

During Your Visit: Conducting Animal Observations

Activity Overview

Carefully observing animals is an inquiry-based activity that can be done anywhere, from the local zoo to the lunch area on a schoolyard. This activity asks students to select a bird of their choice and record its behavior over a set period of time. Scientists use ethograms to help them systematically collect this data.

Objective

Students will record animal-behavior data and share their discoveries with their peers.

Materials

- Copies of Observation Data Sheets
- Clipboards
- Stopwatch or watch with second hand
- Pencils

Inquiry Connection

- Making observations
- Examining books and other information sources
- Using tools to gather and analyze data
- Proposing answers, explanations and predictions
- Communicating results

Procedure

Before going to the zoo, briefly discuss with the students the work of a scientist and the field of animal behavior studies. Explain that they will be conducting their own animal behavior study during their zoo visit. Prepare them for the process of observation and data collection by conducting several practice sessions at the school site utilizing local bird species.

This practice will support student success at the zoo when there are likely to be many factors competing for their attention. Upon arrival at the zoo, proceed to McCormick Bird House. Move through the exhibit until you reach the free-flight area, where you will be standing on a wood platform with birds in the natural spaces around you.

Ask students to find a single bird to observe within the exhibit space. More than one student can observe the same bird, but encourage students to space themselves evenly through the exhibit space. This will give students room to work and discourage off-task behavior that often comes from close, physical proximity.

Provide individual students with a clipboard and a copy of the data sheet. You will serve as the time keeper, announcing every 30 seconds so students can then record what they see on their data sheet.

After the allotted observation time is up, collect clipboards and data sheets for further analysis back in the classroom. Students may want to create graphs or tables from the data they collected, making comparisons between their observations and those of their peers. Displaying these results on a bulletin board along with photos of students at work is a great way to conclude the activity.

Evaluation

A three-point scoring rubric can be used to measure student engagement in the activity.

3	2
<ul style="list-style-type: none">• Student stays attentive and on-task during timed observation period• Student accurately records data on provided data sheet• Student discusses data with his/her peers	Two of these three criteria are met
	1
	One of these criteria is met

Modifications for Younger Students

A modified data sheet will be appropriate for young learners. Several behaviors can be combined so there are fewer categories to identify. For students that need more time to write, intervals can be increased to 60 seconds/one minute. Students can be placed in groups with one student keeping time, one doing the observation, and one or more doing the data recording.

Find Out More

Scientists and Ethograms

When scientists conduct animal observations, they have set procedures to collect data as accurately as possible. They also need to collect a lot of data before they draw any final conclusions. Researchers often use something called an ethogram when conducting animal observations. Ethograms are a list of all the possible behaviors they might see. They help ensure data collected by many different researchers is consistent enough to be compared. As you can imagine, we often use different ethograms for different species to capture the unique behaviors of each. For example, a lion wouldn't likely be seen "flying." Some ethograms however can be used for different species that might have similar behaviors.

Observation Data Sheet: Bird

Name

Date

Species

Self-preening

The bird is moving its own feathers with its beak, stretching or sunning.

Feeding

The bird is eating or foraging for food.

Vocalizing

The bird is singing or making a noise.

Locomotion

The bird is walking, flying, pacing, hopping, running or jumping.

Resting

The bird is lying down or perched somewhere in their exhibit. No other behavior is occurring.

Not Visible

The bird is off exhibit or you cannot see the bird you were observing.

Other

You see a behavior other than the ones described above.

Time	Self-preening	Feeding	Vocalizing	Locomotion	Resting	Not Visible	Other
0:30							
1:00							
1:30							
2:00							
2:30							
3:00							
3:30							
4:00							
4:30							
5:00							
5:30							
6:00							
6:30							
7:00							
Total							