

## Class Summary

### Quick Facts

Outside: 2 hours

Grade: 4-8th

Offered: Year Round

Physical Activity: 1 mile walk

Other: No special skills required

### Concepts

- Identification • Energy
- Relationships / Balance

### [Minnesota Academic Standards >](#)

- Science • Math • Language Arts

### [Classroom Activities >](#)

- Pre-Activity: *Animal Signs Posters*
- Post-Activity: *Wildlife Corridors*

### STEM Components

- Investigate / Theorize
- Observe / Study / Assess
- Identify
- Inquiry
- Estimate
- Measure

### IB Profiles

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Inquirers     | <input type="checkbox"/> Open-minded       |
| <input checked="" type="checkbox"/> Knowledgeable | <input checked="" type="checkbox"/> Caring |
| <input checked="" type="checkbox"/> Thinkers      | <input type="checkbox"/> Risk-takers       |
| <input type="checkbox"/> Communicators            | <input type="checkbox"/> Balanced          |
| <input type="checkbox"/> Principled               | <input type="checkbox"/> Reflective        |

Revised Dec 2011

### Outcomes, students will:

1. Use careful observations to identify different animal signs.
2. Demonstrate how energy moves through a food chain, how energy is lost as it moves through a food chain, and how matter is conserved in an ecosystem.
3. Name different ways energy can be transferred from one species to the next (i.e. predator/prey, parasite/host, etc.)
4. Understand why interpreting animal signs are an important way of learning about the local animals.

### Brief Synopsis:

Using all their senses, students will try to unravel the mysterious lives of Eagle Bluff's wildlife and discover the food chains living nearby. Time will be spent exploring and interpreting animal signs, acting out an example food chain, and the entire class will work together to form one large food web.

### Outline:

#### Mystery Poster (10 minutes)

To introduce the class, a large poster with a mysterious scene is presented, with the challenge to figure out what happened using the clues left behind by the animals on a snowy or muddy day. Students begin to discover what observations are most helpful for interpreting the clues.

#### Exploration (30 minutes)

Exploring the woods and fields of Eagle Bluff is an important way for students to encounter the seven types of animal signs. They will use identification sheets to figure out what kinds of animals have been around and learn about which part of the food chain those animal belong.

#### Food Chains (60 minutes)

A reenactment of a simple food chain will help demonstrate how energy moves through the food chain. After playing a few rounds of this high-energy, tag-style game, the class will continue to explore, this time focusing on finding animal signs that illustrate food chains.

#### Survival Techniques (40 minutes)

Camouflage is an important part of survival for most animals, this may include not only having colorations to help blend in, but also staying still and being quiet. Student will experience this first hand in a hide-and-go-seek meets the animal kingdom game called *Thicket*.

#### Food Webs (40 minutes)

The class concludes by drawing all of the food chains found in class into the larger picture of food webs. Students will use photos of animal signs to create the energy connection between all of the members of the food web and visually illustrate how a change on one area can impact everything else in the food web.