

PROTECTING THE SONORAN DESERT

Introduces students to Sonoran Desert Conservation Issues.



OBJECTIVES

Students should:

- be introduced to the Endangered Species Act and Native Plants Act.
- identify some problems facing Sonoran Desert plants and animals.

MATERIALS

- copy of *Handout 8* for each student (5th grade)

VOCABULARY

- Endangered Species
- extinct
- habitat
- population
- species

BACKGROUND

The Sonoran Desert is a fragile ecosystem with many plants and animals closely dependent upon each other for survival. As our human population grows, cities, mines, and agricultural areas expand, destroying and fragmenting plant and animal habitats. As a result, some Sonoran Desert plants and animals are in trouble. This reading introduces students to a few of the conservation problems we face as desert-dwellers and some possible steps that can be taken to help preserve plants, animals, and undeveloped areas. It also introduces The Arizona Native Plants Act and U.S. Endangered Species Act. (Note: ‘Threatened’ and ‘Endangered’ are capitalized as the reading is referring to these in legal terms.)

This reading is fairly complex and designed for 5th grade students. However, younger students will benefit from a class discussion on conservation.

5th grade: Make a copy of *Handout 8* for each student.

SETTING THE STAGE

- 1) Discuss the needs of plants and animals with the class.
- 2) Ask students if their town or city has grown in recent years.
- 3) Ask students how expanding cities might affect plants and animals.
- 4) Write “Arizona Native Plants Act” and “U.S. Endangered Species Act” on the board. Tell students what these laws protect and ask students why these laws might be important.

- 5) Write the words “Threatened Species” and Endangered Species” on the board. Tell students what “species” means (A group of plants or animals that are very nearly alike and are able to breed with each other and produce offspring similar to the parents. For example, a fox and a coyote are similar, but they cannot breed with each other. A fox is one species and a coyote is another.) Discuss the meanings of Threatened and Endangered as defined in *Handout 8*.

ACTIVITY: PROTECTING THE SONORAN DESERT

- 1) Ask 5th grade students to read *Protecting the Sonoran Desert*.
- 2) Discuss the reading and introduce new vocabulary.
- 3) Have students think of ways they can help protect the desert. Compile a list on the board.
- 4) Using natural objects from the school grounds, have students create a city in the sand that takes into consideration the needs of plants, humans, and other animals. This could be done in the playground sand.

EXTENSION ACTIVITY

Encourage students to conduct further library or internet research on protected, Threatened, and Endangered

Protecting the Sonoran Desert

The Sonoran Desert Region is home to many native plant and animal **species**. Some, like the desert pupfish and giant saguaro cactus, are not found anywhere else on Earth.

The federal Endangered Species Act was written to protect America's plants and wildlife. When the **population** of a species begins to decrease, the species may be listed as a **Threatened Species**. If its numbers become so low that it is in danger of becoming **extinct**, it will be listed as an **Endangered Species**. Threatened and Endangered species are protected by law.

Sonoran Desert plants are also protected by the Native Plants Act. In most cases, it is against the law to remove native plants, including their flowers, fruits and seeds, from the desert. It is even illegal to take dead cactus skeletons from the desert.

One of the major reasons why animals and plants become Threatened, Endangered and extinct is because the areas in which they live are destroyed or changed. This is called **habitat** destruction. Habitat destruction occurs as more wilderness is turned into cities, housing developments, ranches, or mines, and as people drive off-road vehicles through the undeveloped desert. As water is pumped from deep underground for drinking water, irrigating crops, and factory use, streams and water holes become dry. Fish, amphibians, and other animals that depend on these wet areas lose their habitat and may disappear.

Pima County planners are trying to develop better plans for new houses and shopping areas. Part of the Sonoran Desert Protection Plan includes leaving open spaces for wildlife. Water conservation is an important step we can all take to save water. When we hike and picnic in the Sonoran Desert Region, we can help plants and animals by not disturbing them or destroying their habitat. Can you think of



other ways you can help protect our beautiful, special desert?

The Desert Museum has some Threatened and Endangered species on display. When you visit, look for signs identifying these animals. The Museum also has established successful captive breeding programs for some of these species.