

# All about Wolves

Environmental Education Lesson Plan  
Edwards Camp and Retreat Center

## SUMMARY

Students will enter the world of wolves to learn about their controversial past and present and natural history through hands on activities, games, and artifacts.

## USAGE

Grades K-7, year round

## OBJECTIVES

Students will be able to...

- Describe differences between wolves and other canines
- Explain importance of wolves keen senses
- Describe structure of a wolf pack
- Explain why wolves hunt in packs

## MATERIALS

- Box of pelts, skulls, and tracks (wolf, coyote, fox, bear)
- Pictures of various canines
- True Story of the 3 Little Pigs
- Q-Tips with different scents (almond, vinegar, peppermint, anise)
- Tags for game, arms bands (three colors), boundary markers

## INTRODUCTION

Begin by asking the students how they would feel if they were out in the woods camping and they heard a wolf howling. Allow the students to give their opinions, one at a time. Most of the students will voice opinions of being scared of wolves. Ask the students why they would be afraid. Begin discussing that this has been the opinion of wolves throughout history. Wolves were almost exterminated from the lower 48 states by the 1960's. In 1973, the endangered species act saved this animal. Ask the students what stories have wolves as characters. Is the wolf portrayed as a good or bad character? Ask the students the same question about bears. Are the bears portrayed as a good or bad animal? Throughout history, wolves have been portrayed as evil, mean, vicious animals. Yet, there is not one documented case in the lower 48 states of a wolf attacking a human. Ask the students if they have heard of a person being attacked by a bear, a cougar, and a domestic dog. Do these animals have a bad reputation? Not nearly as bad as the wolf. Wolves have a bad reputation because people do not know the real story about wolves.

Now read the "True Story of the Three Little Pigs." After the story, tell the students that they are going to learn about the natural history of wolves... "The true story of wolves."

## MAIN BODY

Part I: Can you tell the difference between a fox, coyote, and wolf?

Spread out the pictures of the different canines in front of the students. Give the students a chance to look at all of them. Now ask the students which pictures are fox. Discuss briefly the size, weight, tracks, and habitat of fox. Show skull. Pass it around, but explain that all of the **skulls are fragile** and need to be handled with care. Show the fox mount (if in Lakeside Laboratory). See attachments for fox natural history.

Now ask the students which pictures are of domestic dogs. Discuss that all dogs are descendents of the wolf, even poodles and pugs. Siberian huskies look a lot like wolves and work together a lot like wolves.

Ask the students to point out the coyote pictures. Discuss the size, weight, tracks, and habitat of the coyote. Use the tape measure to show how long and tall they are. If possible use a student that is about the same size as a coyote. Show skull, pass around. Noticeable differences from the wolf are lack of fur (mane) around neck, size, and narrow face. Coyotes will hang out in small packs, but they really don't hunt in packs. They feed mainly on mice, rabbits, eggs, nuts, garbage. They are scavengers.

**Discuss wolf pictures.** How are they different than the fox and coyote? Discuss size, weight, tracks, and habitat. Bring out wolf and bear skull. See if students can tell difference between wolf skull and bear skull. Discuss differences (shape, snout length, cranial ridge in wolf.) Bring out wolf pelt. Use tape measure to show length and height. Discuss weight of average wolf. Compare to weight of students. Show mane of fur around neck. Allow students to touch pelt, pass bear and wolf skull around. See if students have any questions so far.

Have students prepare to go outside. Put artifacts back into the box.

Part II: **The better to smell you with...**

Hike students out to basketball court or up to Sunset Hill to benches. Have students have a seat. Ask students which sense the wolf uses most. The correct answer is smell. Begin discussing the wolf's incredible sense of smell compared to humans. They use scent to identify each other, mark and recognize territory, and track prey. Studies have shown that dogs are 100 times more odor sensitive than humans. They also have a powerful scent memory.

**“Find Your Pack”** (scent game): Get cotton balls soaked with three different smells from the EE Director. Pass out a cotton ball to each student. Without talking, the students need to find the rest of their “pack” using only their sense of smell. The pack consists of all of the other students with the same scented cotton ball. Once the pack members have found each other, have them stick together and find a “territory.” The territory consists of an area marked by a film canister with their scent in it. If the students are having a hard time distinguishing between smells, have them wet their nose with their fingers. This will enhance their sense of smell. (Wolves and other animal have wet noses for the same reason. The wet surface is able to attract more air molecules, enhancing the smell.)

### **Part III: Pack Structure and Why**

Within the packs, begin discussing the structure of a wolf pack. Discuss the alpha, beta, subordinate, and omega. Discuss that packs have structure to keep order. Talk about some of the body language that wolves use to show their status (dominance and submissive positions). See supplemental information. Number the students in each pack 1-5. Assign each number to a role in the pack: alpha, beta, subordinates, pup, and omega. Have the students act out their roles.

**“Yellowstone Tag”** See attached supplement for how to play. This game is to help simulate why wolves hunt in packs. Wolves eat once or twice a week. Each meal consists of about ten pounds of meat per wolf. It is easier for a pack of wolves to feed off of large prey versus small prey. It takes less energy to catch the large prey working as a pack, then to catch enough small prey to feed the whole pack. Normal prey may consist of deer, elf, bison, moose, and beaver. Have the students play the game and discuss the results.

### **Part IV: Long Distance Communication**

Have the students get into a circle. Teach the students how to howl. Talk about why wolves howl (signal a hunt, social interaction, find a pack member, etc.). The alpha usually starts the howling, then the others follow, all howling at different tones.

### **CONCLUSION:**

Ask the students if they have learned something new today. If time, ask them what. Have the students imagine that they are in the woods camping again and they hear a wolf howl. Ask them, how they would feel now. Have the opinions changed? Why? Briefly discuss that wolf's numbers have been increasing in the United States, especially in Minnesota and Wisconsin due to changing attitudes. People have been learning about the true story of wolves, which has made all the difference in saving this amazing species. Wolves are healthy for the environment. They help keep prey populations like deer in balance.