

Investigation Six - Endangered Species of Utah

Standard V

Students will understand the physical characteristics of Utah's wetlands, forests, and deserts and identify common organisms for each environment.

Objective 2

Describe the common plants and animals found in Utah environments and how these organisms have adapted to the environments in which they live.

Intended Learning Outcomes

1. Use science process and thinking skills
2. Manifest scientific attitudes and interests
4. Communicate effectively using science language and reasoning

Standard

V

Objective

2

Background Information

Some people do not understand or care how actions of the human race is destroying species of animals and plants in Utah. There are many species that are endangered, threatened or have special concerns that could be extinct if measures are not taken. The following are terminology and definitions from the US Department of Wildlife to help your understanding of these endangered species.

Extinct: a wildlife species that has disappeared from the world.

State Endangered Species: any wildlife species which is threatened with extirpated from Utah or extinction resulting from very low or declining numbers, loss of habitat, environmental changes, or a combination of the above. Continued long-term survival is unlikely without the implementation of special measures.

State Threatened Species: any wildlife species which is likely to become endangered within the foreseeable future.

Most of these species have become endangered and are close to extinction because the loss of habitat has affected them. As the human race grows, so does the need to expand. This expansion is taking over more and more land. The more land we take over, the less land the animals have. Animals are not only losing their homes, but also their food and protection. Some animals cannot adapt to new environments very quickly, so their litters are getting smaller. With smaller litters, there is less food in the food chain. People need to start recognizing the problems and state coming up with solutions that can benefit all animals in this world.

Pre-Assessment/Invitation to Learn

Tell the students that while they are out to recess, something will be happening that will benefit all people. While the students are out to recess, mark off one-half of the room with masking tape. Place a construction sign that reads: Development site: The land will be cleared for this site has been zoned for a new mini-mall. No one is allowed to enter.

Over by the students' lunches and backpacks, mark another area off with masking tape. This is so the students will think that they will not be able to eat lunch. Place a sign that says: New construction: Land will be cleared for a new parking structure. No one is allowed to enter.

As the students come in from recess, there will be a lot of commotion. Have the students sit in the remaining area and start a discussion about the construction. Ask: How do you feel? Is it crowded in the room? What do you think will happen at lunch time? If you were an animal, what would you do for food, water, shelter and protection? What happens when the food and water run out? Can everyone find shelter or protection? What will happen if you can't?

Instructional Procedure

Materials

- Fluorescent masking tape
- Worksheet
- Butcher paper
- Animal books for students to do research
- Internet websites: Dept. of Natural Resources (see resources)

1. Place the students in small groups of three or four. Give each group an "Endangered Species" worksheet to complete together.
2. Assign each group an endangered species of Utah. A list is provided. Provide computers or books for research.
3. Each group will need to write a prediction for why this animal is endangered; give a description of the animal, find out about their food, shelter and habitat. They will also need to discuss what problems might be occurring in this habitat. They also need to discuss what would they do to save this animal.
4. Give each group a large piece of butcher paper to write their information on to present to the class.
5. After an allotted time, have each group get up and talk about their endangered animal.
6. Journal entry: Answer the following questions in your science journal. Why is it important to help animals that are endangered? Why is it important to you? How can you help these animals?

Curriculum Extension

Language Arts-

- Look through the local paper to find interesting stories about people who are helping the environment to prevent endangered animals. Post these articles on a special bulletin board. (Standard VIII, Objective 3)
- Find an endangered species living in your area. Create bulletin boards and flyers letting the community know about this animal. Find ways to protect this

animal's habitat. Write letters to the community leaders to gain support. Send letters to the local community newspaper to get information out to the community. (Standard VIII, Objective 6)

Math-

- Find the current data numbers of the endangered species by contacting the U.S. Department of Wildlife. Create a line and/or bar graph to show the data received. (Standard V, Objective 1)

Assessment Suggestions

View the students posters, writings and journals to assess their understanding on this concept.

Resources

Websites:

- www.wildlife.utah.gov
- <http://dwrcdc.nr.utah.gov/vcdc/>

Homework and Family Connections

- Work as a family to help clean up an animal's habitat. Make sure that gloves and protective gear are worn.
- Get parents involved in community meetings and service projects to help protect animals of Utah.

Endangered Species of Utah
U.S. Department of Wildlife of Utah
1998

Birds:

Endangered

American Peregrine Falcon
Southwestern Willow Flycatcher

Threatened

Bald Eagle
Ferruginous Hawk
Yellow-billed Cuckoo
Mexican Spotted Owl

Mammals:

Endangered

Black-footed Ferret

Threatened

Utah Prairie Dog
Wolverine

Reptiles:

Endangered

Banded Gila Monster
Desert Tortoise

Fish:

Endangered

Bonytail
Colorado Squawfish
Humpback Chub
Razorback Sucker
Woundfin
Virgin River Chub
June Sucker

Threatened

Lahontan Cutthroat Trout
Roundtail Chub

Endangered Species

Group members: _____

Question: Why is the _____ an endangered species.

Prediction: I think...

Description of the animal:

Habitat: Where does this animal live? What does it eat?

Problems in the habitat:

Conclusion: This species is endangered because...

What can I do to help this animal?

Draw your endangered species in its habitat.