

## **All about Wolves**

Environmental Education Lesson Plan  
Edwards Camp and Conference Center

### **Summary**

Students will learn about the present, past and future of one of the most controversial of animals, Wolves. They will study these awe-inspiring animals through folklore, natural history, games, and hands on activities.

**Usage** - Grades K-7, year round

### **IL Standards**

12.A.1a; 12.A.1b; 12.B.1a; 12.B.1b;  
12.A.2b; 12.B.2a; 12.B.2b; 13.B.2f  
12.A.3c; 12.B.3b

### **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 canids
- True Story of the 3 Little Pigs
- Q-Tips with different scents (almond, vinegar, peppermint, anise)
- Tags for game
- Strips of cloth (Red and Blue)
- 4 Cones

### **Set-Up**

- Go through the box to make sure all materials are in working order
- If doing the Yellowstone Tag place out the boundary cones

### **Introduction** (10 Minutes)

Welcome the students and introduce the idea that you will be talking about wolves today. Ask the students what they know about wolves already.

Next discuss the opinion of wolves throughout history. Wolves have been viewed with distrust and fear since ancient human times. The wolf was seen as an evil animal that was out to kill people and livestock. When European settlers first came to North America the wolves ranged widely across the continent but were soon killed because of religious, economic, or symbolic reasons.

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. 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."

### **Wolf ID** (10 Minutes)

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.

### **Find Your Pack** (20 Minutes)

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.

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 animals have wet noses for the same reason. The wet surface is able to attract more air molecules, enhancing the smell.)

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.

### **Alpha Wolf** (30 - 60 Minutes)

Students will use the behaviors of a wolf to track down the “Alpha Wolf” (Edwards Staff), somewhere within the limits of camp property.

- 1.) The students must stay within the boundaries given.
- 2.) They must stay together at all times
- 3.) If the Alpha Wolf hears any talking from the group they will move, silently, to a new location.
- 4.) The Alpha Wolf will howl every 45-60 seconds; that is what the students will have to locate the Alpha Wolf.
- 5.) The Alpha Wolf will not hide in thick brush, but may be under things or immediately off trail, and will stay within the boundaries.
- 6.) Each group gets ONE “group howl”, immediately after the “group howl” the Alpha Wolf will howl back.

### **REMEMBER:**

- Number all the student groups that will give you a way of seeing if all groups have found you.
- Set a time to return to the meeting spot, just in case all groups don’t find you, then you won’t be stuck in the woods for an exorbitant amount of time.
- Some teachers might want to adjust the rules, make sure you communicate with them. You may change rules as long as they remain safe, any issues ask Tiffany.

### **Yellowstone Tag** (20 min)

The game of Yellowstone tag should be played if the group will not be playing Alpha Wolf or if you need to still fill time at the end of class.

For this activity divide the students up into Wolves, Deer, and Rabbits as shown on the Wolf Tag Cheat Sheet in the folder.

**Wolves:** The pack chooses an alpha wolf who will be the pack leader before the game starts. The wolves should decide on a strategy – what animals they will hunt to gain enough food to feed the whole pack. If the pack decides to hunt deer, at least two thirds of the pack (or both wolves, if there are only two) must tag the deer. Specify this number to the wolves (and deer). As they tag the deer, the wolves count off LOUDLY from the first wolf to tag to the last. This will make it clear how many wolves have tagged the deer.

**Deer:** Deer are herbivores and should begin the game grazing together in the playing area. If an deer has a safety symbol on its card, they should not show it until a group of wolves has successfully hunted it. The deer may then continue to play the activity. If an elk is killed and does not have a safety symbol, the deer gives the card to the alpha wolf and moves off to the side to watch the game.

**Rabbits:** Rabbits are also herbivores and begin the game scattered about the playing area. Only one wolf needs to tag a rabbit to kill it. When a rabbit is killed, the card is given to the wolf and the rabbit moves off to the side to watch the rest of the game.

Give each of the wolves a red headband to wear, and each elk a blue arm band to wear, to help identify these animals. Rabbits need not wear any bands to identify themselves.

The Instructor will decide when to end the round of activity. At the end of a round, the wolf pack counts its food points to see if it fed its members successfully. Rabbits are worth one point and deer are worth five points.

**Conclusion** (10 min)

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. Though wolves are opportunistic hunters and will hunt any prey that they perceive vulnerable, the animals that the wolves hunt are not usually mature healthy adults. This process actually strengthens the animal populations over time with the stronger genes being passed through to the next generation, actually improving the game population.