

Wildlife Express

November 2022 – Pronghorn



Activities:

Horns and Antlers: Students compare horns and antlers and determine species on a worksheet, then write acrostic poems.

Pronghorn Adaptations: Students answer questions about pronghorn adaptations and solve a puzzle.

STEM Activity: Students discuss problems with pronghorns and fences and design a safe fence for pronghorn.

Tracks BINGO: Students play a game of BINGO to become familiar with animal tracks.

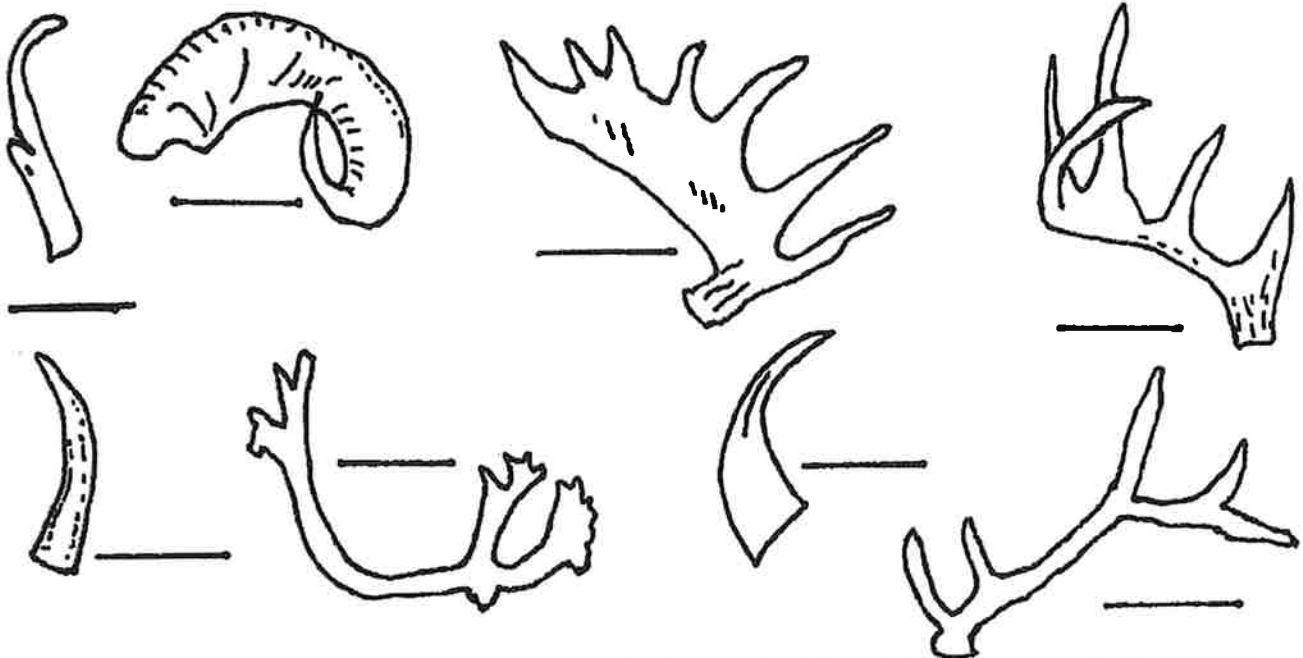
What Ungulate Goes Where?: Students research five ungulate species, draw the habitat for one and share results.

Horns and Antlers

Do You Know the Difference?

Write the letter of the name of the animal that grows the horn or antler in the spaces below. Circle the horns.

- | | | | |
|------------------|------------------|----------------------|------------|
| A. Mountain Goat | B. Bighorn Sheep | C. White-tailed Deer | D. Bison |
| E. Moose | F. Elk | G. Pronghorn | H. Caribou |



Now, brainstorm the differences between horns and antlers. Write an acrostic poem for horns and antlers explaining some of the differences.

H _____
O _____
R _____
N _____
S _____

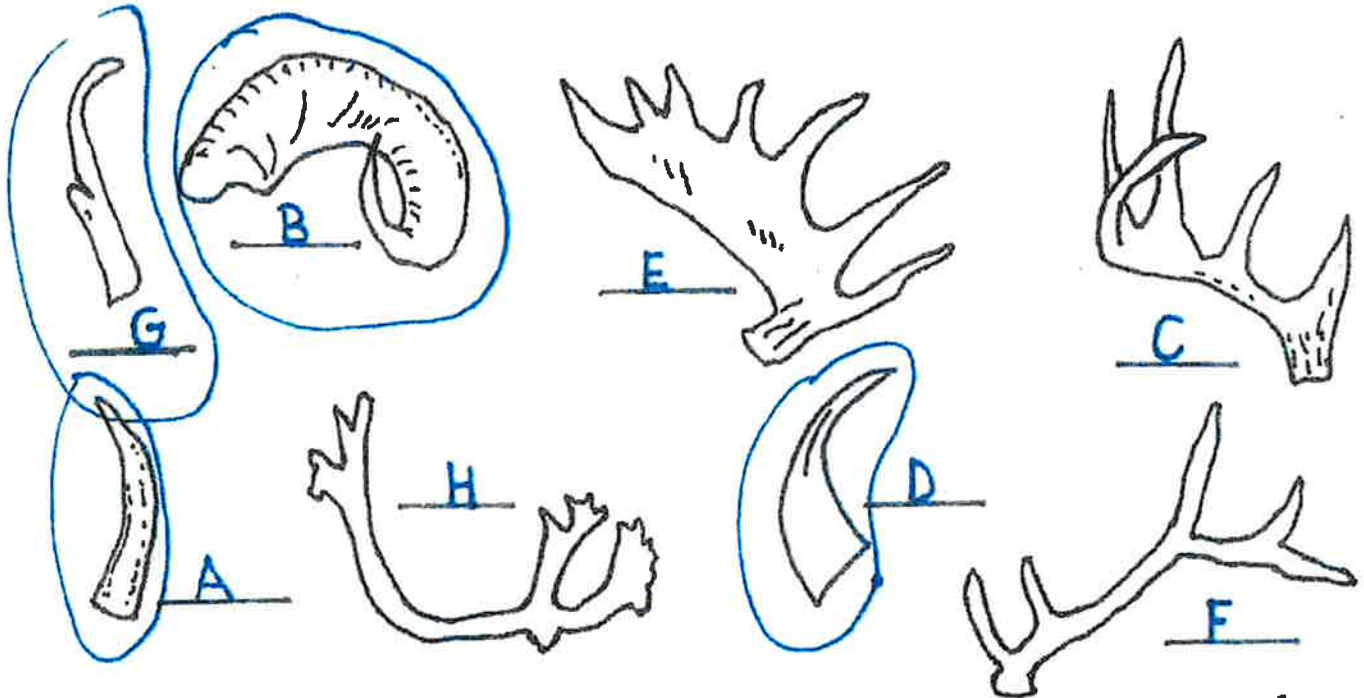
A _____
N _____
T _____
L _____
E _____
R _____
S _____

Horns and Antlers

Do You Know the Difference?

Write the letter of the name of the animal that grows the horn or antler in the spaces below. Circle the horns.

- | | | | |
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| A. Mountain Goat | B. Bighorn Sheep | C. White-tailed Deer | D. Bison |
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Now, brainstorm the differences between horns and antlers. Write an acrostic poem for horns and antlers explaining some of the differences.

Hollow sometimes
On head
Really strong
Never stops growing
Stays on head

All bone
New each year
Temporary
Little at first
Elk, deer, moose
Rarely on females
Solid and branched

Pronghorn Adaptations

Pronghorn's huge eyes see up to _____ miles away. _____

20 19 22 18

Pronghorn _____ up to 45 miles-per-hour. _____

18 22 11

Large _____ help pronghorn listen for danger. _____

2 17 18 1

To protect them from coyotes, fawns have no _____.

19 21 19 18

A huge _____ pumps blood to hard working muscles. _____

10 2 17 18 12

Large _____ hold lots of oxygen. _____

25 22 11 6 1

To run over rough ground, pronghorn have _____ leg bones. _____

12 10 4 26 15

_____ houses in muscles, called mitochondria, help muscles move quickly. _____

5 19 14 2 18

Blood rich in hemoglobin holds more oxygen for hard _____ muscles. _____

14 19 18 15 4 11 6

A good sense of _____ sniffs out danger. _____

1 3 2 25 25

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
										15	25															

14 10 17 12 4 1 17 5 18 19 11 6 10 19 18 11 1 9 17 4 11

1 19 22 18 26 2 19 20 20 19 19 21 4 11 12 10 2 14 4 11 12 2 18

?



Answer: _____

Pronghorn Adaptations

Pronghorn's huge eyes see up to _____ miles away. f o u r
 20 19 22 18

Pronghorn _____ up to 45 miles-per-hour. r u n
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Large _____ help pronghorn listen for danger. e a r s
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 5 19 14 2 18

Blood rich in hemoglobin holds more oxygen for hard _____ muscles. W O R K I N G
 14 19 18 15 4 11 6

A good sense of _____ sniffs out danger. S m e l l
 1 3 2 25 25



A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
17	26	21	2	20	6	10	4		15	25	3	11	19	5		18	1	12	22		14				

What is a pronghorn's main
 source of food in the winter?
 14 10 17 12 4 1 17 5 18 19 11 6 10 19 18 11 1 3 17 4 11
 1 19 22 18 26 2 19 20 20 19 19 21 4 11 12 10 2 14 4 11 12 2 18

Answer: Sagebrush

How Did the Pronghorn Cross the Fence?

Objectives: Students learn about the effects of fences for pronghorn. Students design a solution to the fence crossing problem and compare their solutions with those of scientists. Students display their knowledge by either creating a t-shirt design or a flier.

Materials: Wildlife Worksheet (following page), internet access (for teacher to share other results), paper and pencils

Background Information:

See websites:

<https://blog.nature.org/science/2017/06/26/how-pronghorn-cross-fence-wildlife-connectivity/>

[Pronghorn Migration | VQR Online](https://www.vqronline.org/essay/pronghorn-migration): <https://www.vqronline.org/essay/pronghorn-migration>

Procedure:

1. Share with students the information about how pronghorn prefer to go under fences as opposed to jumping.
2. Discuss types of fences that are needed on rangelands and why. See <https://homesthetics.net/fence-for-cattle/>
3. Propose that students design a fence pronghorn can safely navigate.
4. Handout the worksheet. Do not share scientists' solutions.
5. Have students share their solutions with one another and discuss pros and cons of each solution.
6. Share and discuss the websites above. Are any of your students' solutions better?
7. Assign students to create a flier (or t-shirt) for educating the public on the need for fences that pronghorn can safely cross. A T-shirt pattern can be found on following pages.



How Did the Pronghorn Cross the Fence?

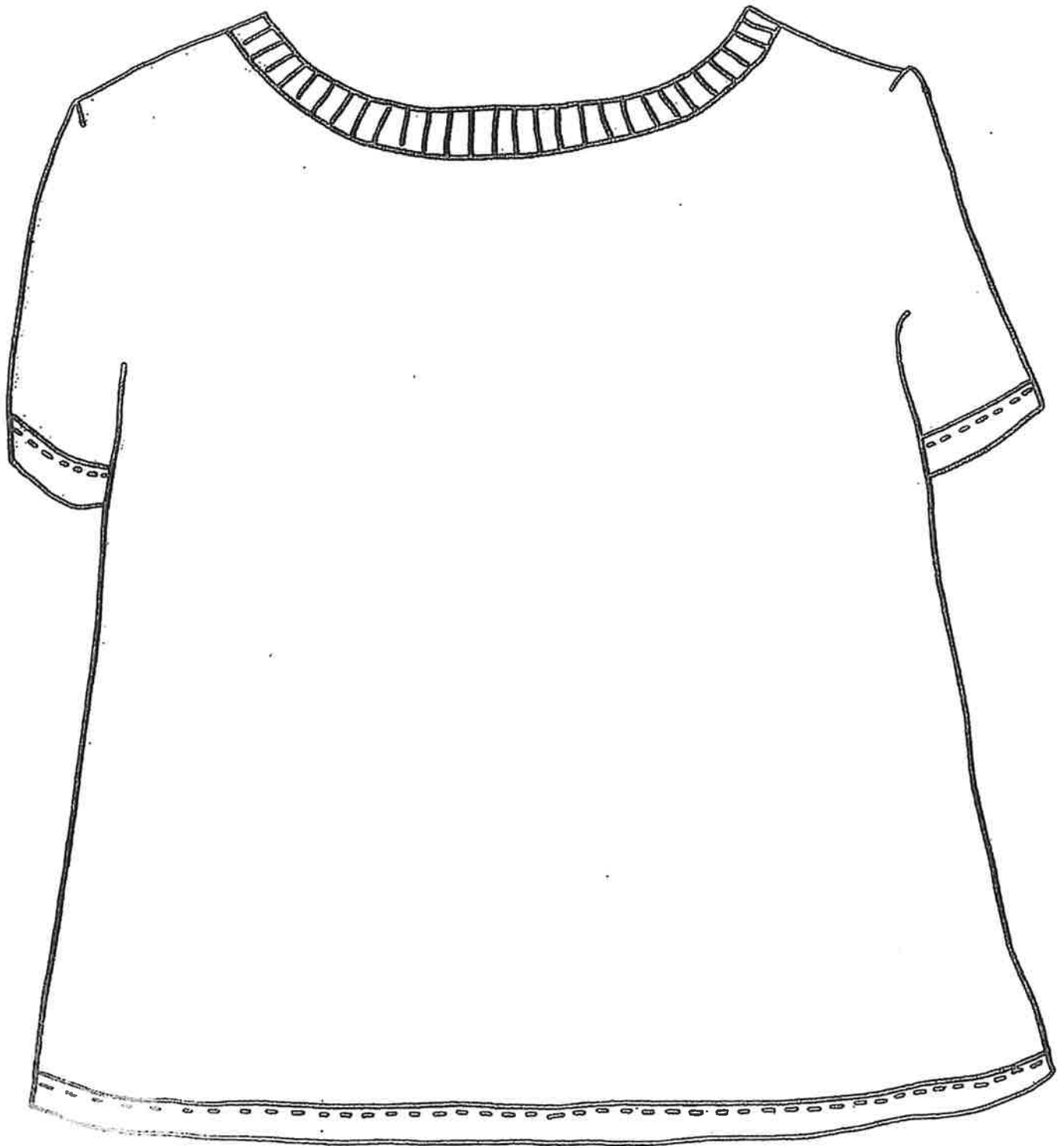
In this month's *Wildlife Express*, you read that pronghorn have a difficult time with fences. They didn't evolve to jump fences. They prefer to go under them. Some fences do not allow this. Your job is to create a fence that pronghorn can navigate. After creating your design, share with your class.



Write (and/or draw) your ideas to help pronghorn in the box below.

When all ideas are created and shared, your teacher will share with you ways scientists have solved this problem. How did your ideas hold up? Your next job is to create a flier (or t-shirt) educating people about this issue – be sure to share solutions!

Design this T-shirt to share a message about pronghorn.



Tracks Bingo

Subject: Science

Objectives: Students play bingo to become familiar with animal tracks.

Materials:

- Copies of track boxes (one for each student to cut up & two for you)
- Blank TRACK card for each student
- Markers (beans, poker chips, small pieces of paper)
- Glue stick for each student



Procedure:

1. Before class, set up a can or hat from which you will draw track cards. Cut up two of the track sheets and place them in the hat or can.
2. To begin, review the tracks with your students. Tell them they will be playing a game of BINGO, using tracks instead of numbers. Each student will need a sheet with track boxes, a glue stick and a blank TRACK sheet. Once the students have these items, instruct them to cut out the tracks and glue them in any order to the blank TRACK sheet (one track in each square). The middle space is a free space.
3. Play TRACK. Start with the letter T and choose a track card from the can or hat. Example: T Grizzly Bear. Keep a tally sheet of the cards you drew for each letter. Then go to R. Choose another track card from the can or hat. Continue reading all the letters (TRACK) and begin again once you get to the end. Students should mark the tracks they have on their cards as you call them out.
5. When someone gets a TRACK (5 in a row), they should call out, TRACKER! Check his or her answers with your tally sheet. You can then have your students clear their cards to play again or go for a black out.
6. Celebrate the winners by giving all students animal crackers or another treat. ☺

BINGO

T

R

A

C

K



Bighorn sheep



Bobcat



Raccoon



Red squirrel



Elk



Gray wolf



Jack rabbit



Moose



Grizzly bear



Deer mouse



Badger



Chipmunk



White-tailed deer



Wolverine



Mink



Pika



River otter



Porcupine



American marten



Pronghorn



Mountain lion



Striped skunk



Mountain goat



Kangaroo rat

Create a unique to you TRACK card by cutting out each square and gluing it on a blank TRACK card in any order.

BINGO


T

R

A

C

K

What Ungulate Goes Where?

(A Modified Project WILD Activity)

Objectives

Students will: 1) identify five species of ungulates and their habitats; and 2) generalize that animals have adapted to live in their habitats.

Method

Students construct posters of five different ungulate habitats. Optional addition: Create one range map showing where all five ungulates are found in Idaho.

Materials

Pictures and descriptions of the five North American ungulate species mentioned in the activity; five large sheets of paper; colored pencils or markers. Optional: Map of Idaho, copies of *Wildlife Express* of each of the species mentioned.

Find here:

<https://idfg.idaho.gov/education/wildlife-express>

Background

All animals need food, water, shelter and space to survive. There are many variances between species on their habitat needs.

We are fortunate in Idaho to have all five of the species of ungulates mentioned in this activity. Background information for each species can be found on the cards on the following pages. Other wild ungulates found in Idaho include bighorn sheep and mountain goats. You could easily add these to the activity.

Grade level: 5th – 8th (Can be adapted to fit your needs)

Subject Areas: Science, Environmental Education, Expressive Arts

Duration: one 30-minute session

Group Size: five groups of three to six students each; increase groups as necessary for class size

Procedure

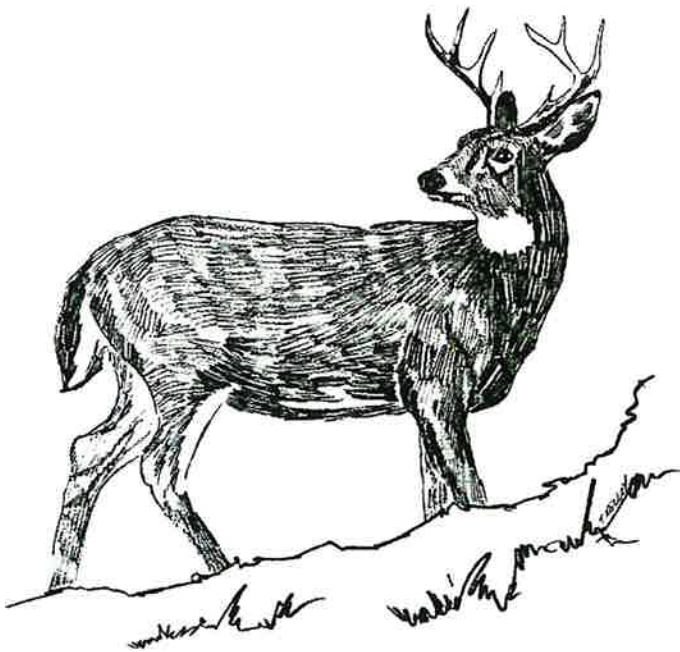
1. Review habitat needs of animals.
2. Show the students pictures of the five species of ungulates. Ask students to discuss the similarities and differences between these ungulates.
3. Ask the students to imagine the place where each ungulate lives. Talk about the similarities and differences between the areas.
4. Discuss the different physical and behavioral adaptations of each of the ungulate species.
5. Group students into five groups. Distribute a large sheet of paper, the description and illustration of one of the ungulate species to each group.
6. Have each group draw elements of the habitat of their ungulate. Make sure that examples of all major habitat needs are included: food, water, shelter and space in which to live.
7. Display finished posters and ask the students what they have learned about ungulates and where they live.

Evaluation

1. Describe five species of ungulates, what they eat, where they live and how they're adapted to the environment in which they live.
2. If someone moved a pronghorn to live in a highly forested area, what might happen?

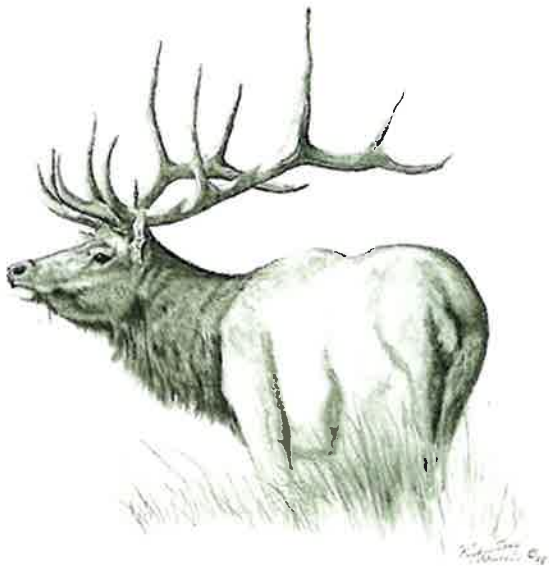


MOOSE: If you see a moose, you won't soon forget it. Moose are the largest antlered animals in the world. Males can easily weigh 1,000 pounds, and females may reach 800 pounds. It's easy to tell the males and females apart; only the males have antlers, which are huge, flat and dish shaped. The largest antlers can span six feet from tip to tip. Even more impressive, moose grow their antlers each year. Moose spend most of their time in meadows and marshy areas. If it's mossy, it's moose-y! A moose's diet is made up mainly of willows, aspens trees and other types of vegetation (some underwater). When feeding, they often dunk their heads below the water to find food. They can keep their heads under water for more than three minutes! They are also great swimmers!



WHITE-TAILED DEER:

In Idaho, white-tailed deer are mostly found north of the Salmon River but are becoming more common in central Idaho. They mostly like woodlands, dense brush and marshy areas. They especially like the areas where different habitats meet, like the edges between meadows and forests. White-tailed deer eat many different types of plants, including grasses, twigs, nuts and fruits. In the winter, digging through snow to find plants is difficult. They get their name from the white tail that flashes as a warning sign for other deer.



ELK: Elk are a member of the deer family. Native American Shawnee first called them "Wapiti" meaning white or pale deer. This probably refers to their light-colored rump. The name "elk" was given to the large deer by early English colonists, ignoring the fact that the name had long been used for the European moose. These large mammals prefer mountainous country with grassy and marshy meadows, river flats and aspen forests. They may also be found in and around coniferous forests, brushy clearcuts, forest edges and sagebrush. They prefer to eat grasses from these areas.

PRONGHORN: Noted for their speed, pronghorn have been clocked at 60 mph and have been known to try to outrace vehicles! They are the fastest North American land mammal. Pronghorn flare their brilliant white rump hairs to signal danger. Their large eyes are set high on the head and far back on the skull, so pronghorn can spot danger from a long distance. Unlike other horned animals, pronghorn shed the outer sheaths of their horns. Both males and females have horns, although the females' horns are much smaller. Pronghorn also have tough padding on their hooves which cushions the shock when running over hard ground. In Idaho, pronghorn are found mostly in the southern part of the state where there are open, sagebrush areas. They eat grasses and sagebrush. Fences can cause problems for pronghorn because of the structure of their hind legs. Pronghorn are more likely to crawl under a fence than jump it. When drawing their habitat, include a "fence fix."



MULE DEER: Mule deer have large ears that move independently and almost constantly, similar to a mule's ears. Male mule deer, called bucks, will sometimes fight over a female, or doe. During these fights, each buck tries, with its antlers, to force down the other's head. Even in such battles, the bucks are rarely injured, usually the loser just gives up. However, if the antlers become locked together, both bucks will starve to death. In Idaho, mule deer like rocky, brushy areas, open meadows, pine forests, aspen tree groves and areas next to waterways. They like to eat the soft tips of shrubs, like sagebrush or bitterbrush, more than grasses.

