

# Rare Species Class Book

Nebraska  
Rare Species  
Educator Packet  
grades K-4

## **OBJECTIVES**

Students will (1) learn about threatened and endangered species and what causes species to become threatened and endangered, and (2) learn ways humans can help threatened and endangered species populations recover.

## **METHOD**

In groups, students will choose one Nebraska threatened or endangered species to focus on to learn about the specie's natural history, examine the reasons it is threatened or endangered, and why it is important to make an effort to save this species.

## **MATERIALS**

- poster board - one per group of 2-3 students
- blank writing materials
- construction paper for book cover
- markers, crayons, and other writing materials
- blank map of the state of Nebraska to plot range map of the species
- access to internet or other research materials

## **BACKGROUND**

Since the arrival of Europeans in North America, more than 500 species have become extinct. The

Subject Areas: Science, Environmental Education, Language Arts, Art

Duration: 2-3 hours

Group Size: any

Setting: indoors

Vocabulary: threatened, endangered, Endangered Species List, habitat

population of many more have declined due to loss of habitat, degradation of the environment, pollution, pesticide use, and other factors.

Nebraska is home to 27 threatened and endangered species. Throughout the United States, there are 1,436 threatened and endangered plants and animals.

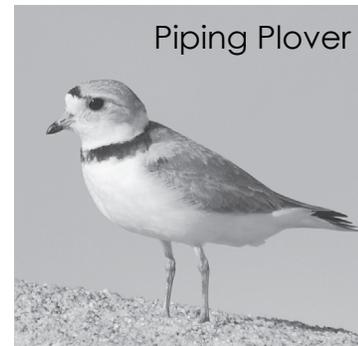
The U.S. took a giant step toward saving plants and animals with the passage of the Endangered Species Act of 1973.

One of the most important ways scientists protect and save these species is to learn more about their natural history (life cycle, reproduction, food requirements, etc), their habitat requirements, and the factors causing this species to be threatened or endangered.

Biologists and ecologists throughout Nebraska are constantly learning more about threatened and endangered species. They use this new information to guide their land management practices.

## **PROCEDURE, PART I**

1. Begin by having a classroom discussion about what it means for an species to be "at risk" (its population is declining, but it is not yet to the point of being classified as threatened), "threatened" (its population is declining and if it continues to decline, it will be endangered), "endangered" (the species's population has declined to a point that it can not



Piping Plover



recover on its own and must have help through conservation efforts), and “extinct” (the species no longer exists on Earth).

2. Ask students what causes a species to become at-risk, threatened, endangered, or extinct. (Habitat loss, habitat degradation through pollution, invasive species, poor management, etc., and *historical* unregulated hunting).

3. Ask students if there are any things humans can do to help threatened and endangered species? (YES! preserve natural habitats, restore habitat, conserve natural resources such as water and energy, conduct research and learn more about all threatened and endangered species, and protect species from accidental death). Help students understand that although it is unfortunate that some species have become threatened or endangered, there is still time and through lots of help, these species may recover.

## **PROCEDURE, PART II**

4. Tell students that, just like scientists, they are going to be doing some research and learning more about Nebraska’s threatened and endangered species.

5. Divide students into groups of 2-3 students. Have each group choose a Nebraska threatened or endangered species to investigate. Make sure each group has a different species.

6. Ask students to investigate their species to determine:

- a description of their species
- the species habitat (prairie, pine forest, wetland, deciduous forest, etc).
- what it eats
- what preys upon this species
- why it is threatened or endangered
- what is being done to help protect it
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## **PROCEDURE, PART III**

7. Provide students with paper, markers, crayons, and

other art supplies to create several pages of a book about their species. Their pages should include:

- a drawing or photo of their species
- a description of the species
- the diet of their species (for animals only)
- predators of the species
- what type of habitat this species can be found
- the range of their species (where in Nebraska can it be found.). You may want to have students draw the range of their species on the blank Nebraska map.
- why this species is threatened or endangered
- what is being done to help save this species

8. Once completed, have each group present their findings to the class.

9. After students have presented their species, collect all pages and put them together into one large booklet. Decorate front and back covers of book. Give your book a title and don’t forget about the “Authors” (your class). Staple or paper punch holes into binding, use yarn, string or rubber bands to keep sheets together

## **EXTENSIONS**

1. Hold a school-wide fund drive (i.e. penny drive or collecting cans for cash) to donate to an organization devoted to helping threatened and endangered species.

2. Visit a zoo that houses some of Nebraska’s endangered species and see firsthand why these critters are so amazing.

3. Inform the community of endangered species native to your area through newspaper articles, brochures, buttons, signs, speeches, or videos. Have students complete the “Picketing for Plovers” activity found at [www.nebraskararespecies.org](http://www.nebraskararespecies.org).

## **EVALUATIONS**

1. Review the pages students created about their threatened or endangered species for accurate information, layout, range map, and grammar.



2. Have a classroom discussion about endangered species, why species become threatened or endangered, and what students can do to help species recover. Evaluate student's responses and discussion participation.

### RELATED WEBSITES

[Rare Species Nebraska](http://www.rarespecies.nebraska.gov)  
www.rarespecies.nebraska.gov

[Nebraska Game and Parks Commission](http://www.ngpc.state.ne.us/wildlife/programs/nongame)  
www.ngpc.state.ne.us/wildlife/programs/nongame

[U.S. Fish & Wildlife Service, Educator and Kids](http://www.fws.gov/endangered/kids/index.html)  
www.fws.gov/endangered/kids/index.html

### BOOKS & PRINTED MATERIAL

[Will We Miss Them? Endangered Species](#) by Alexandra Wright , ISBN-13: 978-0881064889

[Can We Save Them? Endangered Species of North America](#) by David Dobson. ISBN-13: 978-0881068221

[Almost Gone: The World's Rarest Animals \(Let's-Read-and-Find-Out Science 2\)](#) by Steve Jenkins ISBN-13: 978-0060536008

### PERMISSIONS & CREDITS

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## Nebraska State & Federally Listed Threatened & Endangered Species

SPECIES NAME	FEDERAL LIST	STATE LIST
<b>BIRDS</b>		
Eskimo Curlew	Endangered	Endangered
Whooping Crane	Endangered	Endangered
Interior Least Tern	Endangered	Endangered
Piping Plover	Threatened	Threatened
Mountain Plover		Threatened
<b>MAMMALS</b>		
Black-footed Ferret	Endangered	Endangered
Swift Fox		Endangered
River Otter		Threatened
Southern Flying Squirrel		Threatened
<b>FISH</b>		
Pallid Sturgeon	Endangered	Endangered
Topeka Shiner	Endangered	Endangered
Sturgeon Chub		Endangered
Blacknose Shiner		Endangered
Lake Sturgeon		Threatened
Northern Redbelly Dace		Threatened
Finescale Dace		Threatened

SPECIES NAME	FEDERAL LIST	STATE LIST
<b>MUSSELS</b>		
Scaleshell Mussel	Endangered	Endangered
<b>PLANTS</b>		
Blowout Penstemon	Endangered	Endangered
Colorado Butterfly Plant	Threatened	Endangered
Saltwort		Endangered
Western Prairie Fringed Orchid	Threatened	Threatened
Ute Ladies'-tresses	Threatened	Threatened
Ginseng		Threatened
Small White Lady's Slippers		Threatened
<b>REPTILES</b>		
Massasauga		Threatened
<b>INSECTS</b>		
American Burying Beetle	Endangered	Endangered
Salt Creek Tiger Beetle	Endangered	Endangered

