

**Grade Level(s):** One and Two  
**Lesson Title:** Endangered Animals



**Focus: (Concept or skills to be emphasized)**

Classification, protection of endangered species, reading comprehension, conservation, analytical thinking

**Objectives:** See end of lesson for objectives and standards achieved.

**Background Information:**

One of the major characters in *Peter and the Wolf* is the wolf. Natural and human causes have led to a rapid decline in wolf populations.

Basic Wolf Information:

Our pet dogs came from wolves many, many years ago. Our pets are tame but wolves are wild. There are three different types of wolves still living in the world today: the gray wolf (sometimes called the timber wolf in this country), the red wolf, and the Ethiopian wolf. Gray wolves are the largest. Male wolves are bigger than female ones. Large ones can be as big as a man.

Wolves are meat-eating mammals. Among other things, adult wolves eat mice, rabbits, beavers, deer, moose, and berries.

Wolves live in packs or families. The pack stays, eats, plays, and sleeps together. The mother and father wolf usually stay together for life, which can be more than 13 years. Young wolves stay with their family until they are three or four years old when they find a mate and start a pack of their own.

Wolves "talk" by whimpering, barking, growling, and howling. Sometimes howling can be heard for more than four miles. Wolves are very intelligent. They have a very good ability to see, hear, and smell.

Young wolves love to play with each other, which is good exercise for them. This prepares them for the need to hunt other animals for food when they are adults.

Wolves nearly disappeared in the world because of people killing too many of them. Today wolves are found mostly in northern North America, Europe, and Asia. There are less than 400 wolves left in Ethiopia.

### More Extensive Information About Wolves:

Wolves, foxes, coyotes, jackals, and dogs all belong to the Canidae or canine family. Within each type of wolf, there can be many varieties of colors of their fur. The color of fur can adapt to the vegetation of their environment.

Wolves are so adaptable, they can not only live in the frozen areas of the far north, but in grasslands or prairies, forests, swamps, and even in the desert.

A large, male wolf can be three feet tall and over six feet long, weighing over 100 pounds.

The fur of wolves is double, the top layer acting as a raincoat by shedding the water. Wolves can hear sounds up to six miles away. They can smell prey from more than a mile away. Wolves have very powerful jaws. They can run as fast as 40 miles per hour. They are also excellent swimmers.

Wolves give birth in the spring, usually to a litter of 4 to 6, but there could be as many as 14. They stay in the den (usually underground) with their mother for about a month. Other wolves in the pack bring food to the mother. The cubs are full grown in a year but cannot mate until they are nearly two years old. Only about half of each litter survives to adulthood.

The average number in a wolf pack is seven or eight but it can be as large as twenty or more. In addition to the mother, father, and their young, other relatives might join the pack, such as orphaned wolf pups or aunts and uncles. Wolves are very protective of their territory and will "mark" it as a sign for other wolves to keep out. The leader of the pack is called an "alpha male," and he is bigger and stronger than the other wolves. The wolf pack cooperates to hunt for food, usually surrounding the prey before one of them attacks. This allows them to catch animals much larger than themselves, such as moose.

In addition to the sounds they make, wolves communicate with other wolves through body language such as baring their teeth or the way they hold their tails. They also mark with their scents a message to other wolves. When hunting for prey, wolves are smart enough to know it is easier to catch old or sick animals.

People are the biggest enemy of the wolves, but danger also comes from other wolves and bears. The United States passed a law in 1973, called the Endangered Species Act. Now wolves are protected and have been moved from the "endangered" list to "threatened." See <http://endangered.fws.gov/> for more information.

### **Activities (Procedures):**

1. Read the story of *Peter and the Wolf*, as found in the Teacher's Section under The Verizon Literacy Resource Section with your class. Ask students why they think Peter asked the hunters to take the wolf to the zoo instead of shooting him. RLA.1.1.8, RLA.1.3.2, RLA.2.1.6, RLA.2.3.2 This question will be discussed further later in the lesson.
2. Ask students to describe what they know about extinction. Discuss the permanence of extinction and explain some of the factors leading to animal extinction, both natural and caused by humans.

3. Arrange students into groups of 3-4 and assign the roles of recorder, reporter, group leader, and fact-finder. *SS.1.2.1* Ask students to think of things (either naturally or through the actions of people) that may cause animals to become extinct and record their ideas on a piece of paper. *SC.1.1.1, SC.2.1.1* Allow students to discuss this question for several minutes. Reconvene as a class and ask reporters to tell the class what they thought might cause extinctions.
4. On a chalkboard, flipchart, or computer, record group ideas and ask your students, as a class, to classify the possible causes of extinction into the following categories: loss of habitat, over-use, new competition, predators, and other.
  - a. Explain that "loss of habitat" means that plants and animals no longer have enough space to live because the place where they live has been changed by people (e.g., clearing of land for cities, farms or towns, pollution) or nature (e.g., forest fires, flooding).
  - b. Say that some living things are useful to people for food, clothing such as furs and skins, medicines, building materials, etc., and have been used too much. These causes will go into the "over-use" category.
  - c. Tell students the causes that belong in the "new competition" category are new plants and animals that have come into habitats where they do not belong (e.g., human or natural introduction of invasive species, such as Eurasian milfoil and zebra mussels in U.S. waterways).
  - d. Explain that "predators" are animals and people that hunt other things. They can over-hunt animals into extinction if they are not careful. *SC.1.4.2*
  - e. Tell students that some causes of extinction do not fall into these main categories and they will simply be put into the "other" category.
5. Read one or more of the books listed in the resources section (below), or ask students to read on their own. After reading, ask students to return to their groups and add to their previous list of possible causes of plant and animal extinction. Ask fact-finders in the groups to check for other causes in the book they just heard or read. Return to a full-class discussion, and work with your students to classify any new ideas they came up with, and add them to the class chart. Tell students that all plants and animals are important, and that the extinction of any living thing can change the natural environment (e.g., where wolves have been eliminated there have been disruptions of the food chain, resulting in overpopulation by certain species upon which it preys). *SC.2.3.1*
6. Read the "Basic Wolf Information" found in the background material on wolves. After reading this information, discuss with your students how people must have conservation plans, or wolves (like the wolf in *Peter and the Wolf*) might become extinct.
7. Ask students to think about the question posed at the start of the lesson: "Why did Peter ask the hunters to take the wolf to the zoo instead of shooting him?" Explain that Peter must have known that wolves are an important part of the natural world. Tell students that Peter was helping to protect the wolf by sending it to the zoo. Say that one important mission of most zoos is to help preserve animals that are facing extinction. Ask

students to discuss the things that they can do to help protect endangered species and then write a conservation plan of their own.

8. End the lesson by discussing other environmental concerns like the importance of recycling to reduce pollution and to preserve resources. Explain that one way to help reduce the problems plants and animals face is to keep the environment free of garbage and pollution. Optional activity: As a class pick one or more recyclable items (e.g., paper, cans, plastic, glass) and set up an ongoing classroom or school recycling program. *SC.1.6.2, SC.2.6.2* Alternatively or additionally, clean up a portion of school property, a nearby park, or unkempt place by picking up trash.

### **Assessment/Evaluation\*:**

1. Student completed class chart of categorized causes of extinction.
2. Student completed group list of possible causes of extinction.
3. Individual student endangered animal conservation plan.

### **Supplemental Materials and Equipment Needed:**

Paper  
Pencils

### **Resources:**

Suggested books:

Saving Our Animal Friends . (January, 1998). National Geographic Society Staff.

Cherry, Lynne. (1990). The Great Kapok Tree: A Tale of the Amazon Rain Forest. Harcourt: San Diego, CA.

Dobson, David & Needham, James M. (1997). Can We Save Them?: Endangered Species of North America. Charlesbridge: Watertown, MA.

Wright, Alexandra (ill.) & Peck, Marshall III (ill.). (1991). Will We Miss Them?: Endangered Species. Charlesbridge: Watertown, MA.

- Note: this book is available in printed form, and as a PDF file for purchase through Amazon.com. If a copy is not available in your school or public library, go to [http://www.amazon.com/exec/obidos/tg/detail/-/B00005TNU6/qid=1089825294/sr=1-6/ref=sr\\_1\\_6/102-1949445-9488166?v=glance&s=books](http://www.amazon.com/exec/obidos/tg/detail/-/B00005TNU6/qid=1089825294/sr=1-6/ref=sr_1_6/102-1949445-9488166?v=glance&s=books) to purchase a digital version of this book.

Further information on wolves:

Wild World of Wolves. <http://www.boomerwolf.com>

42eXplore. <http://42explore.com/>. 2003.

Help Save the Wolves. <http://www.savewolves.org/>

International Wolf Center. <http://www.wolf.org/wolves/learn/learn.asp>

Nova Online: Wild Wolves. <http://www.pbs.org/wgbh/nova/wolves/>

Further information on zoos:

The American Zoo and Aquarium Association. <http://www.aza.org/>. 2004.

Smithsonian National Zoological Park. <http://nationalzoo.si.edu/default.cfm>

Further information on conservation:

Defenders of Wildlife: Kids' Planet. <http://www.kidsplanet.org/> or

<http://www.kidsplanet.org/factsheets/map.html>

National Wildlife Federation. <http://www.nwf.org/>. 1996-2004.

U.S. Fish and Wildlife Service: Conserving the Nature of America. <http://www.fws.gov/>

WWF. The Global Conservation Organization. <http://www.panda.org/>. July 29, 2004.

World Wildlife Fund. The Conservation Organization. <http://www.worldwildlifefund.org/>. 2004.

### References:

Nicholas, Christopher. (2001). Know-It-Alls Wolves!. Learning Horizons: Cleveland, OH.

Raven, Peter H. & Johnson, George B. (2002). Biology (6<sup>th</sup> ed.). McGraw Hill: Boston, MA.

Swanson, Diane. (1996). Welcome to the World of Wolves. Whitecap Books: Vancouver, BC.

Wexo, John Bonnett. (2003). Zoobooks Wolves. Wildlife Education: Poway, CA.

### National Standards:

#### *Science*

##### Content Standard A

Abilities necessary to do scientific inquiry:

- Ask a question about objects, organisms, and events in the environment
- Communicate investigations and explanations

##### Content Standard C

The characteristics of organisms:

- Organisms have basic needs. For example, animals need air, water, and food; plants require air, water, nutrients, and light. Organisms can survive only in environments in which their needs can be met. The world has many different environments, and distinct environments support the life of different types of organisms.

#### *English Language Arts*

1. Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.
3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).

#### *Social Studies*

##### V. Individuals, Groups, and Institutions

- a. identify roles as learned behavior patterns in group situations such as student, family member, peer play group member, or club member.

**WV Content Standard Objectives:***First-Grade*

- SC.1.1.1 ask questions about themselves and their world.
- SC.1.4.2 identify that most living things need water, food, light and air.
- SC.1.6.2 develop respect and responsibility for the environment by engaging in conservation practices (e.g., recycling, trash clean-up).
- RLA.1.1.8 recognize basic comprehension concepts (e.g., story elements; main idea; sequence; cause/effect; prediction).
- RLA.1.3.2 listen, recite and respond to familiar stories, poems, nursery rhymes, songs and stories with repeated patterns (e.g., retell in sequence; relate information to own life; describe character - setting - plot; engage in creative and dramatic play; imagine beyond the story).
- SS 1.2.1 identify and practice various group roles (e.g., group leader, recorder, reporter, collector) in the classroom.

*Second-Grade*

- SC.2.1.1 recognize science as the human's search for an understanding of the world by asking questions about themselves and their world.
- SC.2.3.1 identify that systems are made of parts that interact with one another.
- SC.2.6.2 develop respect and responsibility for the environment by engaging in conservation practices (e.g., recycling, trash clean-up, power consumption reduction).
- RLA.2.1.6 use basic comprehension skills to understand a story (e.g., story elements; main idea; sequence; cause/effect; predicting; drawing conclusions; fact or opinion; summarizing; responding creatively to texts).
- RLA.2.3.2 listen, recite and respond to familiar stories, poems and songs (e.g., retell in sequence; relate information to own life; describe character - setting - plot; engage in creative and dramatic play; imagine beyond the story).

**Kentucky Program of Studies:**

## S-P-LS-1

Students will understand that organisms have basic needs (e.g., air, water, nutrients, light) and can only survive when these needs are met.

## S-P-AC-4

Students will examine how science fosters understanding of issues (e.g., use/misuse, availability, distribution) related to natural resources.

## ELA-P-R-1

Students will listen to a variety of genres (e.g., stories, poems, articles) to form an understanding of reading.

## ELA-P-R-21

Students will integrate prior knowledge and experiences with text to infer, predict, and conclude (additional supporting Academic Expectation 6.2).

## SS-P-CS-3

Students will recognize the roles individuals have in various groups.

**Ohio Academic Content Standards:**

*First-Grade*

Y2003.CSC.S02.GKG-02.BA.L01.I01

Characteristics and Structure of Life /

01. Explore that organisms, including people, have basic needs which include air, water, food, living space and shelter.

Y2003.CTE.S02.GKG-02.BB.L01.I01

Technology and Society Interaction /

01. Explain how various materials can be reused or recycled.

Y2003.CTE.S02.GKG-02.BB.L01.I02

Technology and Society Interaction /

02. Describe the reasons for doing things or behaving in ways that protect the environment.

Y2003.CSC.S05.GKG-02.BC.L01.I08

Doing Scientific Inquiry /

08. Use oral, written and pictorial representation to communicate work.

Y2003.CER.S03.GPK-03.BF.L01.I09

Self-Monitoring Strategies /

09. Monitor comprehension of independently - or group-read texts by asking and answering questions

Y2003.CSS.S06.GKG-02.BA.L01.I01

Participation /

01. Demonstrate the importance of fair play, good sportsmanship, respect for the rights and opinions of others and the idea of treating others the way you want to be treated.

*Second-Grade*

Y2003.CSC.S02.GKG-02.BA.L02.I01

Characteristics and Structure of Life /

01. Explain that animals, including people, need air, water, food, living space and shelter; plants need air, water, nutrients (e.g., minerals), living space and light to survive.

Y2003.CSC.S02.GKG-02.BA.L02.I05

Diversity and Interdependence of Life /

05. Explain that food is a basic need of plants and animals (e.g., plants need sunlight to make food and to grow, animals eat plants and/or other animals for food, food chain) and is important because it is a source of energy (e.g., energy used to play, ride bicycles, read, etc.).

Y2003.CSC.S05.GKG-02.BC.L01.I08

Doing Scientific Inquiry /

08. Use oral, written and pictorial representation to communicate work.

Y2003.CER.S03.GPK-03.BE.L02.I06

Comprehension Strategies /

06. Answer literal, inferential and evaluative questions to demonstrate comprehension of grade-appropriate print texts and electronic and visual media.

Y2003.CSS.S06.GKG-02.BA.L02.I01

Participation /

01. Demonstrate skills and explain the benefits of cooperation when working in group settings:

- a. Manage conflict peacefully;
- b. Display courtesy;
- c. Respect others.

\*All Assessments are to be at the expected state assessment standard; in West Virginia this is mastery level; in Ohio this is benchmark level; and, in Kentucky, this is academic expectations level.