



## *Western Upper Peninsula Center for Science, Mathematics and Environmental Education*

*A partnership of*

Copper Country & Gogebic-Ontonagon Intermediate School Districts and Michigan Technological University  
Serving schools and communities in Houghton, Baraga, Gogebic, Ontonagon and Keweenaw Counties

### **Beneath the Snow**

**Grade 3**

**Duration:** 1-1.5 hours

**Summary:** Is there anything living under the snow? Actually, there is a flurry of activity occurring beneath the surface! Students explore this winter world, searching for signs of animal on the snow, in galls, under bark, and under the snow. We will also investigate how different colors absorb or reflect sunlight.

**Content Benchmarks Addressed** SCI:S.IP.03.11-16; S.IA.03.11-14; S.RS.03.18; L.OL.03.32; L.EV.03.12; E.ES.03.52. SOC: 3-G5.01-02

#### **Objective:**

Students will be able to:

1. Explain techniques animals use to survive through winter.
2. Make observation of animal sign beneath the snow
3. Show evidence of close observation of animal sign found.

#### **Materials:**

- Small shovels (one per group)
- Data Sheets (handout)
- Clipboards
- Pencils
- Hand lens/Bug Boxes
- Thermometers
- Black and white pieces of fabric or construction paper
- Who Lives In the Snow? By Jennifer Berry Jones

#### **Pre-Activity:**

1. Brainstorm:
  - a. What do animals do in the winter:
    - Hibernation
    - Migration
    - Supercooling (ability to withstand sub-freezing temperatures without freezing).
  - b. Where might some animals be found
    - Near buildings
    - In & under tree bark
    - In stumps
    - Under snow
    - In curled leaves
    - Galls (growths on plants as a reaction to insect infestation; insects use the gall for protection and food).

**Activity:**

Read students the first 5 pages of the book “Who Lives In the Snow”. Show them some of the pictures of the animals living under the snow.

Discuss how we will dig a few holes to the ground (one per group of 3 to 5 students). We want to try not to disturb the area too much, as animals are relying on the subnivean environment to stay protected from the cold above.

Put on snowshoes, have students search for evidence of animals, under the snow and in other places they think animals might be.

Students should record their findings on the data sheet provided (one per each group).

Once back inside, review the findings. Have students draw one of the environments where they found signs of wildlife.

**Assessment:**

1. What are some techniques animals use to survive winter?
2. Where are some places you can find overwintering animals?