



Bird study

Grade Level: 3-6

Overview Trying to find a science unit that has everything can be a frustrating task. Some units require costly or hard to get materials. Others require an extensive background in science for the teacher. Still others are just plain dull because of a lack of activity. And then there are those units that don't involve the students in the processes of science. Well, here is a unit that has few drawbacks and a great deal of student interest. It is a unit in which the teacher can learn a great deal along with the students, and it has an added bonus. With just a little effort it can promote a lot of parent involvement and make a lot of good neighbors for the school.

Purpose The purpose of this activity package is to provide science activities that help students practice the process skills of natural science while acquiring a great deal of information on birds and their place in the living community. These activities can also help the students develop an appreciation of living creatures and a respect for the property of others.

Objectives Students will be able to:

- Identify by name 20 birds in the environment
- Locate the parts of a bird.
- Identify by sound 20 different kinds of birds.
- Record the description of twenty or more kinds of birds.

Resources/Materials Resources on bird study are available in a good library and in every bookstore. In addition, there are many good nature programs on public television and many good videos available. Universities, Museums of Natural History, and Zoos may have exhibits that can be toured or brought to the school. However, the teacher may need the following:

- Tape-recorded sounds of different birds
- Binoculars
- Letter/Number cards
- Map of area in which activity is to be carried out.

Activities and Procedures The teacher should read through the following carefully before embarking on the activity.

- Use a guessing game to introduce this unit. Give descriptions of some locally common birds one part at a time and have the students try to guess what you are describing. Use a sound tape of some very common bird songs in the game, too. Once the kids catch on to the idea that all the "things" that you are describing are

very common birds, show a good filmstrip or video on birds of your area and express surprise that they don't know their "neighbors" very well.

ii. Use a large diagram of a bird as a bulletin board to help students learn the parts of a bird. Also give them a handout to take home so that they can teach their parents about birds. Give a quiz every day on the bird parts. This is a mastery quiz and only perfect scores are recorded. (This activity becomes a lot more fun if the teacher or a student draws the quiz bird on the chalkboard freehand. You can draw some wild and crazy birds and the students will learn to identify the parts on a wide variety of bird shapes.) Students who have passed the quiz twice can use this time to color bird pictures, work on a bird collage, etc..

iii. Use bird records to create a tape of twenty birds that are common to your area. Each day give a mastery quiz over ten of them. Check the quiz by playing it again and giving the correct name of the bird as it is singing. Leave the tape at a center table with a headphone for individual practice or practice with the class with guessing openly allowed each day. Tapes for take home practice can be dubbed for anyone who wants to bring a blank tape.

iv. Use binoculars with wide-angle lenses and insta-focus for birding. (This is really the only equipment that may not be readily available to you. These can be purchased at discount stores for around \$45 a pair. It works best to have one pair for each 4 or 5 students. Parent teacher organizations, class fundraisers, or business sponsors are great sources if the school budget doesn't stretch.) Have students take the binoculars out of the cases and experiment with how they work. Through the discovery method they will find out how to focus the image. Encourage peer teaching if some students have used binoculars. Encourage research by way of the instruction sheets to find out how to clean the lenses and how to adjust the eyepiece if one eye is stronger than the other. Emphasize that these are expensive pieces of equipment and help the class develop a set of rules for using the binoculars and penalties for misusing them.

v. Use a set of cards with small letters and numbers printed on them to have binocular speed quizzes. To pass the quiz a student must take a pair of binoculars that is out of focus and set for the wrong eye width and adjust them so that they can read the card in 5 seconds or less. This activity can go very quickly if a relay game is set up. It is also a good time to practice the proper precautions in handling the binoculars.

Use the same type of activity for describing nests and eggs.

vi. NOW WE ARE READY TO GO OUT AND STALK THOSE BIRDS! With the permission of your principal and perhaps a visit with some of the nearest neighbors around the school you are ready to begin direct observation and recording of birds and their behavior. On the first trip be sure to stress that we will walk only on sidewalks and in the alleys and that we will not pick flowers or bother other peoples property. If students know that the class will come in immediately if these rules are broken they will be on their best behavior in order to stay outside. (If principals and neighbors know this they are also much more cooperative.) If you have some dead

end alleys for if some neighbors will permit it, you will have better results if you can scatter out in small groups (all within sight of the teacher) and sit down for periods of time to wait for birds to come near.

vii. After several days of bird walks, take a special mapping walk. Help students draw a map of the area by providing them with a handout with the blocks around the school outlined. As you walk, draw in landmarks and use symbols to show the locations of any nests that you have found in the area. Keep this map up to date by adding newly discovered nests and by recording the activity in and around the nests on a separate sheet. Develop a map key to use on this record sheet.

Tying it all together Science is a field of study that requires doing--involvement. This unit allows students to use the skills and methods required in the search for knowledge as well as calling on their creative abilities in completing a record of their work. It allows them to experience the beauty and wonder of the natural world while gaining an appreciation of the need for careful study in order to understand and preserve that beauty. Assessment This is both an indoor and an outdoor activity. The teacher should keep a record of individual participation and contribution to the successful completion of the activity.

Suggestions/Modifications

- The instructor can pick and choose which activities they would like to use from this unit.
- The students may have input as to the habits of birds and their prevalence in the area.
- Students should understand the importance of learning about birds and the scientific value that is gained from the study.

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