



Activity 3-1

Endangered Species Gallery Walk

AT A GLANCE

Conduct research to create a poster about an endangered species in the state of Illinois and then take a walk through a poster “gallery” to find out more about threatened/endangered species around the state.

OBJECTIVES

Identify groups of animals that are threatened or endangered and name some species within each group. Research one species, describe why it’s threatened or endangered and compare its problems to those of other endangered species.

SUBJECTS

English language arts, science

SKILLS

gathering (collecting, researching), analyzing (comparing and contrasting), interpreting (defining problems, generalizing), applying (creating, designing), presenting (illustrating, writing)

LINKS TO ILLINOIS BIODIVERSITY BASICS

CONCEPTUAL FRAMEWORK

endangered, threatened and extinct

VOCABULARY

endangered species, Endangered Species Act, habitat, introduced species, range map

TIME

three or more class periods

MATERIALS

copy of “Legal Lingo/Poster Parameters” for each student or post one for all to see; poster board; magazines with pictures of threatened/endangered plants and animals; reference materials; Internet access; list of current Illinois endangered and threatened species (See “Resources” list for Web address.); (optional: poster-sized paper)

CORRELATION TO COMMON CORE STANDARDS AND NEXT GENERATION SCIENCE STANDARDS

English language arts: Writing Standards for Literacy in Science, Production and Distribution of Writing, 4; Research to Build and Present Knowledge, 8, 9
science: MS-LS1-4, MS-LS1-5, MS-LS2-1, MS-LS2-4

Have your students ever heard of a hellbender? Do they know what a yellow-headed blackbird looks like? Have you smelled the white lady’s-slipper flower? By researching threatened/endangered species, your students will put a face on species biodiversity and gain insight into some of the problems that threaten all living things. As they share their research, they’ll begin to understand broader issues of biodiversity loss—such as the HIPPO dilemma. HIPPO is an acronym that represents the five major threats to biodiversity, which are caused by human activity: **H**abitat loss, **I**ntroduced species, **P**ollution, **P**opulation growth and **O**ver-consumption. This activity provides a way to help students understand the threats to biodiversity and what the word “endangered” means. It also provides students with an opportunity to use their creativity to design a poster and share information with their peers.

BEFORE YOU BEGIN

Make the current list of Illinois threatened/endangered species accessible for each student. See the Web address in the “Internet” section. Copy the “Poster Parameters” (page 90) onto a chalkboard or a poster-sized paper. Have a piece of poster board available for each student. In addition, gather magazines that the students can use to cut out pictures of their endangered species. CD-ROMs and the Internet will also have information and pictures that students can download.





Activity 3-1

Endangered Species Gallery Walk (continued)

WHAT TO DO

1. Discuss the terms “threatened,” “endangered” and “extinct.”

Access the current list of "Illinois Threatened/Endangered Species." Explain that every organism on this list is threatened or endangered. Discuss the terms “threatened,” “endangered,” “extirpated” and “extinct.” (See “Legal Lingo,” page 90.)

2. Explain the task and have students choose an organism to research.

Tell students that each of them should pick an organism from the list to research. Have each student select a different species, encouraging them to select one that they are unfamiliar with. Each student will need to research the organism and then create a poster to teach others about it. Point out the “Poster Parameters” you copied earlier and review what the students should be trying to find out about their species—this is the kind of information they should include on their poster. Hand out poster board and give students time to conduct research.

3. Take an endangered species gallery walk.

When the students have finished their posters, use them to create a scavenger hunt. Your scavenger hunt might include statements like the following:

- Name two endangered wetland animals and explain why they’re endangered.
- Find two reptiles that are endangered. Record their names and why they’re endangered.
- List three different kinds of plants that are threatened by loss of habitat.
- Name an endangered animal that lives in woodland areas.
- Name two animals that winter in one part of the world and breed during spring or summer in another part.
- Name three animals that live in prairies and tell why they’re endangered.

The questions must be developed from the students’ posters and should be designed to get students to

read the posters and draw conclusions about why different organisms are in trouble. You should include questions that cover the full range of organisms your students researched. Next hang the posters where everyone can see them and hand out copies of your scavenger hunt clues to the group. Explain that the students should “tour the gallery,” reading the posters to find the answers to the scavenger hunt sheets.

4. Share scavenger hunt results.

After students have finished their scavenger hunt, review their answers as a group. What seemed to be the biggest problem(s) facing the species in the gallery? What other generalizations can the students make about threatened/endangered species? For what reasons are prairie plants in trouble? Wetland animals? Birds of prey? Students should notice, for example, that pollution has been a big problem for many birds of prey, that many species are in trouble because of introduced species and that animals that live in woodland areas are threatened by habitat loss. What are people doing to help endangered species? Is there anything that students can do? Why do people care about losing species?

WRAPPING IT UP

Assessment

1. Posters should be assessed separately, making sure that each poster meets the parameters of the assignment.
2. Have each student give examples of species that are threatened or endangered and describe why. Have him or her choose a group of species from the Illinois endangered species gallery (e.g., a group of prairie plants) and list major reasons the species are endangered. Identify and match endangered species to each reason. Can the students recognize a common reason or reasons for endangerment of different groups of plants and animals?

Portfolio

The student’s endangered species poster can be added to the portfolio.



Activity 3-1

Endangered Species Gallery Walk (continued)

Extension

Have students create a group database using the information they found about their species. They can also do an Internet search to add to their information—see sample pages below in the “Resources” section. The students can use the database as a reference. It could include the following entry fields: name of species; type of species (mammal, bird, fish, reptile, amphibian, plant, etc.); method of obtaining food (herbivore, carnivore, omnivore, producer); size or height (less than 5 pounds, 6–25 pounds, 26–100 pounds, 101–500 pounds, more than 500 pounds); habitat type (woodland, prairie, wetland, etc.); and the main reason it’s threatened/endangered (habitat destruction, introduced species, pollution, over hunting, over-collecting, etc.). After students have entered information on their species, they can use the database to answer questions about the species they researched. The database can be updated and expanded by other classes during the year and in future years.

Illinois Natural History Survey

<http://www.inhs.illinois.edu/>

Illinois Endangered Species Protection Board

<http://www.dnr.illinois.gov/esp/esp/Default.aspx>

List of Illinois Endangered and Threatened Species

http://www.dnr.illinois.gov/ESP/ESP/Documents/2015_ChecklistFINAL_for_webpage_051915.pdf

Illinois Plant Information Network

<http://www.nrs.fs.fed.us/data/il/ilpin/>

Illinois Natural History Survey List of Illinois Taxa

<http://www.inhs.illinois.edu/collections/ilspeclist/>

Resources

Internet Sites

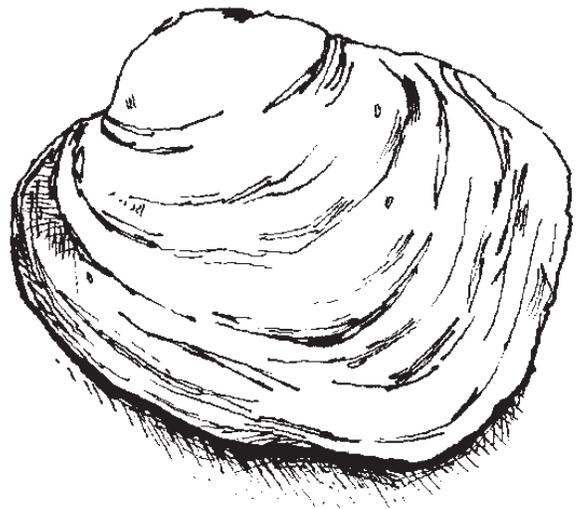
There are many Internet sites with great information and photographs of endangered and threatened species. The following sites can be a base to work from when searching for information on this topic.

Illinois Department of Natural Resources (IDNR)

<http://www.dnr.illinois.gov>

IDNR Division of Education

<http://www.dnr.illinois.gov/education>





Student Page Endangered Species Act

LEGAL LINGO



In the United States, many species are protected by the Endangered Species Act. Under this act, species may be listed as threatened or endangered. Populations of threatened species are generally low or declining but not in immediate danger of extinction. Endangered species are in immediate danger of becoming extinct. Typically, their populations are critically low and require high levels of protection. A federally endangered species is one in danger of extinction throughout all or a significant portion of its range. A federally threatened species is one which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. A state endangered species is any species which is in danger of extinction as a breeding species in

Illinois. A state threatened species is any breeding species which is likely to become a state endangered species within the foreseeable future in Illinois. An extirpated species is one that has been eliminated from part of its range. For example, the elk has been extirpated from Illinois, although it still lives in other parts of its natural range.

A list is maintained of all species listed as endangered or threatened in Illinois. The list is updated every five years. Visit <http://www.dnr.illinois.gov/ESPB/> for the most current information.

Poster Parameters

Your poster should include the following information:

- natural history information about your species (what type of habitat it lives in, what it eats or who eats it and other natural history information such as how it gets its food, how long it lives, where it breeds or reproduces and when it is active [night? day? year round?])
- why your species is in trouble
- what people are doing to help your species
- what your species looks like (pictures or drawings)
- where your species lives (a range map).

The poster should not be a report. It should present the required information in easy-to-read chunks arranged in an informative and creative way that will capture people's attention. Pictures should have captions that explain what is shown.

