This activity is adapted from the Western Hemisphere Shorebird Reserve Network.

Description

eache

By watching birds from the classroom window or taking schoolyard field trips, students begin to appreciate the changes and trends in nature over a period of time.

Objectives

Students will:

• Become familiar with common birds in your schoolyard

• Develop an observation routine (monitoring) to watch birds on a consistent basis

• Keep observation records (data) to determine trends and abundance of particular birds, and to develop research questions (such as "How does temperature affect the number of birds I see?")

• Learn that scientists use monitoring to study populations

Time Required

Preparation: 10 minutes Activity: 20 or 30 minutes once a week

Subjects

Life Science, Environmental Science

Skills

Explaining, Predicting, Observing, Comparing, Gathering and analyzing information, Evaluating, Interpreting and drawing conclusions

National Science Standards

K-4: Life Science

Characteristics of Organisms Organisms and environment Unifying Concepts

Form and Function

5-8: Life Science

Diversity and Adaptations of Organisms Unifying Concepts and Processes Form and Function

Materials

Monitor Birds in Your Backyard

Optional: Field guides for schoolyard field trips Binoculars are helpful for seeing birds far away, but are not required A bird feeder on the school lawn or window if you can watch birds from the classroom window

Procedure

1. Discuss with your students: why do scientists monitor birds? Scientists can see if populations are increasing, decreasing or staying the same. Based on the results, they can then take action to help species in decline.

2. Decide an area to survey and keep within those boundaries. If you are doing window sampling, establish boundaries from your window viewpoint. You might want to have students map their study site.

3. Decide when to sample and how often. Make it convenient for the class and also remember to sample often enough so that patterns emerge.

4. Decide what to sample and take careful information. Practice graphing skills to illustrate data when appropriate. Some suggested information might include:

• Kinds of birds

• Number (or greatest numbers of birds seen and when seen)

- Behavior of birds
- What habitats birds are using
- What birds might be eating
- Environmental conditions (weather, precipitation)

5. Many scientists also keep field journals to write or draw observations or to record questions that come to mind. This "open ended" recording is also important to courage in your students.



Feache

Procedure (continued)

6. Please remember the following, especially if you are feeding birds:

- Birds can become dependent on a. feeders. Don't begin feeding birds unless you are able to feed during the cold months.
- b. Feeding birds can attract other animals. Make sure that you don't get close to them in case they become sick or become defensive.

7. Have fun!





Analysis

Now is the exciting part: you get to analyze your results.

- 1. Have your students share what they learned with their data. Remind them that the data that scientists collect is not always easy to interpret.
- 2. What kinds of questions might they want to ask? Base questions on the type of information that the class decides to collect. Compare findings with a local birding club.
- Remind students that the birds they see may not 3. be the long distant migrant birds that are in trouble. Monitoring is still an important tool to use to document trends, whether it be resident or migrant birds.