

BEAVER ECOLOGY

LESSON PLAN



WOLF RIDGESM
ENVIRONMENTAL LEARNING CENTER

BEAVER ECOLOGY



Class Description: An Animal Ecology Class

Students will participate in a beaver dress-up activity that illustrates the physical adaptations of the beaver. A hike along Sawmill Creek offers an excellent opportunity to observe the effects of beaver activity on the environment. Students may encounter dams, lodges, cut trees, canals, drags, or food caches. A skit of fur trade era characters offers insight into human and beaver interaction in the past. Discussion will help students understand the beaver's role in the present.

Total time: 3 hours (2 1/2 hours outdoors)

Audience: 6-20 students, 4th grade through adult

Activity level: strenuous

Travel: 1 1/2 mile

Total uphill travel: 320 feet

GUIDING QUESTION

How do beavers influence Sawmill Creek?

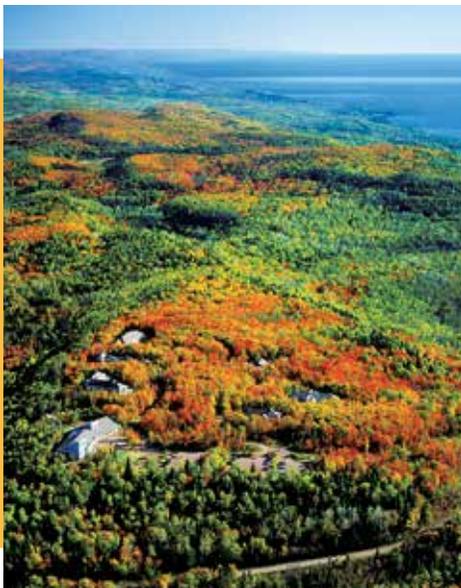
CONCEPTS

1. All living and non-living components of an environment interact with one another to form an ecosystem.
2. Beavers possess certain physical and behavioral adaptations to be successful in and change their environment.
3. The natural environment has many obvious and subtle impacts upon human history and culture.

OUTCOMES

Upon completion of Beaver Ecology class students will be able to:

1. Define physical and behavioral adaptations.
2. Identify physical and behavioral adaptations that allow beavers to survive and utilize their environment.
3. Recognize and interpret the evidence of beavers' signs such as dams, lodges, canals, food caches, etc.
4. Trace the history of the fur trade era and describe how beavers and humans interact in modern times.
5. Evaluate how the beaver influences the ecology of both forest and aquatic ecosystems.



Our mission is to develop a citizenry that has the knowledge, skills, motivation and commitment to act together for a quality environment.

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Equipment

- beaver parts: front feet, hind feet, pelt, castor gland, tail, skull
- other props: Video & DVD, chewed stick, muskrat pelt, trap, aspen chips, laminated legend, ecology cards
- poster: Population graph
- beaver dress up: goggles, webbed feet, WD 40, paddle tail, deodorant, plastic nose with clothespin, paper teeth, rubber gloves, foam insulation, earmuffs, pelt
- fur trade time line: Canadian nickel, 9 character time line cards, tuque, sash, top hat, scissors, fur trade map, paddle, crown, Wolf Ridge hat, beaver pelt

Appendices

- Glossary
- Optional Activities
 1. Beaver Legend
 2. Amazing Beaver Facts
- References
- Sources
- Spiral Learning Sheet
- Planning Outline

Set-up (15 min.)

- Classroom/class prep description
- Safety Management

I. What do we think about beavers? (30 min.)

- A. 3-2-1
- B. Definition of Adaptation
- C. Beaver Dress-up

II. How are beavers connected to the landscape? (120 min.)

- A. Overlook
- B. Signs to Look For
- C. Life Cycle
- D. Ecological Connections

III. How are beavers connected to people? (20 min.)

- A. Historical Perspectives
 1. Prehistoric Era
 2. Fur Trade Time Line
 3. Modern Era

IV. What do we think about beavers? (20 min.)

V. Return to Wolf Ridge (25 min.)

Clean-up (10 min.)