

Bird Watching As An Alternative to Chick Hatching

Grades: 3 - 6

Objectives:

Affective:

- Students will observe and identify birds in the community.
- Students will be able to explain why some people are opposed to chick hatching while other people endorse it.

Academic:

- Students will be able to identify some species of birds as well as their characteristics, behaviors and needs.
- Students will make observations and record data in an observational journal.

Materials:

- *Crinkleroot's Guide to Knowing the Birds* or other grade appropriate books for children that name birds and describe their anatomy and behaviors, Chart Paper or overhead and transparency

Motivation:

Find out what your class already knows about the subject of birds and have them begin to formulate some questions that will guide their study of birds.

Use K.W.L. which asks children to think of what they know about a subject (brainstorming), what they would like to find out about the subject (questioning) and what they learned about the subject as the unit progresses (summary).



The K.W.L. activities are usually done as a chart. An example follows. Create the chart on large sheets of paper or on an overhead transparency, because you will want to save it and come back to add to the chart as the children acquire more information on the topic.

Birds		
K	W	L
<p><i>What do you know about birds?</i></p>	<p><i>What do you want to find out about birds?</i></p> <p><i>Let's create some questions to guide us.</i></p>	<p><i>What have you learned about birds?</i></p> <p><i>(Fill in column as unit progresses and at completion of unit.)</i></p>

Procedure:

Mini-Lesson:

- 1) Read and discuss with the class the book *Crinkleroot's Guide to Knowing the Birds* or other grade appropriate books for children that name birds and describe their anatomy and behaviors. This may take several days.
 - As you read the book, have students complete the chart.
 - Discuss identifying features of the birds shown. For example, which bird is almost completely red? Blue and black? Which birds swim in the water?
 - Be sure to include chickens, roosters and turkeys in your listing. Write or call resource organizations for their photos of chickens in trees because they are not included in most books.

- 2) Look out of the classroom window or take a neighborhood walk to look for neighborhood birds.
 - Try to locate birds from a respectful distance.
 - Have students photograph or sketch these local birds. Place their pictures in sequence on a poster or an observational notebook.
 - Have children draw pictures of birds sitting on their nests.
 - Assemble a bird collage using back issues of magazines on this topic.
 - Ask students to name the birds they know.
 - Ask students how they know they are seeing a bird? Try to elicit the facts that bird have feathers and lay eggs.
 - If possible, have a representative of the local Audubon Society, or other group knowledgeable about birds, talk to the class.
 - Show a video or slides about birds.




- Get pictures from a chicken sanctuary to show to the class.

Small-Group Activities:

Your bird unit will rely on your students' observational skills, so an observational journal is very helpful. Individual or small groups of children can maintain some kind of a journal. An observational journal includes illustrations as well as words; it includes questions as well as statements. Students can make their own notebooks for this purpose. Younger children enjoy making their own bird-shaped notebook which they can trace from your template.

In recording information in an observational journal, children learn to collect observational data and begin to make comparisons over time. Students should make entries in their observational journals on a regular basis, at least twice a week for a month. If you are also asking children to make seasonal comparisons, you can decide as a class when to do follow-up observations and enter those dates on your class reminder calendar so you won't forget to do so. Be certain that children include information about the characteristics (color, size, feathers), behaviors (fly, swim, nesting) and needs (food, water, shelter, companionship).

An example of an observational journal page is shown above, but create a format that suits the interests and abilities of your students.

<p>Bird Observation Date:</p> <p>My Illustration: </p> <p>What I See:</p>
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As you begin to hone students' observation and questioning skills, you also need to begin to provide input. This input can be interdisciplinary, spanning a number of subject areas. In your communication arts program, begin reading books about birds to your class and provide books on the topic in your guided and independent reading. Look for books with good technical information and a humane theme.

Summary:

- 1) Students can share information in their observational journals with the class.
 - *What was the same and what was different about their observations?*
 - *Do they have any questions about their observations?*
- 2) As part of your summary activities, carry out activities which will help students understand why people have varying opinions about classroom chick-hatching.
 - *The book, A Home For Henny, as well as literature from a company that sells chick eggs and incubators for classroom use would be helpful.*
 - Explain to students that while *A Home For Henny* is fiction, that many of the individual incidents in the books are based on actual events which are representative of what chicks might experience in this type of setting.
 - Read and discuss *A Home For Henny*.



Questions for Discussion:

- *Where was Henny born?*
- *Why didn't all the eggs in the incubator hatch?*
- *What problem did some of the chicks have at the time of hatching?*
- *What happened to the chicks after the classroom project?*
- *Why did someone try to steal Henny?*
- *Why was Henny taken to a chicken sanctuary?*
- *What did Melanie observe the hens and roosters doing at the chicken sanctuary?*

Follow-up Activities:

Building one or more birdfeeders, placing them near the school and observing the birds that come to them is an exciting follow-up activity!

- Make bird feeders by smearing pinecones with peanut butter. Then roll them in a birdseed mix. Use cord around the top for a hanger.
- Clean large plastic jugs very well. Decorate the outside of the jug with non-toxic permanent markers. Suspend from a cord. Fill with mixed bird seed.
- Suspend plastic salad bowls or wooden salad bowls from cords. Fill them with birdseed.
- Fill orange or onion bags with suet and hang them using a cord.

** Be sure to remove the cords and remaining materials from the tree when this project is over.*

- *If you have started this project in the fall or winter, be sure to feed the birds until spring when they can more easily locate another food source.*

Literature Connections



★ *A Home for Henny*
by Karen Davis

★ *Urban Roosts: Where Birds Nest in the City*
by Barbara Bash

★ *It Could Be A Bird* by Allan Fowler

★ *This Way Home* by Lisa W. Peters

★ *Pigeons* by Schlein

★ *Egg: A Photographic Story of Hatching* by Robert Burton

★ *Crinkleroot's Guide to Knowing the Birds* by Jim Arnosky

★ *Feathers: Poems About Birds*
by Eileen Spinelli

(See appendix for annotated bibliography.)

Ideas for Science Fair Projects:

- a) Make a bird feeder and place it where it can be viewed by students. Make a daily log. Which birds come to feed? Chart the names of the birds as well as a count of the number

of each type of bird which comes to feed. Supplement with photos or drawings. If space allow, set up two feeders and place different food in each. Note what type of food attracts what bird(s).

- b) Have students make a class book about birds. Be sure to include information about large birds such as chickens, ducks and/or geese. Younger students can contribute to a big book which contains information about kinds of birds including the fact that all birds have feathers. Drawings and photographs can be used to enhance this book. Older students can contribute research and book reports about birds.
- c) Have students make a dioramas including clay figures of birds which they have sculpted themselves. Use photos, clay, straws, sticks or magazine pictures. Attach a report about the birds featured. Older students might make a video about birds.
- d) Students can conduct observational studies of birds. Which birds are seen in the school or community? Which birds are seen most frequently? What do they eat? Are different birds seen at different times or are the same birds seen all day? Are different birds seen in different seasons? Display the results on charts backed with cardboard or oaktag.
- e) For gifted six graders: At the beginning of this unit, have the students choose several primary questions which they want answered from their research on birds. Before they begin to gather their data, have them make predictions about what they think they will find out. Their prediction, or hypotheses, could be about the kinds of birds, number of birds or the most common bird in the local community. Have students collect data and record their observations. Design a chart to record data which answers their primary questions. Help children to analyze their records. Which of their predictions came true? Which did not? Did some new birds come to a feeding station after several weeks? Did a bird that fed at these stations for several weeks not come in the last weeks of observation? Have the students develop a written statement explaining what they found through their research. A culminating activity could be the construction of a display board which includes predictions, hypothesis, procedures, data and conclusions as well as drawings, pictures from magazines or photographs.

Note to Teacher:

This unit explores bird watching and the benefits and problems involved in classroom chick hatching projects. The underlying goal will be to involve young students in the exciting, highly motivating, and often awe-inspiring study of birds in their natural environments. It is hoped that students will come to appreciate the value of observing birds in their natural habitats as a means of gathering a wealth of facts about the natural living conditions of these animals. An additional goal will be to have teachers make informed decisions about whether or not to carry out chick-hatching programs in their classroom.

Every year, primary school teachers and their students place thousands of fertilized eggs in classroom incubators to be hatched within three to four weeks. These birds are not only deprived of a mother; many grow sick and deformed because their exacting needs are not met during

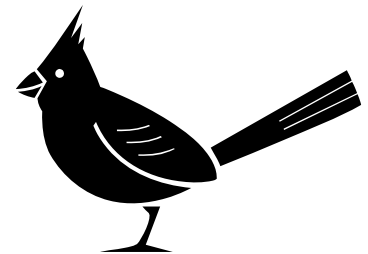
incubation and after hatching. Body organs stick to the sides of shells because they are not rotated properly. Eggs can hatch on weekends when no one is in school. The heat may be turned off for the weekend causing the embryos to become crippled or die in the shell. Commercial suppliers' eggs hatch an abnormally high number of deformed birds reflecting the limited gene pool from which they derive. Some teachers remove an egg from the incubator every other day and open it up to look at the embryo in various stages of development. This results in the death of the embryo.

When the project is over, these now unwanted birds may be left in boxes in the main office for many hours without food, water or adequate ventilation waiting to be collected for disposal. Students and even some teachers are misled to believe that the birds surviving at the end of the project are going to live out their lives happily on a farm. In reality, most of them are going to be killed immediately as working farms do not assimilate school project birds into their existing flocks. Some birds will be sold to live poultry markets and auctions, while others will be fed to captive zoo animals.

Teachers and students need to make informed decisions on whether or not to carry out chick-hatching experiments in their classrooms. Teachers might consider observations of birds in their natural environments as another possible science unit. Programs exist in which data collected by students becomes part of a national database which students can access on the computer or read about in published newsletters. Contact the Cornell Lab of Ornithology, an international bird study center, for information about their Project Pigeon Watch and Project FeederWatch programs which are designed to strengthen such skills as observation, identification, research, computation and writing. This holistic approach can be supplemented with books, videos and posters for a comprehensive and exciting educational experience.

Resources for Teachers:

- American Society for the Prevention of Cruelty to Animals, 424 East 92 Street, New York City 10128, 212-876-7700. www.aspca.org
- *Chick, Chick, Chick* video by Mick and Bob Brown, Society for Visual Education, 1974, 1-800-829-1900.
- Cornell Lab of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850-1999. Phone #: 1-607-254-2440, www.birds.cornell.edu
- Kids & Critters, 518 Lorraine Avenue, Santa Barbara, CA. 93110.
- National Audubon Society, 700 Broadway. New York, NY 10003, Phone #: 212-979-3183/3000 or your local Audubon chapter, www.audubon.org
- United Poultry Concerns, P.O. Box 59367, Potomac, MD. 20859, Phone #: 1-301-946-2406 has the *Replacing School Hatching Projects: Alternative Resources & How to Order Them* booklet, *A Home For Henny* book, *Chickens Can Fly* poster, books for adults as well. www.upc-online.org



Books for Students:

- Boring, Mel, *Birds, Nests, & Eggs*, NorthWord Press, 1998, 48 pages, ages 4 – 5

- Harrison, George and Kit, *Backyard Bird Watching for Kids: How to Attract, Feed, and Provide Homes for Birds*, Willow Creek Press, 1997, 72 pages, ages 8-12
- Weidensaul, Scott, *Birds: National Audubon Society First Field Guide*, Scholastic Publishing, 1998, 160 pages, ages 9-12
- Westberg Peters, Lisa *This Way Home*, Henry Holt Publishing, 1994. 32 pages, ages 4-8.

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding:

Students will read, write, listen, and speak for information and understanding.

Listening and Reading

Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

ELA Standard 3 - Language for Critical Analysis and Evaluation:

Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

MST Standard 4 – Science:

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

7. Human decisions and activities have had a profound impact on the physical and living environment.

MST Standard 7 – Interdisciplinary Problem Solving:

Students will apply the knowledge and thinking of mathematics, science, and technology to address real-life problems and make informed decisions.

Connections

1. The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.