

**UNITED FEDERATION OF TEACHERS
HUMANE EDUCATION COMMITTEE**

52 Broadway, 12th Floor
New York, N.Y. 10004

www.uft.org/member/committees/humane/

TITLE: BIRD WATCHING AS AN ALTERNATIVE TO CHICK HATCHING

LEVEL: GRADES 2 TO 6

DURATION: FOUR TO SIX WEEKS

Some of the information in this unit has been adapted, with permission, from United Poultry Concerns' *Hatching Good Lessons - Alternatives to School Hatching Projects* booklet. Log onto <http://www.upc-online.org/hatching/alternatives.html> to view the entire United Poultry Concerns booklet.

SCIENCE OBJECTIVE #5: Create models of non-intrusive, productive animal research through natural (non-manipulative) observations.



Robin



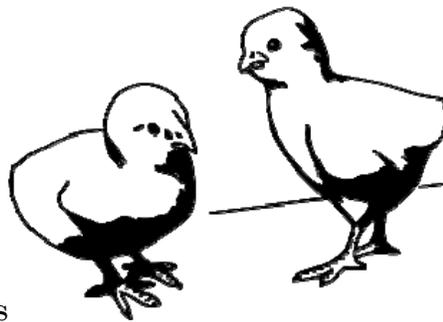
Blue Jay

UNIT OVERVIEW:

This unit will explore the problems involved in classroom chick hatching projects. It will discuss the wide variety of alternative projects which exist with a focus on bird watching. 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 nature as living beings deserving of our respect rather than as "specimens" in a classroom incubator project.

BACKGROUND INFORMATION:

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 even remove an egg from the incubator every other day and open it up to look at the embryo in various stages of development, even though this results in the death of the embryo.



baby chicks

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.

Each year, animal shelters across the country are brought unwanted chicks, ducklings, quails and even turkeys by educators who cannot find homes for them. Nearly all of these birds are killed immediately because there are no homes for them or because they arrive sick. Residential zoning laws usually ban keeping domestic fowl. Even those people who can provide a good home can accommodate only so many birds. Normal flocks have several female birds to one male. Roosters crow before dawn and during the day. This sometimes poses a problem for people willing to take them and may lead to complaints from neighbors.

Observations of birds in their natural environments should be considered as an alternative science unit. This holistic approach can be supplemented with

books, videos and posters for a comprehensive and exciting educational experience.

PERFORMANCE OBJECTIVE I: Students will be able to identify some species of birds.

MATERIALS: Grade appropriate books for children that name birds and describe their anatomy and behaviors.

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. One methodology for doing this is some kind of semantic mapping or brainstorming activity. K.W.L. is one of these. The K.W.L. activity 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.

TOPIC: BIRDS

K	W	L
What do you know about birds? Let's brainstorm and make a list.	What do you want to find out about birds? Let's create some questions to guide us.	What have you learned about birds? Fill in column as unit progresses, and at completion of unit.
1.		
2.		
3.		
4.		
Etc.		

ACTIVITIES:

Look at and discuss the pictures in a bird book suitable for the grade level you are working with. Practice naming some of the birds in the book based upon their color, shape and size.

Read and discuss the book about birds with the class. This may take several days. Discuss identifying features of the birds shown. For example, which bird is almost completely red? blue and black? Which birds swim in the

water? Chart this information in graph form. Be sure to include chickens, roosters and turkeys in your listing.

Bird Habitats
Place an X in the boxes that apply

Type of Bird	Birds Who Swim	Birds Who Nest in Trees	Etc.
Robin		X	
Chicken		X	
Duck	X		
Etc.			

and

Main Color of Birds
List as many birds as apply under each heading

Red Birds	Blue Birds	Black Birds	Etc.
Robin	Blue Jay	Crow	
Etc.			

Have children label a drawing of a bird to show the crown, forehead, beak, throat, breast, belly, foot, leg, tail, wing, back and cheek. Look out of the classroom window or take a neighborhood walk to look for neighborhood birds. Can you identify any of them? If possible, have a representative of the local Audubon Society, Park Rangers or other group knowledgeable about birds, talk to the class and show a video or slides about birds. Get pictures from a chicken sanctuary to show to the class.

PERFORMANCE OBJECTIVE II: Students will understand that birds have feathers. Birds also lay eggs. The baby birds hatch from the eggs.

MATERIALS: Current books or Internet sites about the characteristics of birds.

MOTIVATION: Ask the children to name the birds they know. Ask them how they know it's a bird.



Rooster Lincoln, hen Sno-Pea and chick Luv-Bug

ACTIVITIES:

Teachers and children can log onto the “All About Birds” section of the Enchanted Learning site at <http://www.enchantedlearning.com/subjects/birds/> to get information about birds including the fact that they have wings, feathers and a beak. Share grade appropriate information with students. Children may be asked to bring library books or information from encyclopedias and dictionaries to get this information. Ask children to relate their personal experiences.

Look at birds through the classroom window, in the schoolyard and in the neighborhood. Note that all of these birds have feathers. Try to locate birds’ nests from a respectful distance. Have students photograph or sketch these local birds. Place their pictures in sequence on a poster or an observational

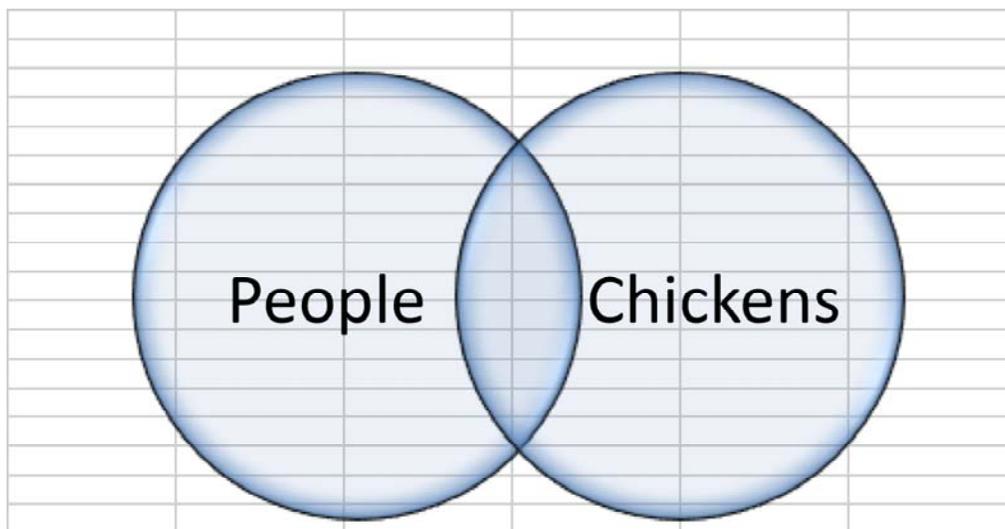
notebook. Have children draw pictures of birds sitting on their nests. Assemble a bird collage using back issues of magazines on this topic.

PERFORMANCE OBJECTIVE III: Students will study birds to learn about their behaviors and needs.

MATERIALS: Project PigeonWatch, www.birds.cornell.edu/pigeonwatch, and/or Project FeederWatch, www.birds.cornell.edu/pfw/ materials, a bird house or feeding station near the school.

MOTIVATION: Develop a Venn diagram to show what people need and what chickens need. Which needs do people and chickens share? Which of their needs are different?

Needs of People and Chickens



ACTIVITIES:

Your bird unit will rely on your students' observational skills, so an observational journal is very helpful. All 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.

HAVE STUDENTS MAKE OBSERVATIONAL JOURNALS

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

Bird Observation

Date: _____

What I See: _____

My Illustration:

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.

If possible, take a trip to a bird rehabilitation center or environmental center to observe birds. Contact your local Audubon Society, Parks Department or Environmental Study Center for assistance. Before you go, ask the students to brainstorm questions that could be answered on their trip. Students should take along trip boards. These are homemade clipboards made from cardboard to which a pencil is attached with a string. A study sheet is attached to it and the students can refer to it during the trip. The sheet can contain diagrams, requests to illustrate what they observe, as well as any questions they have prepared for their trip. If possible, take photographs of birds you see for future discussion.

Contact the Cornell Lab of Ornithology, www.birds.cornell.edu/, an international bird study center, for free advice and information to teachers. It specializes in direct observation programs. Ask about Project Pigeon Watch and Project FeederWatch as well as their BirdSleuth Program,

www.birds.cornell.edu/birdsleuth/. Activities are designed to strengthen such skills as observation, identification, research, computation and writing. Phone #: 1-800-843-2473.

BIRD FEEDERS

Build one or more birdhouses near the school and observe the birds from a respectful distance using binoculars.

- a) Make bird feeders by smearing pinecones with peanut butter. Then roll them in a birdseed mix. Use cord around the top for a hanger.
- b) 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.
- c) 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.

PERFORMANCE OBJECTIVE IV: Students will understand why some people are opposed to chick hatching while other people endorse it.

MATERIALS: *A Home For Henny* book, literature promoting the use of chick eggs and incubators for classroom use.

MOTIVATION: Have the children list why they think that some people might like the idea of hatching chick eggs in a classroom while other people think that it's a bad idea. Chart student responses before and after they read, or

listen to the teacher read *A Home For Henny* as well as materials promoting classroom chick hatching.

ACTIVITIES:

Tell students that *A Home For Henny* is fiction, but many of the incidents in the book are based on actual events. Read and discuss *A Home For Henny*. Where was Henny born? Why didn't all the eggs in the incubator hatch? What problems 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 United Poultry Concerns? What did Melanie observe the hens and roosters doing at United Poultry Concerns?

Read materials promoting classroom chick hatching from organizations which provide the eggs and the incubator. Why do some teachers like to hatch eggs in the classroom? What can children learn (positive and negative) from hatching chick eggs in a classroom incubator? What can children not learn from hatching chick eggs in a classroom incubator? Create a two-column chart, as illustrated, and have the students complete it as a group. Older students might debate this topic.

CHICK HATCHING	
PROS	CONS

POSSIBLE SCIENCE FAIR PROJECTS:

Make a bird feeder and place the feeder so students can view it. Make a daily log nearby? Which birds come to feed? Chart the names of the birds as well as a count of the number of each type of bird who 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).

Have students make a class book about birds. Be sure to include information about chickens. Younger students can contribute to a big-book that 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, book reports, poems and essays.

Have students make dioramas including clay figures of birds 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. 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.

At the beginning of this unit, have the students choose several primary questions that 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 predictions, 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 that 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.

Children in grades four and above can be helped to conduct an experimental study about student attitudes toward birds. Design a pre-test with input from the students and teacher. Formulate questions that will show student knowledge and attitudes about birds. What do all birds have? What do birds eat? How do birds get from place to place? Is it okay to photograph birds? feed birds? shoot birds? hatch bird eggs in the classroom? Administer the test to the class carrying out the project (the treatment group) and a class that will not be learning about birds in a given time period (the control group). Carry out activities as outlined in this unit. Administer a post-test to the treatment and control groups. Record results. Are the results the same or different? Do students in the treatment group know more or less about birds? Have their attitudes changed? Do girls or boys have more humane responses? older or younger students? Construct a display board or a class book to record this study.



Seagull

ORGANIZATIONS TO CONTACT FOR ADDITIONAL INFORMATION:

**National Audubon Society, 700 Broadway. New York, NY 10003,
Phone #: 212-979-3000 or your local Audubon chapter.**

**Cornell Lab of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850-
1999. Phone #: 1-800-843-2473**

**United Poultry Concerns, P.O. Box Box 150, Machipongo, VA 23405
Phone #: 1-757-678-7875**



Hens roosting in trees at United Poultry Concerns Sanctuary