

SUGGESTED GRADE LEVELS: 4 - 6

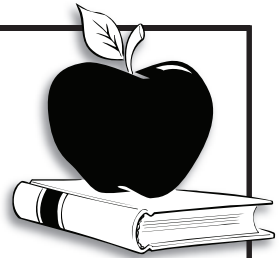
ILLINOIS LEARNING STANDARDS:

English language arts 4.B.2b; mathematics 10.A.2a; science 13.B.2e, 13.B.2f; social science 17.A.2b, 17.C.2c

SKILLS/PROCESSES: observation, prediction, communication, mapping, graphing

OBJECTIVE: Students will recognize how the actions of people have altered habitats and impacted wildlife populations.

TEACHER'S GUIDE



UNIT 3 • LESSON 2

Right or Wrong – You Decide

BACKGROUND

Natural threats (predation, drought, lack of food, disease) to populations of wildlife are minimal when compared to the threats caused by humans (acid rain, introduced species, selling of bird parts, egg collecting, habitat destruction, domestic pets). Human presence and use of the land has caused the **extinction** of some species (passenger pigeon *Ectopistes migratorius*, Carolina parakeet *Conuropsis carolinensis*), while other species have benefitted from human presence and their numbers increased (rock pigeon, European starling). Population levels of other species, such as the wild turkey, dropped following settlement, but have rebounded dramatically as a result of people's ability to manage the species and preferred **habitats**.

One cannot open a newspaper or watch the evening news without seeing accounts on the **environment**. Too often that news is saddening: an oil spill killing marine life for miles; leaky underground storage tanks affecting water supplies; acres of quality habitat falling under the bulldozer; or the thinning of the ozone layer. We do have the power to change those stories!

ILLINOIS



DEPARTMENT OF
NATURAL
RESOURCES

Conservation of our natural resources is critical. One component of conservation is preservation of habitat and reversal and modification of actions that degrade or destroy quality habitat. Long-term planning and cooperation between the public and private sector must become the norm.

Conservation of natural resources may entail passage of laws. The Illinois Wildlife Code contains laws which protect natural resources, regulate the harvest of game species and specify fines for the illegal harvest or possession of natural resources. For instance, it is illegal to possess wild birds (except the house sparrow, European starling and rock dove) and parts of



birds (nests, eggs, feathers) unless taken legally by hunting or as authorized in a permit issued by the Illinois Department of Natural Resources and U.S. Fish and Wildlife Service. Nature centers that have displays of wildlife have obtained both state and federal permits allowing possession of animals for educational purposes.

Regulations to protect birds are also passed at the national level. Birds don't know about the artificial boundaries made to distinguish states and nations. The U.S. Fish and Wildlife Service is responsible for these **migratory species**. Through the Mississippi Flyway Council and Technical Section, the U.S. Fish and Wildlife Service works with state agencies to establish guidelines for harvest and protection of waterfowl based on detailed population and habitat analyses. The U.S. Fish and Wildlife Service is also responsible for designation and protection of species considered threatened or endangered at the national level.

Individuals play an important role in the conservation of natural resources. Citizens report to law enforcement officials thousands of natural resources violations each year. Passing legislation to further protect and manage natural resources requires citizen support and lobbying. **Boycotting** the purchase of wild-captured parrots and finches is a way people can assist in protecting these resources. Through hunting licenses, habitat stamp purchases, nongame check-offs and taxes, citizens also support public agencies that manage and preserve natural resources. Many people support conservation of natural resources through membership in private organizations dedicated to the purchase and management of habitats. Even something as simple as leaving what appears to be orphaned wildlife alone, practicing organic farming or using environmentally-friendly **pesticides** are important citizen roles.

PROJECTS AND ACTIVITIES

1. Using information gained from previous lessons, mark off four areas as different "habitat types" with

yarn and assign each student a bird type. Have appropriate "birds" enter their habitat. Give each "bird" an ample supply of "food" (small, inedible objects). Include a story about habitat loss (reasons for), where "birds" die or lose their food supply or cannot survive in the "wrong" type of habitat. Students act out the "bird" roles. Make the area smaller/larger by moving yarn and have students discuss how changing habitat size affects birds. Students should discuss the role-playing and end results of the activity.

EVALUATION

1. Compare original land documents and survey maps (available in your County Records Office) to current maps of the community. Determine and map out land use changes (habitats). Have students interpret how land use changes have affected local plant and animal populations.
2. Have each student research an Illinois bird species and prepare a report about it. Conduct a discussion on how the species has been affected by human actions (positive and negative).
3. Evaluate participation in the Activity Page activity.

EXTENSIONS

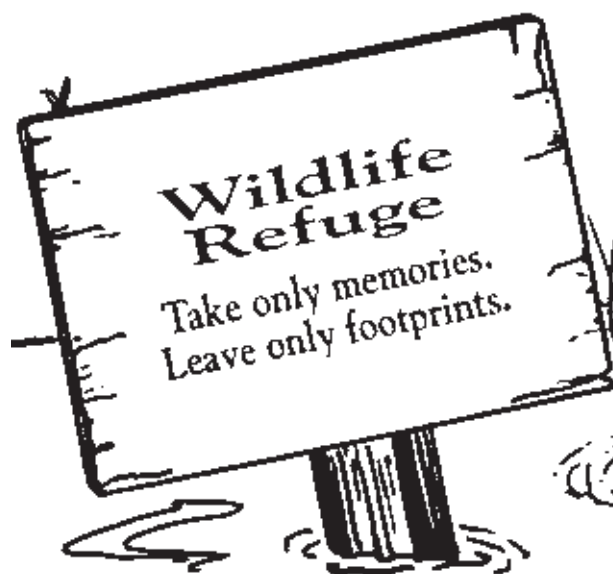
- Wildlife populations are valuable for a variety of reasons. Select a bird species and research and discuss its values in the following categories: cultural; ecological; economic; educational; scientific; historical; recreational; aesthetic; symbolic; **intrinsic** (value merely by existence); and **ethical** (right to exist).
- Research population trends of the bald eagle, greater prairie-chicken or wild turkey in Illinois. Plot population levels since pioneer settlement using bar graphs to show increasing or decreasing trends.

BIRDING ETHICS

- Leave nests alone and don't get close—you could cause the parent to abandon the nest or lead predators to the eggs or young.
- Show respect for landowners and lands. Respect the rights of others observing nature.
- Leave "injured" and "orphaned" birds alone. The parent is often nearby and will return to care for the young.
- Understand and obey hunting regulations.
- In nature, you are the guest. Be quiet and orderly. Move slowly.
- Don't "chase" birds. Observe birds from a distance using your binoculars to bring them close.
- Leave no litter. Some litter, especially fishing line, plastic soda can and bottle rings, bubble gum and cigarette butts, can be harmful to birds.
- If you are feeding birds, maintain fresh and adequate food supplies for them. Don't feed birds your food—they are healthiest when they eat natural foods.
- Don't bring predators along. Your dogs and cats belong at home.

VOCABULARY

boycott	habitat
environment	intrinsic
ethical	migratory species
extinction	pesticides



Right or Wrong – You Decide

STUDENT'S GUIDE

We cannot open a newspaper or watch the evening news without seeing stories on the environment. Often the news is sad: an oil spill killing marine life for miles; leaky underground storage tanks affecting water supplies; acres of quality habitat falling under the bulldozer; or the thinning of the ozone layer. We have the power to change those stories!

Conservation of our natural resources is critical. One part of conservation is preservation of habitat. We must also reverse and change actions that degrade or destroy quality habitat. Conservation of natural resources may require new laws. The U.S. Fish and Wildlife Service is responsible for migratory species. This agency works with state agencies to establish guidelines for harvest and protection of waterfowl. It also designates and protects species considered threatened or endangered at the national level.

What roles do people play in the conservation of natural resources?

- report natural resource violations;
- work toward legislation to protect and manage resources and vote for legislators who support it; –boycott the purchase of wild-captured parrots and finches;
- purchase hunting licenses and habitat stamps;
- contribute to the Wildlife Preservation Fund;
- pay taxes;
- become a member in organizations that purchase and manage habitats;
- leave "orphaned" wildlife alone;
- practice organic farming;
- use environmentally-friendly pesticides.

Can you name others?

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ACTIVITY PAGE

Do the Right Thing

Make one copy of this page. Cut out the cards and distribute one to each group of students. After the group discusses their card, have the students explain what they think they would or should do in each situation.

<p>You see a very small nest in a clump of shrubs. Do you. . .</p> <p>A. take it home? B. leave it alone? C. sell it to your neighbor?</p>	<p>You see a baby bird fall out of its nest. Do you. . .</p> <p>A. pick up the bird and take it home to care for it? B. leave it alone as its parents will feed it on the ground? C. return it to its nest by climbing up the tree?</p>	<p>You are walking in the park, and you see a family. One of the children in this family throws her bubble gum on the ground. Do you. . .</p> <p>A. pretend you didn't see? B. pick it up after they've left? C. ask them to pick it up because it may harm the birds or other animals that mistake it for food and eat it?</p>
<p>Your town is considering developing an area along a creek where there is prime wetland habitat. Some of the ideas for development include: a park with a swimming pool; a subdivision; a landfill; and a mini-mall. Do you. . .</p> <p>A. write a letter to your city council explaining your concerns? B. attend a council meeting to gain information? C. cross your fingers and hope the adults will make the right decision?</p>	<p>You are going away during winter break and have been feeding birds in your yard since Halloween. Do you. . .</p> <p>A. let the birds fend for themselves while you're gone? B. leave a map and direct the birds to your closest neighbor who has a bird feeder? C. ask your neighbor to continue putting fresh seed out each day?</p>	<p>On a fine spring morning you are walking your dog in the park. You notice a lot of small birds in the trees, an excellent indication that spring migration has started. You decide to go bird watching. Do you. . .</p> <p>A. leave your dog in the car while you look at birds? B. take your dog home then return to the park? C. continue your walk letting your dog run free?</p>
<p>Goose hunting season has started, and you want to provide a goose for the Thanksgiving table. You know that a lot of geese live on the ponds at the local golf course. Do you. . .</p> <p>A. ask a friend to scare the birds off the pond and hope they fly over your hunting area? B. enroll in a hunter safety education course and ask an adult to take you hunting? C. lure the birds to your hunting area with a trail of corn?</p>	<p>You think the bird you have been following for fifteen minutes is a bird you have never seen before. It has flown across a fence that has a "Private Property—No Trespassing" sign on it. Do you. . .</p> <p>A. try to find the property owner and ask permission to go on the land to follow the bird? B. tear the sign off the fence, bury it in leaves then jump over the fence? C. look around the area for another bird like this one?</p>	<p>You are walking down the street and see a man on the corner selling beautiful parrots. You can't believe that such beautiful birds are so cheap. Do you. . .</p> <p>A. ask him where the birds were raised? B. turn him in to the proper authorities? C. buy a bird and take it home?</p>