



# Oh Deer!

Raising awareness about the  
White-lipped Deer, *Cervus albirostris*

*This would be a great activity to do before visiting the deer at the zoo! Use this activity to focus on the endangered species of deer we have at the zoo.*

North Dakota Science Standards K.4.1. 1.4.2. 2.4.2. 4.4.2. 7.4.6

## Introduction

The White-lipped deer need our help! The current **conservation status** of this species is **vulnerable**. Only 7000 remain in the wild and more than 100 are kept in zoos. Students will use their creativity to make signs that convey messages to people about how they can help protect these deer.

## Background Information

Before starting this activity, talk about the deer, listing its physical characteristics, diet, habitat and reasons why it is threatened. Depending on the age level and amount of time you have, you may want to define what the conservation status of a species is, along with what the different categories are. Refer to the *glossary* at the end if you want to create a Word Wall.

### What exactly does endangered mean?

The word “endangered” literally means “**in danger of becoming extinct**”. **Threatened** means a species is vulnerable to becoming endangered in the future.

There are many reasons why an animal may become extinct:

- ✚ a habitat change, reduction or destruction
- ✚ overhunting
- ✚ disease or predation
- ✚ lack of regulation or management
- ✚ other natural or man-made factors

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## **Teaching Objective**

*By following this teacher’s guide and using the provided picture templates, students will create signs that convey messages to the public that help protect the vulnerable White-lipped deer. Each poster can be as creative as the students want and should be informative and inspirational.*

## **Materials:**

- *Provided clip art pictures that students can cut out and color*
- *Blank paper or poster board*
- *Scissors*
- *Glue*
- *Colored markers, crayons, pencils or paint*
- *Any other art materials for decoration*

**Time: 30 – 60 minutes**

The International Union for the Conservation of Nature (IUCN) uses these terms to categorize the conservation status of a species:



**Extinct** – No reasonable doubt that the last individual has died.

**Extinct in the wild**— Known only to survive in captivity or in an introduced population well outside the natural range.

**Critically endangered**— Facing an extremely high risk of extinction in the wild.

**Endangered**— Facing a very high risk of extinction in the wild

**Vulnerable**— Facing a high risk of extinction in the wild.

**Near threatened**— Does not qualify for one of the other categories now, but is likely to qualify for one of them in the future.

**Least concern**— Currently widespread or abundant.

The Species Survival Plan (SSP) is a program developed in 1981 by the American Association of Zoos and Aquariums (AZA) to help **ensure the survival of selected species in zoo and aquariums**, most of which are threatened or endangered in the wild. The Red River Zoo participates in the SSP and breeds several species at the zoo!

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## White-lipped Deer information

White-lipped Deer are named because of the white patches they have around their muzzles. They are found in China, in the mountains of western Gansu and western Sichuan and the Tibetan Plateau. They inhabit rhododendron scrub, alpine grasslands and **coniferous forests**. \*You can show your students a map.

They are one of the largest deer species - males, weigh 400 - 510 lbs, females 200 - 350 lbs. Their hair is coarse and grey-brown over most of the body, fading to yellowish buff on the under parts, and during winter, the coat is paler and about twice as thick, being thicker even than that of a moose!

Only male deer have antlers which are shed annually in March, reaching their full length by late summer. The White-lipped deer has a number of physical **adaptations** to its high altitude environment. The short legs and broad hooves make it an **agile** climber, able to use steep mountainous terrain to escape predators. Its nasal cavities are unusually large, allowing it to breathe in high **altitude** air, while the thick hair protects against the cold. The red blood cells in this species are smaller and more numerous than average. This allows them to take up limited amounts of oxygen.

*Crepuscular means "active during dawn and dusk"*

The white-lipped deer is **crepuscular**. They feed on plants, mainly on grasses and sedges.

These deer are declining in most parts of their range because of **habitat degradation** and over hunting for their antlers. It also faces threats from advancing human agriculture, including competition from domestic animals such as sheep, goats and yaks. It is also hunted, for meat, antlers, and other body parts (such as the velvet) used in traditional Chinese Medicine. It is a protected species in China.

*Since these deer are so shy and so rare, they are one of the least familiar deer in the world!*



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## Procedure

- Review background information with your students. Ask - what did you learn about the deer's situation in the wild? What needs to be done to help these deer?
- Discuss how one important way to help the deer is to get the word out about what people should do and not do to help protect them.
- Tell them that today they will be making signs that will give messages about how people can help the White-lipped deer. You can tell them to pretend that these signs will be posted in China in the newspapers, stores, airports, parks, etc. You may also want to post them around your school once they are complete.
- Students may need more direction when creating their signs- you can give them ideas of what would be appropriate to write, and that there are different ways of relaying messages. Examples may include "Please don't hunt these deer", "No hunting allowed", "The Red River Zoo is protecting this deer - so can you!", etc.
- After students are done, you may want to have them discuss why they chose the message they did and what they wanted to accomplish with their sign.

## Follow-Up

Where specifically do you think these signs should be placed to have the highest impact? Why? What are other ways, other than using signs, can we relay messages about endangered animals?

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## Glossary

**Adaptation:** A physical or behavioral process whereby an organism becomes better able to live in its habitat

**Agile:** the ability to change your body's position efficiently, using balance, coordination, speed, reflexes, strength and endurance.

**Altitude:** a distance measurement, usually in the vertical or "up" direction

**Coniferous forest:** A forest that is made up of mostly conifers ("evergreens", cone-bearing trees, most have needle-like or scaly leaves)

**Conservation status:** Indicates members of a species are still alive and how likely the species is to become extinct in the near future. Many factors are taken into account when determining conservation status: the number of individuals remaining, the overall increase or decrease in the population over time, breeding success rates, known threats, etc.

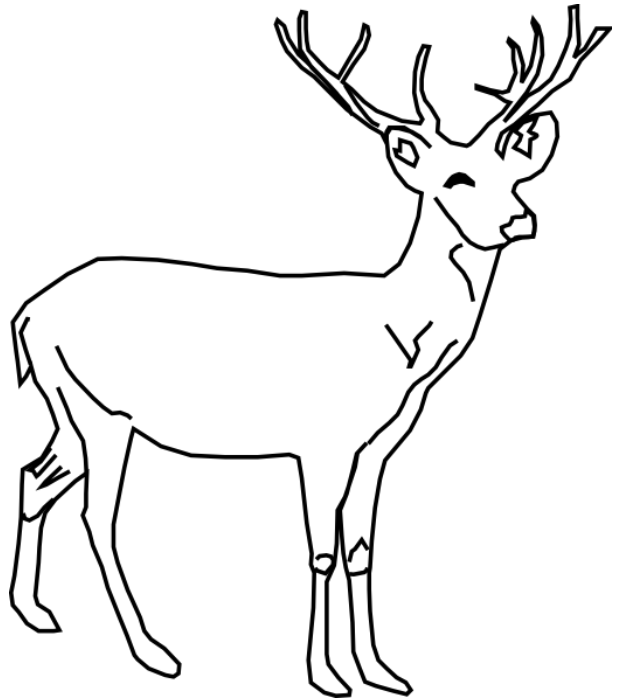
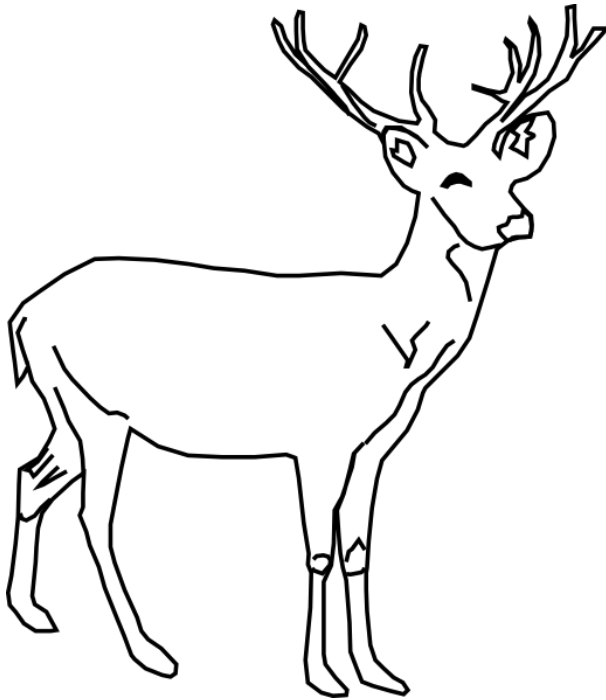
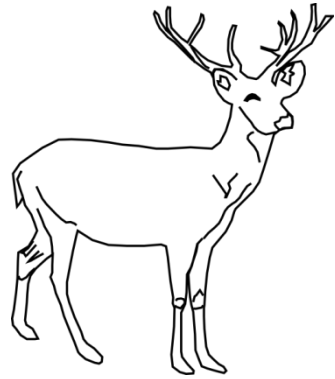
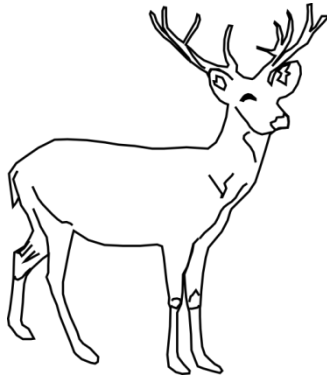
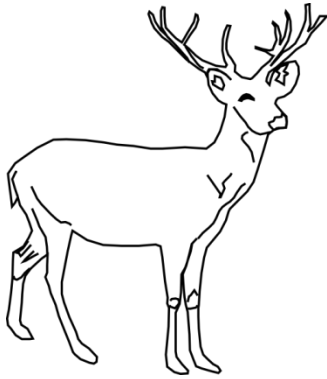
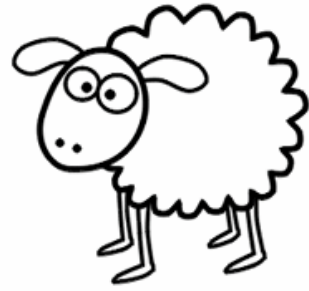
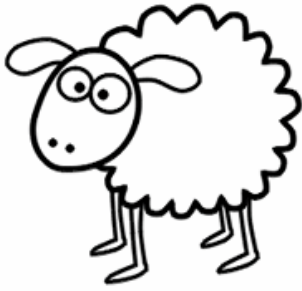
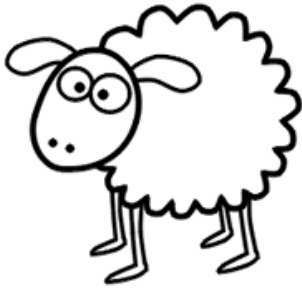
**Crepuscular:** Active during dawn and dusk

**Endangered:** facing a high risk of becoming extinct

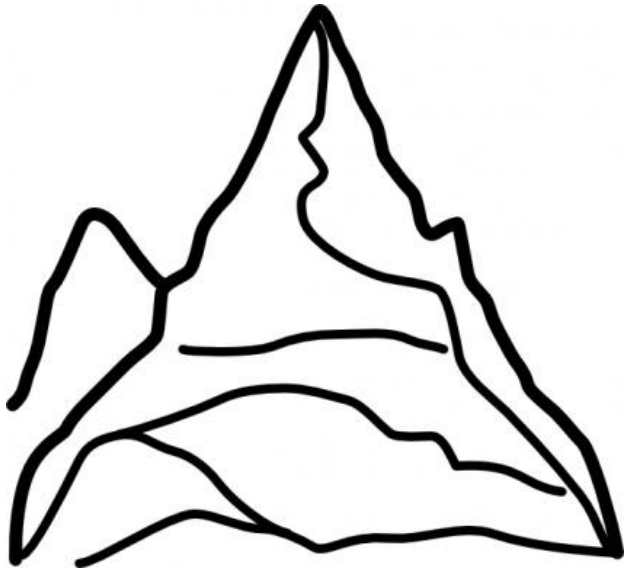
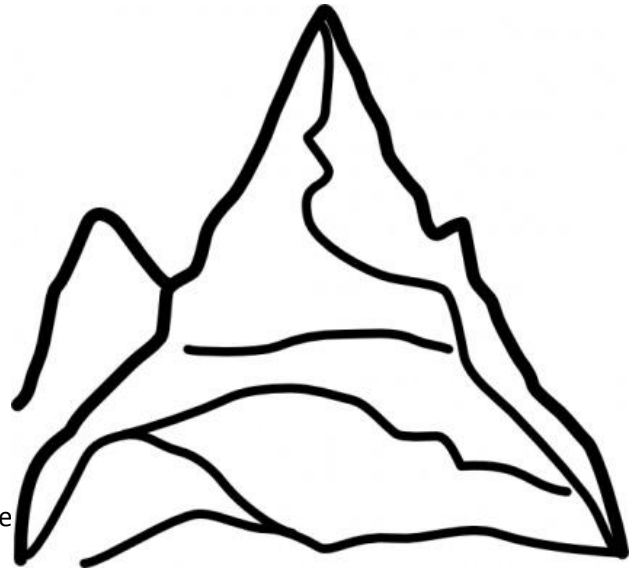
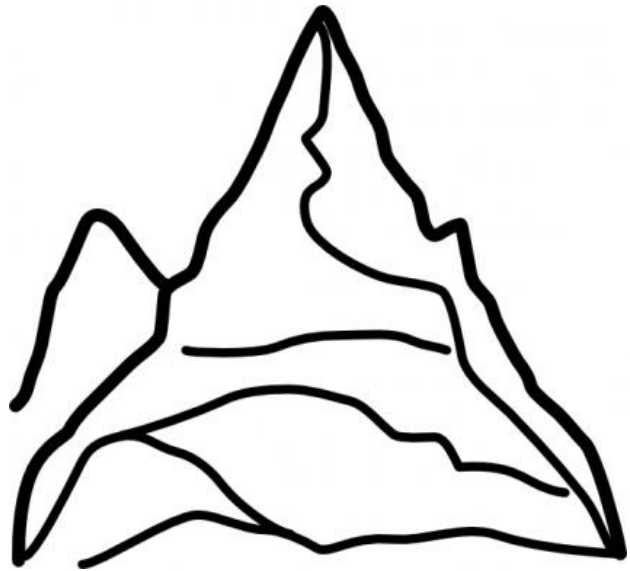
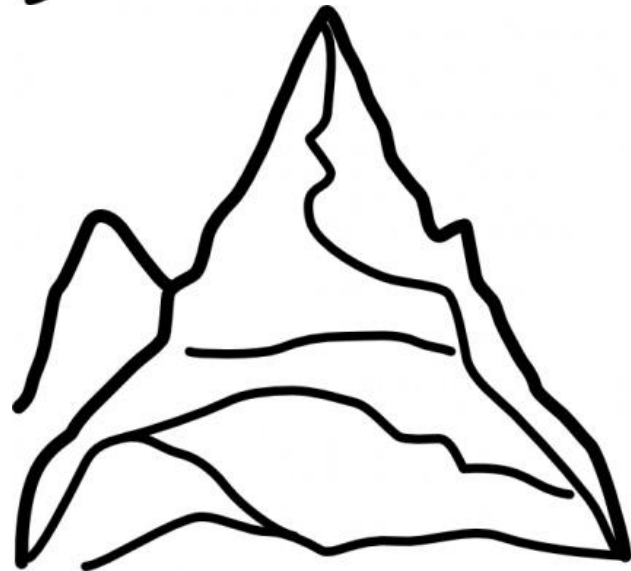
**Habitat degradation:** when habitats are displaced or destroyed, making them unable to support the species present

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Clip-Art Pictures



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