

ecoMentors Lesson Plan Template: Helping kids explore the planet! www.ecomentors.ca		
Title: Endangered Species	Grade Level(s): 4	Time/Date:
School:	Teacher:	
Directions to school, class:		
Contact Info:		
Ontario Curriculum Connection: Life Systems- Habitats and communities		
Vocabulary: Words & Concepts your class may be learning, look these up yourself too!		
<p>Extinct: Species is no longer present</p> <p>Endangered: Species is almost extinct; only few are left</p> <p>Habitat: Area which contains everything a species needs to live</p> <p>5 causes of species extinction:</p> <p>Invasive Species – an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.</p> <p>Habitat Loss – When animals lose the natural resources that make up their home and food</p> <p>Overuse of species by humans – Humans may use some animals for fur, food or other reasons</p> <p>Pollution of Soil and Water – Pollution from man enters into the soil and water that animals use</p> <p>Climate Change – The change of weather patterns across large regions</p>		
Materials and Equipment: List these before and while you plan and revise so you're prepared.		
A ball of string		
Scenario's of extinction (optional; create yourself)		
Cards with pictures of the different parts of the food chain (on separate worksheet).		
What is your class accomplishing?: Learning & Activity Goals, Objectives		
<ul style="list-style-type: none"> • Demonstrate an understanding of the concepts of habitat and community, and identify the factors that could affect habitats and communities of plants and animals. • Describe ways in which humans can change habitats and the effects of these changes on the plants and animals within the habitats. • Classify organisms according to their role in a food chain • Recognize that animals and plants live in specific habitats because they are dependent on those habitats and have adapted to them • Describe ways in which humans are dependent on plants and animals (e.g., for food products, medicine) • Show the effects on plants and animals caused by the loss of their natural habitat 		

PROCEDURE

The Spark: Introductions, Demonstrations, Show and Tell, Topic Intro (Break the ice!) ~5-10min
<p>Introduce yourself. Ask the class if they know what 'extinct' means. <i>Can someone spell it? Can anyone name some species of animals or plants that are now extinct? How did these species get extinct? What is an endangered species? Can you name one? What is the difference between endangered and extinct?</i> Ask the students to name causes of species extinction. Hint at any other causes of species extinction that the students may not have given. 5 Causes are listed above. Summarize these 5 causes on the black board and shortly explain the 5. Tell the students we will talk about these 5 causes today and will explain the meaning of habitats and invasive species during this lesson.</p>
Brainstorming, Getting ideas, Connecting ideas (assess their knowledge!) ~10-20min
<p><i>Do you know what the word habitat means? What is rabbit's, whales, eagles, dandelion's...etc. habitat? What is a student's habitat? What are some things in your classroom (your learning habitat) that are important to make it a classroom? Work with the example of 1 animal, i.e. a bear. What does he need in his habitat? (water source, a wide range to find food, a place for a home, paths to travel through) Could an animal survive in another habitat? i.e., place a rabbit in a whale's habitat and vice versa? Why</i></p>

not? >> Point out the different needs animals have. *Does anyone know what an invasive species means? Explain. What if we put a couple kindergarten students in your classroom? How would this affect the classroom? Can you think of an invasive animal in nature?*

Activity, Game, Exercise, Debate, Puzzles, Problem Solving, Role Play ~10-30mins

Habitat by a String

Ask for a volunteer to assist you in stretching a piece of string to split the classroom in half. If you know the class, use this activity as an introduction activity and go before the students and put up the string with a paper sign 'no longer usable'. *What has changed in the classroom? What is cut off? If we have the same number of students in the smaller space how many students will we have to get rid of for everyone to be comfortable again? Can we have a class in a room this small? What are some things that are no longer available for you to use that may affect you? What happens when more people or animals have to live in a smaller space? How would animals and students deal with the new smaller space?* Cut the space in half again with string if possible. Ask the students again, *how many students could we fit in this space and still have a class? What will happen to the other students? What else has been cut off?* Continue to cut class in half until it is evident that the students are all squished together!

Activity, Game, Exercise, Debate, Puzzles, Problem Solving, Role Play(Pt. II or Cont...) ~10-30mins

To review, read the animal stories below and ask the students which of the five causes is described. Point out the five causes on the board so the students can choose between them. Some cases have more than 1 cause. You can have these scenarios written down on pieces of paper and ask the students to read them aloud.

- The Northern part of Canada is getting warmer and warmer and the Polar Bears that used to live there are not used to the warm weather. Many are getting sick and the fish they eat are disappearing.
- Many Eastern Wolf are killed by humans through hunting and trapping. Also they are sometimes hit by cars. Humans are building farms and homes on top of their forests.
- The smoke from a nearby factory has lots of pollution and poisons in it. The pollution falls on the flowers and trees that are beside the factory, causing the plants to die.
- The cane toad was used to control for insect pests of sugarcane and other crops. It has become a pest. It will eat on any animal or plant available. It eats the food of native toads and frogs and will even eat other toads and frogs.
- The swift fox has lost its home to farmland, and it had been the accidental victim of trapping and poisoning aimed at other animals such as coyotes, wolves and ground squirrels.
- The Peregrine Falcon is a bird of prey that was affected by pesticides, especially DDT, which causes eggshell thinning. Sometimes the eggs break before the babies can hatch.

Find more scenarios at. http://www.sis.ec.gc.ca/ec_species/ec_species_e.phtml

Activity, Game, Exercise, Debate, Puzzles, Problem Solving, Role Play ~10-30mins

Let the students stick the food chain cards on the blackboard>> Creating a simple food chain. (explain algae!) Point out why this is important for us humans. Take one of the middle cards out: *What would happen if all fish got extinct? What happens with the water where the algae are growing? What happens with the bigger animals who eat fish? What happens with us?* Take other cards out of the food chain: *How does this effect the other elements of the food chain?* You can bring some extra cards if you'd like

Contingency, Plan B, extra game or activity (Back up plan) ~5-10mins

Extinction Pictionary

Tell students that they will be playing a drawing game that involves a student to coming up to the blackboard. The ecoMentor will whisper in his/her ear one of the causes of species extinction. Without speaking, the student will draw pictures on the board to describe the cause. The other students guess.

Review, Conclusion and steps towards continued action ~5-10mins

Erase the causes from the board and ask if the students can name all of them. Ask students what they will do to help prevent species extinction when they go home. *Why is it important to prevent extinction?*

References

1 The World Conservation Union - <http://www.iucn.org/bil/species.html>

2 Environment Canada - http://www.sis.ec.gc.ca/ec_species/ec_species_e.phtml

Great work ecoMentor! After use of Lesson Plan revise, add ideas and repeat!