

# Birds: Winter Survival

## Synopsis

### K, 1st—6th, upper



#### Summary:

Explore basic bird biology, identification, and binocular use (size appropriate binoculars for every group), and learn about seasonal bird behaviors through observation and outdoor activities.

Winter survival is a guided exploration of amazing avian adaptations. Discover some of birds' strategies for surviving the coldest months of the year.

#### MN Academic Standards

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

##### *Science*

0.1.1.2.1, 0.4.1.1.1, 0.4.1.1.2, 1.1.1.1.1, 1.1.1.1.2,  
1.4.1.1.1, 1.4.2.1.1, 1.4.2.1.2, 3.1.1.1.1, 3.4.1.1.1,  
3.4.1.1.2, 3.4.3.2.1, 3.4.3.2.2, 5.4.1.1.1, 5.4.4.1.1

##### *Language Arts*

0.8.1.1, 0.8.3.3, 1.8.1.1, 1.8.3.3, 2.8.1.1, 2.8.3.3,  
3.8.1.1, 3.8.3.3, 4.8.1.1, 4.8.3.3, 5.8.1.1, 5.8.3.3

##### *Social Studies*

V.D.5

#### Authenticity

Students will observe birds during winter in Hartley Park. Bird species seen and/or heard are recorded and contribute to ongoing data collection at HNC.

#### 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:**

- Use binoculars to observe wild birds.
- Explain birds' unique adaptations.
- Identify some common bird species by sight or sound.
- Summarize the survival strategies of winter bird residents.

#### Activities

##### **In the classroom:**

- Students will brainstorm the 5 Ws of winter survival (what, who, where, when, why).
- Stories or interesting examples from bird species will be used to illustrate bird behavior in winter.
- 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 use binoculars and/or field guides to observe and identify species seen in Hartley Park. Field marks and calls will be pointed out.
- Students will participate in the Owl Pounce or Huddle, Mob, Dodge 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
- Binocular and field guide use at windows
- Up-close look at preserved bird species
- Conduct an insulation experiment to test the value of protection in the cold