



How Can You Help?

Teacher Lesson Plan

Endangered Species Post-Visit Lesson

Duration: 40-60 minutes

**Minnesota State
Science Standard**

Correlations:

4.1.2.1.1., 5.3.4.1.3.,

5.4.4.1.1.

**Wisconsin State
Science Standard**

Correlations:

E 4.2, C 4.1, C 4.2

Supplies:

- 1) Smart Board or Dry Erase Board and Markers
- 2) Copies of the Environmental Action Booklet (Appendix III) for each student—print double sided for a one page booklet
- 3) Environmental Pledge (Appendix IV)

Overview

Students will learn what children throughout the world are doing to help the environment and what they can do in their everyday lives to make an impact.

Objectives

- 1) Students will identify areas in their life where they are already making a difference for the environment.
- 2) Students will describe new ways in which they can help the environment.

Background

Children around the world are helping the environment in many different ways. Some hold bake sales or make art to sell and donate the funds to environmental organizations. Others start their own non-profit organizations to bring awareness about different environmental issues. Children have arranged beach and park clean-ups and started recycling programs in their classrooms and neighborhoods. One girl named Olivia Bouler used her love of birds to write and illustrate a book for the National Audubon Society (<http://www.oliviabouler.net>). Merit Leighton and Marlowe Peyton started a program called Plastic Patrol (<http://theplasticpatrol.squarespace.com/about-me>) to educate children about saving the oceans by reducing the amount of plastic they use. A 12-year-old girl in Indonesia, Adeline Tiffanie Suwana, started a program to plant coral reefs and mangrove trees in her country. One way schools can help the environment is by signing up with Terracycle. You can then collect waste—from Capri-sun pouches to cheese wrappers—and send it to the company and they will recycle the items into something new! (<http://www.terracycle.com/en-US/pages/resources-for-k-12-schools>).

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Procedure

- 1) Review the different conservation categories with the students and have them list some endangered species. Then ask them to list reasons why an animal is endangered (habitat loss, poaching, pollution, etc.). What can do in their everyday lives to help with these problems?
- 2) Explain to students that one way they can help endangered species is by being environmentally friendly. Ask the students if they know what it means to be environmentally friendly (see important terms). Can they think of anything they or their families do to be environmentally friendly (turning off lights, recycling, turning off the water when they brush their teeth)? Can they think of anything they do at school to be environmentally friendly (reusing paper, recycling, using only one/no paper towel(s))?
- 3) To give students ideas of what else they can do, tell them about what children all over the world are doing to help the environment. Tell them they can do big things or small things, but everything they do helps.
- 4) Explain to students that they will be making a book to show what they already do for the environment and what more they can do to help. They will be writing and illustrating their books.
- 5) Once they are done with their books, have the students share their book with the rest of the class, focusing on what they can do in their classroom to help the environment.
- 6) Compile the ideas into 3 or 4 ideas and write the ideas on a pledge to help the environment. Once the pledge is written, have the students recite and sign the pledge. You can copy the pledge onto a large sheet of paper to hang up in your classroom so the students will be reminded of their pledge every day.

Assessment

- 1) What does it mean to be environmentally friendly? *Making small or big changes that have a positive impact on the environment—air, water, land, plants, animals, etc.*
- 2) What are some examples things you can do to be environmentally friendly? *Recycle, turn off lights, take shorter showers, walk or bike instead of drive, etc.*
- 3) What are ways that children throughout the world help the environment? *Write a book, plant trees, clean up parks/beaches, and raise money for environmental organizations.*

Further Reading

Can We Save the Tiger? by Martin Jenkins

Heroes of the Environment: True Stories of People Who Are Helping to Protect Our Planet by Harriet Rohmer

Marty McGuire Digs Worms! by Kate Messner

My Life with Chimpanzees by Jane Goodall

Not Your Typical Book about the Environment by Elin Kelsey

Olivia's Birds: Saving the Gulf by Olivia Boulter

The Elephant Scientist by Caitlin O'Connell and Donna M. Jackson

The Everything Kids' Environment Book by Sheir Amsel

Wildlife Heroes by Julie Scardina and Jeff Flocken

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Conservation Categories

The International Union for Conservation of Nature (IUCN) is a worldwide environmental organization that was founded in 1948. They encourage and assist societies throughout the world in their conservation efforts. They also maintain the IUCN Red List of Threatened Species which is the most widely accepted global listing of plant and animal species.



Least Concern Categories - No immediate threat of extinction. (lc=lower risk, nt=near threatened)

Threatened Categories

Vulnerable - Faces a high rate of endangerment in the wild.

Endangered - Faces a high risk of extinction in the future.

Critically Endangered - Extremely high risk of extinction in the wild.

Extinct Categories

Extinct in the Wild - Only survives in captivity, or as a wild population outside its historic range.

Extinct - A species that no longer has any living members.

Important Terms

Amphibian - A cold-blooded (ectotherm), vertebrate animal that lays many soft, jelly-like eggs which allow for water and air to enter. Young are born with gills and metamorphose into adult animals that breathe through their skin. This group includes frogs, toads, salamanders and newts.

Bird - A warm-blooded (endotherm), vertebrate animal that lays hard-shelled eggs, is covered in feathers, has wings, and breathes through lungs. This group includes raptors, penguins, water fowl and songbirds.

Ecosystem - A community of living organisms who are connected by their environment (living and non-living components) and depend on each other for survival.

Ectotherm (cold-blooded) - Animals that rely on outside temperature for their body heat. They may raise their body temperature by moving to a sunny spot or lower their body temperature by moving to a cool spot.

Endotherm (warm-blooded) - Animals that generate their own body heat. They are able to raise their body temperature by shivering or eating to increase energy, or lower their body temperature by sweating or panting.

Environmentally Friendly - Making small or big changes that have a positive impact on the environment—air, water, land, plants, animals, etc.

Fish - A cold-blooded (ectotherm), aquatic, vertebrate animal that lays many soft-sided, jelly-like eggs which allow water to enter. They are covered in scales, breathe through gills and have fins. This group includes sturgeon, lamprey, and carp.

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Insect - An invertebrate animal with 6 legs and an exoskeleton. They breathe through holes in their exoskeleton and reproduce by laying eggs which then undergo either complete or incomplete metamorphosis until they reach adulthood.

Invertebrate - An animal without a backbone.

Mammal - A warm-blooded (endotherm), vertebrate animal with fur/hair that gives birth to live young, feeds its young milk, and breathes through lungs. This group includes dogs, cats, bears and cows.

Population - A group of plants or animals of the same species all living in the same area.

Reptile - A cold-blooded (ectotherm), vertebrate animal that is covered in scales, lays soft shelled eggs, and breathes through lungs. This group includes turtles, snakes, lizards and crocodilians.

Species Survival Plan (SSP) - The management of threatened or endangered species in zoos and aquariums to ensure their populations do not become extinct. (<http://www.aza.org/species-survival-plan-program/>)

Vertebrate - An animal with a backbone.