



A NEWSLETTER FOR KIDS WHO WANT TO
HELP MAKE OUR WORLD A BETTER PLACE

TOMORROW'S PLANET

Explore, enjoy and protect the planet

Issue #8

Endangered Species: Nature's 911

What is an endangered species? A species is a particular type of animal, for example a Bald Eagle or a Desert Tortoise. To be "endangered" means to be in danger. What these animals are in danger of is disappearing forever, or becoming extinct. Many endangered species are at risk because their habitat, or home, is disappearing. Other species are disappearing due to pollution or poisons in the environment. To help these animals, it is important to learn as much as possible about them. Only then will we be able to understand and appreciate their place in our natural world.

To start, it's good to have a rough idea of how many species exist today. Scientists have positively identified somewhere between 1.4 and 1.7 million different species of living things. While these numbers seem huge, they are dropping at alarming rates. Just how fast are species really disappearing? This is hard to know for sure, since so much of the earth's land and ocean is relatively unexplored. Scientific studies have shown that thousands of species become extinct each year as a result of the destruction of the tropical rainforest alone, which is home to at least half of all plants and animals on the planet. Some estimates believe species are becoming extinct at the rate of 100 per day, which is about 1 species every 15 minutes.

There are many reasons to protect endangered species. One reason that you may not know about is that a lot of medicines come from plants and animals. Penicillin, a very common drug used to prevent infections and disease, was actually discovered from a mold. Substances contained in the leaves of the

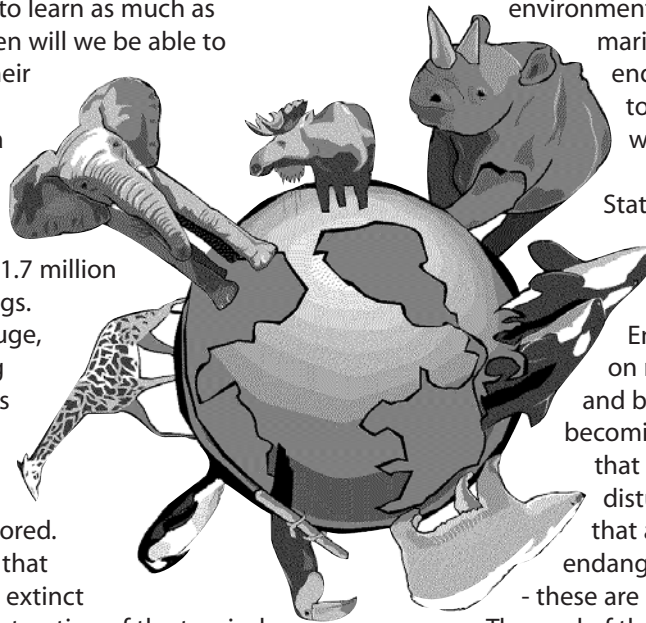
Periwinkle plant from Madagascar are used to treat forms of cancer. The venom from a Malayan pit viper snake was also discovered to help in the prevention of heart attacks. If these plants and animals had become extinct before these discoveries were made, many people would have suffered. In addition to medical benefits of protecting species, endangered species can be Nature's "911", an early warning to humans that something in the

environment is not right. For example, if a marine animal becomes endangered, this may be a sign to people living in the area of worsening water quality.

Fortunately, the United States government realized the importance of protecting endangered species, and created a law, known as the Endangered Species Act. Based on research by many scientists and biologists, species in danger of becoming extinct are placed on a list that makes it illegal to harm or disturb them. Additional species that are at risk of becoming endangered may be protected as well - these are referred to as "threatened".

The goal of the law is not only to prevent extinction of a species, but to help species recover completely.

While the Endangered Species Act has helped protect and restore numerous plants and animals to higher numbers, the rate at which many species are being lost is still too high. By doing your part to inform others of the important roles that all living things play, you can help make the world more enjoyable to all - because once a species becomes extinct, it is gone forever.



Inflated Heelsplitter, Arkansas Fatmucket, Speckled Pocketbook and Fine-Rayed Pigtoe are all types of threatened or endangered mussels - small, shelled marine animals.



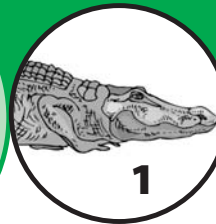
Fun and Games

Match the endangered species with its story by drawing a line from one to the other. Then fill in the blanks below with the names of each animal. Find these words, and the words listed below, in the word search. Words can be vertical, horizontal, diagonal or backwards!

At one time there were over 100,000 of us in the United States, today there are just a few hundred of us left. While many people fear me for being ferocious, I would actually rather eat berries and avoid people.



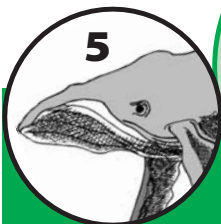
I can hold my breath for up to an hour! While I am very large, I only eat tiny shrimp and fish. I am also known for my singing ability. My species is slowly coming back, but hunting has greatly reduced my numbers.



I first appeared during the age of the Dinosaurs, and some might say that I still look like one. Sadly, there are only a few hundred of me left as hunters have used me for my leather.

Threatened Species
C r o c o d i l e
Endangered _ _ _ _
 _ _ _ _ **Habitat**
Protection
 _ _ _ _ _
Extinction

P	R	O	T	E	C	T	I	O	N	U
C	E	D	Z	F	J	P	W	P	O	T
R	D	N	P	E	L	I	C	A	N	H
O	H	N	D	U	K	L	S	K	D	R
C	A	W	H	A	L	E	E	T	R	E
O	B	O	W	V	N	A	I	C	T	A
D	I	L	Q	X	G	G	C	M	E	T
I	T	F	B	E	A	R	E	X	E	E
L	A	Y	N	Q	V	S	P	R	O	N
E	T	J	O	Y	I	H	S	Q	E	E
N	O	I	T	C	N	I	T	X	E	D



I am a very social animal and live in small packs, or groups, to help care for each other. While I usually eat small animals, such as mice, I am very important to helping the deer population. Without me, there would be too many deer, and many would die of starvation.



You may have seen me near the ocean. I fly very close to the water, looking for fish to eat. My large bill is used to hold lots of fish while draining off water. I was once endangered, but I have recovered.



WEBSITES

www.sierraclub.org/wildlands/species
Sierra Club
www.nwf.org/kids
National Wildlife Federation
www.kidsplanet.org
Defenders of Wildlife

Answers: 1.C 2.E 3.B 4.A 5.D

BOOKS

Animals You Never Even Heard Of (ages 7-10)
 By Patricia Curtis
Come Back, Salmon (ages 7-11)
 By Molly Cone
And Then There Was One: The Mysteries of Extinction (ages 8-11)
 By Margery Facklam
"Galapagos" means "Tortoises" (ages 5-9)
 By Ruth Heller

TOMORROW'S PLANET

Editor/Contributor Seth Fields

Sierra Club Statement of Purpose

To explore, enjoy and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.

Are you curious about how you can help save the planet?

Career Path

If you enjoy science, being out in nature and teaching, then maybe a career as a **naturalist** would be perfect for you! Naturalists use their own expert knowledge of nature to help others learn about how every plant and animal is important enough to protect. Naturalists work all over the world, and often are required to travel to many different places. The most important thing a naturalist must do is to become an expert on the animals and plants of the area that they work in. Once a naturalist becomes one, it's up to them to teach others what they know!

Did You Know?

The **Bald Eagle**, America's national symbol, has been an endangered species. Largely due to the widespread use of **DDT**, a chemical used to control insects, the species suffered low birth rates, as the chemical was found to cause their eggs' shells to weaken, enabling fewer chicks to survive.

Bald Eagles are still considered threatened as their population continues to increase slowly. While in 1967 only 417 known nesting pairs of eagles remained, today there are an estimated 4,000 nesting pairs.

5 things you can do to help

1

Respect all living things

All living things contribute to the beauty and diversity of the earth.

2

Learn More

"Adopt" an endangered species native in your area and find out about ways to protect it and ensure its survival.

3

Tell a Friend

Share what you've learned about endangered species protection and habitat with your friends and family.

4

Read

Explore the many books available on endangered animals, many of them are available through the Sierra Club!

5

Get Outside

Enjoy the wild places in your area, because the more people that know about them, the easier they will be to protect!

Tell us what you think



Use this space to write a letter or draw a picture showing your concern for the environment and send it to us! If we print your drawing or letter you could get a **FREE** Sierra Club backpack, hat or children's book. So go ahead, tell us what you can do to help protect the earth!

Submissions become property of the Sierra Club and may be used without limitation or restriction.

Name _____ Age/Grade _____

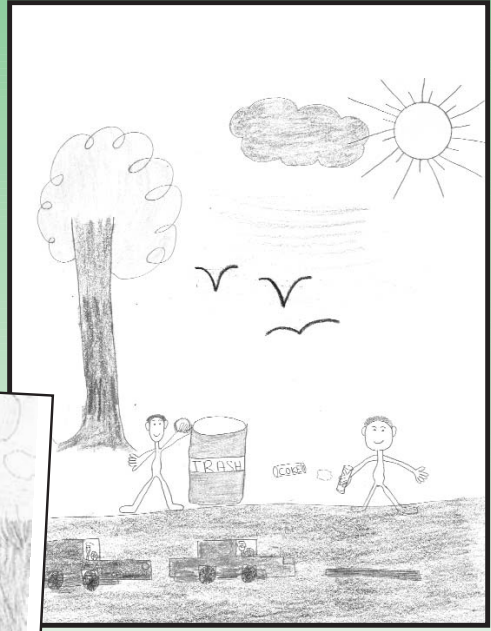
Your letters and pictures



Toni
Grade 5



Hayley
Grade 5



Haseeb
Grade 5

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