

Birds: Winter Survival

Synopsis

K, 1st—6th, upper



MN Academic Standards

supported during HNC program. More standards can be supported with pre- and post-lesson activities.

Science

- o.1.1.2.1 Observation of natural world
- o.4.1.1.1 Observe plants and animals
- o.4.1.1.2 Parts of plant/animals
- 1.1.1.1.1 Support answer with observations
- 1.1.1.1.2 Accurate descriptions
- 1.4.1.1.1 Sort animals by characteristics
- 1.4.2.1.1 Animal needs for survival
- 1.4.2.1.2 Habitats provide needs
- 2.4.1.1 Living things are diverse
- 3.1.1.1.1 Support claims with evidence
- 3.1.3.4.1 Use science tools
- 3.4.1.1.1 Growth, survive, reproduce
- 3.4.1.1.2 Observable characteristics
- 3.4.3.2.1 Inherited or acquired traits
- 3.4.3.2.2 Differences give advantage
- 5.4.1.1.1 Plant and animal structures
- 5.4.4.1.1 Beneficial and harmful human interactions with natural system

Math

- K.3.1.2 Sort by shape, size, color and thickness

Language Arts

- o.8.1.1 D, o.8.3.3, 1.8.1.1 C, E, 1.8.3.3, 2.8.1.1 C, E, 2.8.3.3, 3.8.1.1 C, D, F, 3.8.3.3, 4.8.1.1 C, D, 5.8.1.1 C, D, 6.9.1.1 C, D

Authenticity

Students will observe birds during winter in Hartley Park.

Goals & Objectives

This program will:

- Highlight the major adaptations that set birds apart from all other creatures.
- Expose students to live birds and their behaviors in their natural habitat.
- Discuss various strategies birds use to survive the cold winter months.

Students will be able to:

- Identify 4 common bird species by sight or sound.
- Summarize the survival strategies of winter bird residents.
- Explain birds' unique adaptations. (2nd +)
- Use binoculars to observe wild birds. (3rd +)

Activities

In the classroom:

- Students will list adaptations that make birds different from all other animals.
- Students will brainstorm how birds survive the winter.
- If a bird bander is present, bird banding will be discussed in relation to survival. For example: a band on a bird we trap at HNC can be looked up to find a history of that bird. Hartley educators may trap a wild bird to give students an up-close view of bird adaptations.

In the field:

- Students will observe and identify species seen in Hartley Park. Field marks and calls will be pointed out.
- Students will participate in a game all about winter survival to learn the three ways birds can survive the cold.
- Students will participate in the Owl Pounce or Owl wing demo, owl ears, or owl and mouse activities to highlight certain birds' adaptations to cold conditions.
- Other bird signs and information can be discussed during the hike. Why don't birds freeze? How do their bodies change to prepare for life in the cold?

Bad Weather Alternative

- Live bird handling, banding, and release (if bander available)
- Up-close look at preserved bird species
- Students will participate in a game all about winter survival to learn the three ways birds can survive the cold.