

ENDANGERED SPECIES: WHAT AND WHERE?

Summary:

Students learn about North American endangered species through creation of a species book. Older students will locate endangered species on a map and explore their habitat requirements.

Grade Levels:

K-2; 3-8

Time Estimate:

1-2 class periods

Subjects:

language arts, creative arts, geography, science

Skills:

description, construction, comparison, application

Learning Objectives:

Students will be able to:

- ✓ Define endangered species.
- ✓ Identify several examples of endangered species and where they can be found.
- ✓ Determine the home range of several endangered species of the United States.
- ✓ List examples of endangered species found in their state.
- ✓ Explain habitat requirements of several endangered species and determine if their schoolyards contain any of these requirements.

Materials:

- ✓ large U.S. map
- ✓ art materials (construction paper, markers, glue, scissors, pipe cleaners, string, etc.)
- ✓ U.S. Map Student Activity Sheet
- ✓ KWA Species Cards

Background

In this activity, students will explore some of the many endangered and threatened species in North America. The following information will be useful in guiding your students to investigate National Wildlife Federation's Keep the Wild Alive focus species, and then to explore local species on their own.

Extinct species are plants or animals that once lived on Earth, but no longer live anywhere in the world. Examples include the dodo, passenger pigeon, dinosaurs, woolly mammoths, and saber-toothed tigers.

Although extinction is a natural process that has gone on throughout time, human activities have greatly accelerated the rate of extinction in modern times.

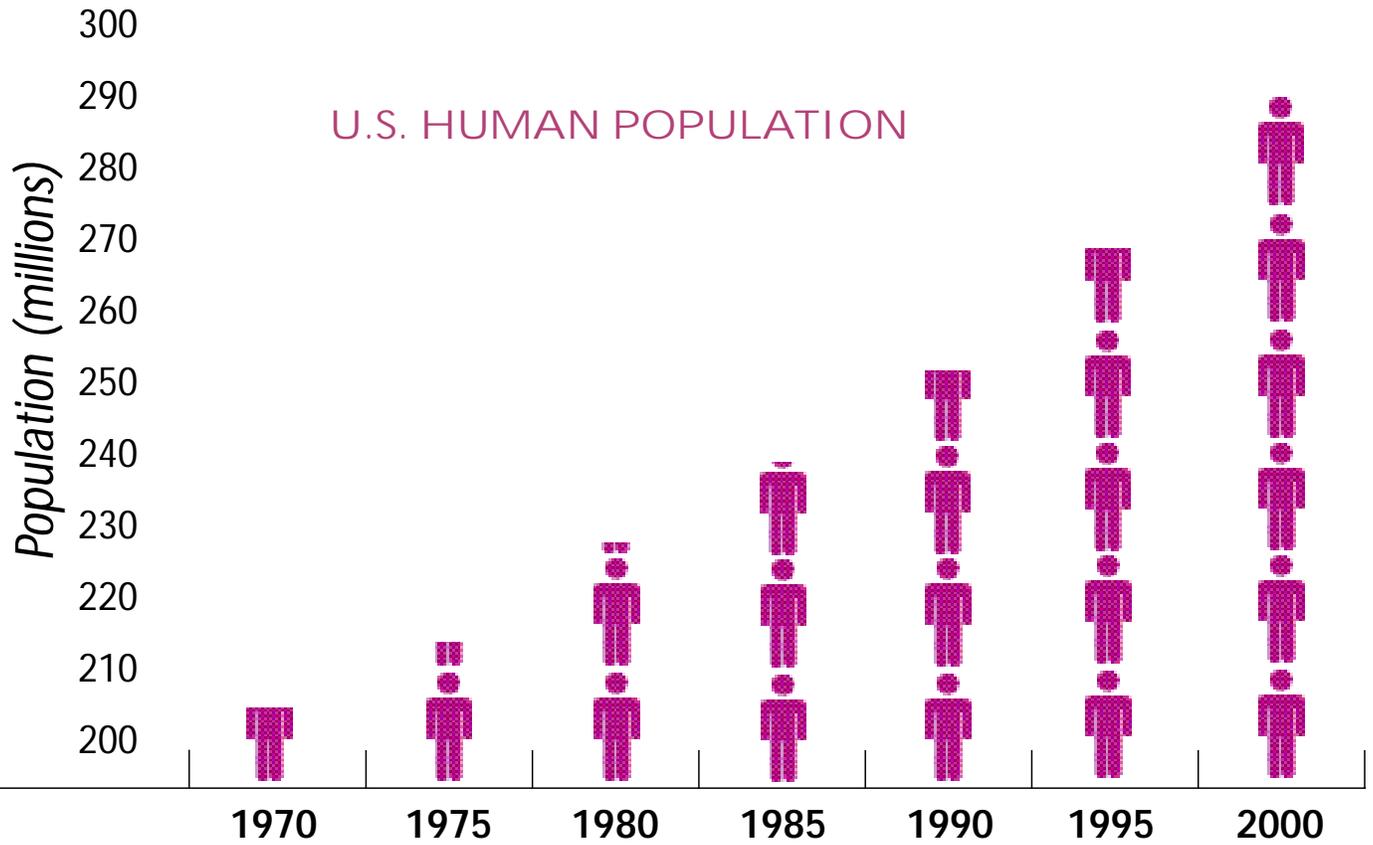
An endangered species is a plant or animal that is in danger of becoming extinct in the very near future, because its numbers are declining rapidly, or its habitat is being rapidly destroyed.

Threatened species are plants or animals which are not yet endangered but whose population numbers are falling unnatu-

rally quickly. These species face significant conservation challenges and scientists feel they must be carefully monitored to prevent them from becoming endangered.

Procedure

1. Explain to students that they will be learning about some amazing animals that they may not have heard of before. Show your students each picture on the KWA Species Cards. As you show each one, ask if the students have heard of or seen this animal. *Do they know where it lives? What it eats?* If there are not many, explain that the reason they may not have seen the animal is that there are very few of these animals today. These animals are called "endangered," meaning they are unusually rare and could be in danger of disappearing altogether. Point out on a large map of the U.S. where some of these animals live, being sure to emphasize those that are present in your local region or state.



Source: U.S. Census Bureau

- In small groups, have students create and illustrate their own Species Book. Divide up the KWA Species Cards among the groups. For every species card they have in their group, ask students to think of another animal they know that begins with the same letter. Have students draw this animal for each letter they have represented on a species card, each on a separate piece of paper. They can also draw what it eats, where it lives.
- Ask students, *What is one thing that your animal has in*

common with the species card illustration you were looking at (i.e., large, hairy, has big eyes)? Depending on their writing level, students should write that characteristic under their drawing, or you can write them on the board.

- Depending on how much time is available, you may want to rotate the group of Species Cards so that each group eventually gets all 25, or you may want to stop at a smaller number. When all the student illustrations are complete, assemble a class

species book, including copies of the Species Cards and all the illustrations the students created, grouped by letter. These illustrations may also be used for bulletin board creation, animal letter mobiles, or composing an animal alphabet song!

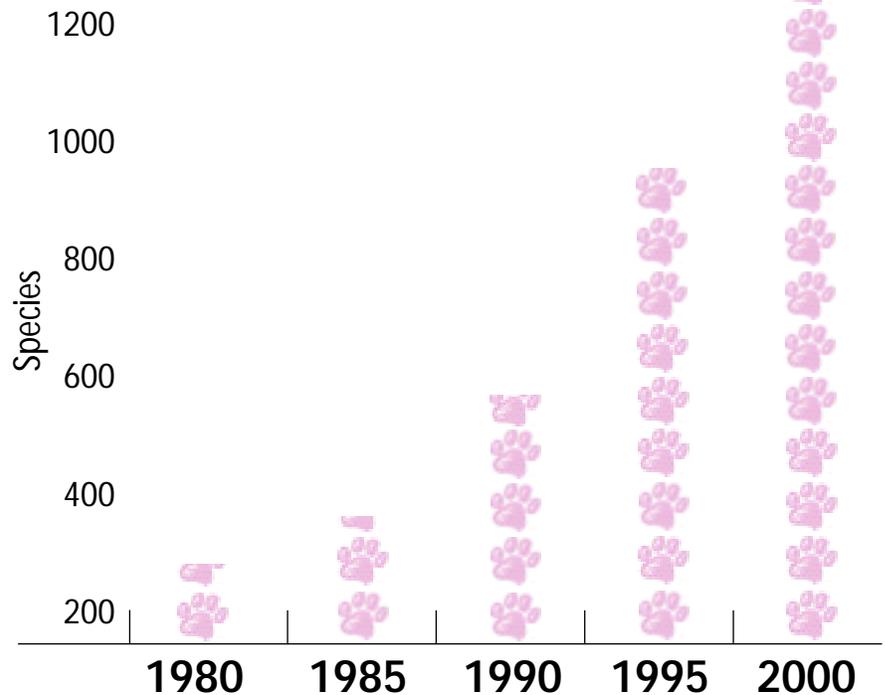
Modifications for Older Students (Grades 3-4)

- Introduce your students to the idea that animals and plants need homes, or habitats, just like people. The area

that an animal needs to find its food, water, cover, and places to raise young is called its habitat, and areas of the country or world where its habitat can be found are called home ranges. Your students will be noting species' home ranges on a United States map.

2. Divide the class into small groups and distribute the U.S. Map Activity Sheet.
3. Distribute the KWA Species Cards among the groups (you may want to divide the cards ahead of time into geographic regions). Each group's task is to find the range information on the cards, and shade in the states where species are found, noting each species with a different color or design. Students should make a key on their map to correspond to the color or design used for each species.
4. Ask the groups to examine their maps and see which species are present in their state or local area.
5. Have groups each pick one species that is present in their region and research its habitat requirements. You will probably want to add several local species to the list of given species. To find out more about these species and other

U.S. THREATENED & ENDANGERED SPECIES



Source: U.S. Fish and Wildlife Service

endangered species in your area, contact your local environmental agency or visit www.enature.com or the United States' Fish and Wildlife Service's Division of Endangered Species' website, www.endangered.fws.gov. Use the search function to look up endangered species using their common names, interesting facts about each listed species, and lists of endangered species by state.

6. Once each group knows what its species' habitat needs are, take the class out to the schoolyard and investigate to

see if those needs can be met in their schoolyard. As a class, discuss what they found. *If the habitat elements are present, where are they? If not, what could they add to the schoolyard that would provide for their species?* Note that it may be impossible to provide everything for every group's species.

Modifications for Older Students (Grades 5-8)

1. Have students create a bar graph showing the number of species in each U.S. region

(i.e., Northeast, Southeast, Midwest, West). *Do they notice any patterns?*

2. Working from a local map (for your region or state), have students research local endangered and threatened species and create a local endangered species map to accompany their U.S. map. This local map should show ranges and overlaps, and be labeled with species names.
3. Have students investigate what kinds of efforts are underway locally to protect endangered species in the region. *What organizations are working on this issue? How can students become involved?*

Extension

(K-2): Take students out to the schoolyard to see what animals and plants they can find. When you return to the classroom, have students write down the name of one animal they saw and illustrate it for their book or bulletin board. Add these in a special section: Animals of Our Schoolyard. Have students write a short poem or story about their animal.

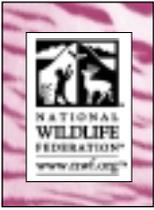
(3-8): Ask students to write or draw up a plan for how they would add/change their schoolyard to attract several of their

local endangered species, or if they think it would not be possible, why.

Assessment

(K-2): Have students present their art projects and explain their choice of illustration to the rest of the class. *How did they choose their animal? Where have they seen it?* Have students share one habitat fact about their animal. Write a class poem on the board, using as many of the animals as possible.

(3-8): Have each student group present their map to the rest of the class, sharing some of the key facts about each species from the KWA Cards, and what they discovered about their local species. Be sure that students have included habitat requirements, home range, threats the species is facing, and why it is endangered. After the presentations, again emphasize that the species your students have learned about are only part of the total number of species that are endangered in the United States, and in the whole world.



WORKSHEET

