

GOING, GOING, GONE!

The emphasis of this animal unit is endangered species.

This learning unit contains information and activities that will assist in planning and carrying out a variety of activities and an educational field trip to the Caldwell Zoo. Included are suggested activities to do before and after the Zoo visit and a summary of information to be covered during the Zoo class. The Zoo's goals are to:

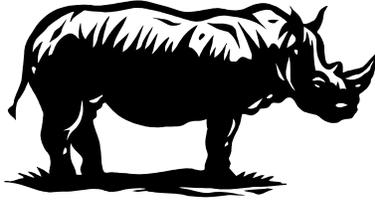
1. Encourage inquisitiveness about the natural world.
2. Help each child find answers for his/her own questions.
3. Aid development of understanding and factual knowledge of the environment.
4. Improve each child's ability to think rationally.
5. Promote creative and productive imaginations.
6. Provide a fun learning experience.

Texas Essential Knowledge and Skills ("TEKS") for science:

Third Grade: 112.14b: **1 A, 3, 9 A, 10 A**

Fourth Grade: 112.15b, **1 A, 3, 10 A**

Fifth Grade: 112.16b: **1 A, 3, 9 A&C, 10 A**



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Our world is rapidly changing. There are many plants and animals on the endangered species list today. Wildlife and wild places are facing many, many threats—the greatest being loss of habitat. Currently extinctions are usually not natural, but are instead man induced.

Silent killers, such as poisons and pesticides have taken a toll on animal populations. Pollution of air, water and soil has also caused problems. Even political activities, such as war, can exert pressures on plants and animals that are unbearable.

In the past, the pet trade put pressures on wild populations. Cute little animals grow to be large, powerful adults. Animals taken from the wild into the pet industry are not in wild breeding situations thus causing a problem.

Some animals have parts of their bodies that humans consider to be valuable. Ivory, actually an elephant's tooth (tusk) is the second most stable valuable worldwide commodity after gold. It is even profitable to kill young elephants with five-pound tusks. Animals with beautiful fur coats have been the objects of immense pressure.

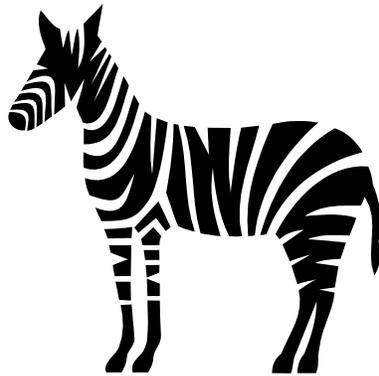
Animals thought to be a menace to farmers' and ranchers' livestock or crops have been destroyed. Not only is this a problem for the species thought to be a pest, but also often it causes an imbalance in other animal species that are preyed or supply food for the "pest."

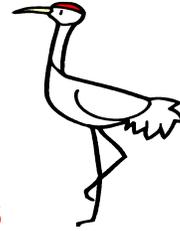
Although the endangered species picture may look bleak, there are many success stories. In 1945 the whooping crane numbers were only 19 birds. Through the efforts of many people this crane population is making a comeback. Golden lion tamarins' numbers had dwindled drastically due to the pet trade and loss of rain forest habitat, but today these tamarins are being raised in zoos and then re-introduced back into the rain forests of South America. The black-footed ferret, the most endangered mammal in North America, was thought to be extinct a few years ago, but today the black-footed ferret has been re-introduced into the wild.

It is important for young people to know that they CAN make a positive difference. By such simple activities as recycling, turning off electricity and water when not in use or even writing letters to governmental officials even the youngest student can help wildlife and wild places.

CLASSROOM ACTIVITIES

The activities on the following pages are for use before and/or after your Zoo visit.





GOING, GOING, GONE! ACTIVITIES

1. To show the importance of biodiversity, have the children write a short story about an endangered animal, plant or habitat. Perhaps they could share their stories with the rest of the class. Correlate the stories with an ecosystem and pretend each letter in the stories represents an animal. Choose two letters to become “extinct” in the stories, and have the children cross out all of those letters. What happened to the story? Choose two more letters to become “extinct.” Do you even have a story anymore?
2. One of the reasons to save endangered species is aesthetic. Have children write paragraphs telling why a certain animal is beautiful. Attach illustrations to show the beauty.
3. Create an alphabet book of either extinct or endangered animals.
4. Research an endangered species and find out where it lives, what it eats, why it is endangered, why it is important and what is being done to protect it. Be sure to share what you know.
5. Design a t-shirt, poster, billboard or stamp to promote conservation of an endangered plant, animal or habitat.
6. Write a song or rap about endangered animals, plants or places.
7. Write a “what if” story about an extinct animal. What if the dodo bird still lived? What if a dinosaur lived in my backyard?
8. Write a commercial for an endangered plant or animal. Videotape the commercial to share with others.
9. Make up a search-a-word puzzle with words relating to endangered species.
10. Write a conversation between two animals. Have the animals discuss their problems with being an endangered species.
11. Write a letter to someone (family, friend or governmental official) on behalf of an endangered species.

12. Stage a television program. Choose a reporter to interview an endangered animal. Remember that your program needs to have commercials (see #8).
13. Write letters to appropriate agencies about conservation issues. If you ask them to send you information, remember to write a thank you note when you receive the requested information.
14. Hold a debate about conservation issues. (Perhaps the local high school debate team would come share proper debate techniques.)
15. Plan and hold a conservation day at your school. Plan events, displays and maybe recycling with money going to a conservation organization.
16. Imagine this—what if everyone between the ages of 9 and 11 became extinct in Texas. What would happen at your school? How would it affect your family and community? Can you compare this limited disappearance of part of our human population to extinctions in the animal kingdom?
17. Take an opinion poll about a conservation issue and graph the results.
18. Create a time line of extinctions.
19. Read or watch a film about conservation heroes/heroines who have made a difference and helped endangered animals.
20. Discuss pollution and the effect it has on wildlife (and on humans). Discuss how each of us can help make a difference.



VOCABULARY WORDS TO KNOW

ADAPTATION	A modification of a plant or animal in structure or function that helps in adjusting to a new condition or environment.
BALANCE OF NATURE	Term used to describe the balance of living organisms within their natural environment
BIODIVERSITY	The great diversity of life—plants, animals and their ecosystems—on earth.
BIOME	A biotic community characterized by distinctive life forms.
COMPETITION	The situation when two or more types of animals try to survive in the same habitat when each needs to use limited food, shelter and other resources available.
ECOLOGY	Study of relationships between living things and of relationships between organisms and their environment.
ECOSYSTEM	A complex system of exchanges of material and energies between living things and their environment.
ENDANGERED SPECIES	A species which is in danger of extinction throughout all or a significant portion of its range. Living numbers are low.
ENVIRONMENT	All the surrounding conditions, factors and influences that affect development of a living organism.
EXTINCT	No longer in existence. A species whose members have all died out.

HABITAT	The natural home of an organism.
INTRODUCED SPECIES	An animal or plant that has been brought into an area where it does not naturally live.
NATURAL SELECTION	“Survival of the fittest.”
POACHING	Hunting or killing of animals or plants illegally.
THREATENED	A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
THRESHOLD LEVEL	Lowest level (numbers) of a species’ population at which it can continue to survive as a distinct species. When population drops below this level, deaths will outnumber births and the species may become extinct.
VULNERABLE	A species likely to become endangered.