

## Making Observations

*Illinois Goals and Standards**Science: 11.A, 12.B, 13.A, Math: 6.A English Language Arts: 4.A, 5.A*

### Program Overview

The first part of the program will provide students with background information on the importance of making careful observations when studying animal behavior. During this component, students will learn how to distinguish between bird behaviors such as moving, resting and eating. After this brief content introduction, students will travel to one of the zoo's bird exhibits to conduct their own animal observations. While observing different species of birds, they will make tally marks on a provided data sheet to indicate which behaviors they see. At the end of the observation they'll review their data sheets to determine which behavior they saw most frequently and share their discoveries with their peers.

### Program Objectives

- Students will observe and describe bird behaviors.
- Students will identify similarities and differences between birds.
- Students will record data based on careful observations.
- Students will draw conclusions based on collected data.

### Background Information

There are many different species of birds at Lincoln Park Zoo. Regardless of the species, all birds have several things in common. For example, they all have feathers, wings and beaks. However, there may also be great diversity in their appearance. Birds can be a variety of sizes, shapes and colors.

Another way birds are different is related to behavior. Bird species display a wide variety of behaviors. While all birds rest, where and how they rest may vary. Some may perch high up on a branch or ledge while others may rest on the ground. While all birds eat, there can be big differences in what they eat. Some birds eat other animals such as fish or mice. Other birds eat foods from plants such as seeds or fruits. Additional behaviors that can vary by species are the ability to fly or swim.

Studying these behaviors is important to understanding what different birds need to survive. It can provide zoo staff with information that can aid in caring for birds at the zoo and provide scientists with information that can help conserve wild populations.

### How to Prepare

While advanced preparation is not required for a successful visit, reviewing a few basic skills before your visit can help make your students' experience more meaningful.

- To support the data-collection activity, review how to make tally marks with students.
- To support observation skills, review how to look carefully at things for several minutes at a time.
- To support sharing discoveries, review the vocabulary below and how to respectfully share ideas with peers.

### Vocabulary:

Behavior

Moving

Resting

Wings

Eating

Beak

Feathers

Talons



## Back at School

### Extend the Inquiry

We hope you'll continue your explorations long after your visit to the zoo. We've provided a few ways you can extend inquiry-based explorations of birds and other animals to the classroom.

1. Survey the schoolyard or surrounding neighborhood for birds and other animals. Have students draw or take photos of what they find.
2. Visit the education section of [www.ethosearch.org](http://www.ethosearch.org) to learn how scientists use something called an ethogram to help with animal observations. Download an ethogram appropriate for young learners and lead students through an observation on the schoolyard.
3. Have students compare the animals they found at school with the species that can be found near their homes.

### Connect Across the Curriculum

These are a few ways you can connect your science investigations with other areas of the curriculum.

#### *Visual Arts*

- Have students create a scientific illustration of a bird on the schoolyard or detailed diagram of a feather provided in class. This activity will build both observation and fine motor skills.

#### *Social Studies*

- The Chicagoland area is home to more than 300 bird species. Have the students complete a mini-research project on one of the many birds native to the city paying special attention to other areas in the United States this species can be found. They may choose to study the peregrine falcon, Chicago's official bird or another commonly encountered bird such as the mallard, cardinal, crow, wood duck or Canada goose.

#### *English Language Arts*

- Encourage students to start a field journal where they can record their scientific observations while building literacy skills.