This family will stay together until the kits begin their second winter when they go off on their own. After they have learned how to build and maintain dams and lodges, they look for a mate and build a home for themselves.

Europeans demand for beaver fur almost drove the beaver to extinction. It is believed that before European trappers there were 60 to 100 million beavers in North America. From about 1800 to 1850, about 100,000 to 500,000 beavers were killed each year. By 1850 the beaver was almost extinct. Today, there are between 6 to 12 million beavers living in the North America.

Even today, beaver can be viewed as either a helper to our environment or a nuisance. Beavers are known as being an "ideal conservationists" as they help build areas that provide homes for other animals. They are a renewable resource as they are still trapped for their fur which contributes economically to society. However, farmers have difficulties with beaver that build dams that cause flooding of farmland and roads. In addition, beavers sometimes chew on valuable fruit and shade trees chewed on.

So the beaver helps our environment, but also can destroy valuable property.

**Links:**

[www.mnzoo.org/animals/minnesota-trail/beaver](http://www.mnzoo.org/animals/minnesota-trail/beaver)

[www.dnr.state.mn.us/](http://www.dnr.state.mn.us/)

[www.geocities.com/bobarnebeck/lodges.html](http://www.geocities.com/bobarnebeck/lodges.html)

[www.enature.com](http://www.enature.com)  
(search under beaver)

**Objectives:**

Students will debate the use of synthetic furs compared to using real furs of beavers illustrating the role of the beaver in Minnesota history.

**Procedure:****Pre-visit Activity:**

After presenting information about the beaver trade, the decline in the beaver numbers, the beaver comeback and the beaver roles today, students will summarize the beaver timeline by making a comic strip illustrating the plight of the beaver.

Research the economic importance of the beaver today. The beaver is a renewable fur source whereas the synthetic furs are made from petroleum primarily. This could be an item to debate the use of real furs versus synthetic furs.

**Onsite Activity:**

Use the Products from Animals worksheet: Students will choose four animals and make a list of products that are made from parts of the animal. Students can compare their findings with others students, after the zoo visit.

Make a list of animals (Animals that have struggled in MN) that were or are on the endangered or extinction lists in Minnesota. Find out some reasons for the animal's struggle for survival.

**Post Visit Activity**

Students will research other animals that have been or are on the endangered or extinction lists found in Minnesota or in other states. Students will describe the main struggle of why the animal is having difficulties surviving in its environment.

Another possibility is that students could look at an animal that has had success, like the beaver and the wolf in Northern Minnesota, the coyote, eagles, peregrine falcons and trumpeter swan. Students will research the following; the animal's biome, the main predators, number of current animals, describe what conservationists are currently doing to help the animal, analyze if there are other possible solutions that should be tried, describe how peers could help with the survival of the animal. After researching students will produce a poster about the plight of the animal and what can be or is being done to help the endangered animal.

Research animals that are legal to hunt today and how conservationists are helping the animal to survive through weather, hunting seasons, disease and man's use of land.