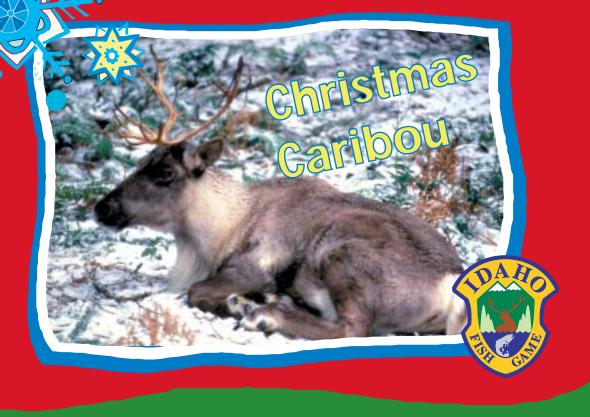


Ho! Ho! Ho!





Let's Look At...

Woodland Caribou

Caribou in Idaho? Don't they belong in the Arctic? It may seem strange, but it is true. Woodland caribou *Rangifer tarandus*, (RAN-je-fer tar-AN-dus) do live in Idaho.

At one time, woodland caribou were found as far south as central Idaho. Now they are only found in north Idaho's Selkirk Mountains. Woodland caribou are endangered in Idaho.

The caribou found in Idaho are part of a herd of 41 animals. They spend time in Idaho, Washington and Canada. Last year, only one caribou in the herd spent the entire year in Idaho. The rest of the herd spent most of their time in British Columbia, Canada.

Woodland caribou are members of the deer family. All male members of the deer family have antlers, but caribou are different. Both male and female caribou grow and shed antlers. Males, called bulls, usually have larger antlers than females, called cows. Bulls may weigh up to 500 pounds; cows weigh about 300 pounds.

Caribou are known for their curious and docile nature. They are not as cautious about things as other types of deer. People have mentioned being out in the forest and having a caribou only 20 to 30 feet away. The caribou was just standing there looking at them!

Caribou sometimes grunt, pant or bellow, but they also click. The noise doesn't come from the caribous' mouths. It comes from their feet! As caribou walk, tendons slide over the bones in their feet, making a clicking sound.

Caribou are animals that are built for living in snow and cold temperatures. Their coat has two layers. The bottom layer is called underfur. It is fine and a bit crinkly. Guard hairs make up the top layer. They are hollow and can trap air. The trapped air is the caribou's insulation against the cold. It helps keep in the animal's body heat. Guard hairs also act like a life preserver! The air in the guard hairs helps caribou float while swimming.

How would you like to have feet like snowshoes? Caribou hooves are larger and rounder than most deer hooves. Their feet work like snowshoes. Caribou don't sink as deep as other deer when walking in the snow.

Most animals travel down mountains in the winter to stay away from the cold and deep snow. Not woodland caribou. They migrate up to the tops of mountains! Woodland caribou move to the tops of mountains where there are fewer predators and more food.

During the winter, caribou eat **lichen** (LI-ken) growing on trees. Caribou use the snow like a stepladder to reach the lichens high in the treetops. Lichen looks a bit like green or brown spaghetti hanging from tree branches. It is also called old man's beard. Lichen is the most important winter food for caribou. They eat more lichen than anything else. They can eat two garbage bags full of lichen every day!

During the summer, caribou hide in thick forests lower on the mountainsides and in valleys. Here they eat lichens and other plants like grasses and bushes.

Have you heard of barren-ground caribou? They are found in Alaska and Canada. You may be wondering if they are the same as the caribou in Idaho. Yes, they are! They share the same scientific name. Barren-ground are considered a **subspecies** of caribou. They are the same animal, but they live in a different habitat.

Barren-ground caribou live on the flat, open tundra. They live in huge groups; woodland caribou live in smaller groups in forests. Barren-ground cows all give birth at about the same time. Woodland caribou go away by themselves to give birth. By living in large herds, barren-ground caribou have more noses to sniff out danger and eyes to look for predators. Woodland caribou have the safety of the forest.

Woodland caribou are beautiful and amazing animals. Hopefully, Idaho will always have a place they can call home.

What is an Ungulate?

Caribou are **ungulates** (UN-gyoo-lits). Ungulate is the Latin word for hoof. All ungulates have hooves.

Scientists used to group all ungulates together, but now they divide them into two groups. One group includes animals that have an odd number of toes. Horses, zebras, and rhinos are in this group. Animals in the other group have an even number of toes. Which group do you think caribou are in?

All ungulates are **herbivores**. They eat plants. Grasses, leaves and twigs are tough to eat. To help them digest plants, ungulates have stomachs divided into four different chambers or rooms.

When caribou eat, they nip off lichens and plants. They don't chew their food much before swallowing it. The plants go into the first chamber of their stomachs. The first chamber is full of bacteria and other organisms that help break down the plants. Later, caribou spit up the food and chew it again. Ever heard of cows chewing their cud? They are chewing food regurgitated from their stomachs.

Once chewed, the food passes into the second and third parts of their stomachs where water is taken out of the food. The fourth chamber of their stomachs is the one that is most like your stomach. It absorbs the nutrients out of the food.

Having a stomach with many chambers not only allows animals to eat tough plants, it also helps to keep them safe. Many animals are at risk when they eat. Predators are more likely to see a deer eating in a clearing than hiding under a tree, so deer eat quickly. They nip off plants, chew them just a little and then swallow them. Once their first stomach is full, the deer finds a place to rest and hide. Now the deer can fully chew and digest their food, without having to constantly look out for danger. Don't ungulates have some amazing adaptations for survival?



Horse Hoof— One Toe Per Hoof



Bighorn Sheep— Two Toes Per Hoof

On Dasher On Dancer

I'm sure you have heard of reindeer. Rudolph might come to mind. Reindeer look like caribou, but are they the same? Well, yes and no.



Reindeer are caribou that have been tamed or **domesticated** (do-MES-ti-kated) by people. People that live in Europe and Asia call all caribou, wild and tame, reindeer.

People in Asia began to tame wild caribou about 5,000 years ago. At first, hunters would capture a caribou and put a leash on it. Hunters would use the leashed caribou like camouflage. They would hide behind it to sneak up to wild caribou while hunting. Later, people trained reindeer to pull sleds. In some cultures, reindeer are saddled and ridden like horses.

Today, just like in the past, people depend upon reindeer for food and transportation. They not only eat reindeer meat, they sell reindeer meat, hides and antlers for money.

Reindeer were first brought to North America in the 1890s. North America had wild caribou herds, but native people had not domesticated them.

In the 1800s, hunters and whalers from America and Europe were killing the animals Eskimos needed for survival. Eskimos were starving.

Some people thought if Eskimos took up reindeer herding, they would have the food they needed. So, the United States government bought reindeer in Russia and shipped them to Alaska. They even brought reindeer herders to Alaska to teach Eskimos how to herd reindeer.

At first, the reindeer herds did well. But as time passed, people lost their interest in reindeer herding. Wild caribou were becoming easier to find, and people would rather hunt caribou than herd reindeer. Now only a few reindeer herds are found in Alaska.

You might think that any wild caribou could be tamed. Scientists have tried to take caribou out of the wild and tame them like reindeer. It did not work. No matter what they did or how much time they spent, they just could not get the wild caribou to act like the reindeer you see today. Some scientists believe that all reindeer herds today are related back to the caribou that were domesticated 5,000 years ago.

Old Growth Forests

Have you ever heard of old growth forests? Old growth forests look like they have been untouched by man. No trees have been cut and no roads have been built. If you could take a time machine back hundreds of years, the forest would look the same today as it did then.



Some animals, like caribou, depend upon old growth forests. Woodland caribou's most important food, lichen, grows on old trees. Lichens grow slowly. It can take 80 to 150 years for a forest to grow enough lichens to support caribou. Now that's a long time!

Old growth forests are also important for science. Scientists are still discovering new species of plants and animals in old forests, especially tropical forests. By studying old growth forests, scientists can learn how plants, animals and other organisms interact.

Scientists are also studying old growth forests to see if they can find pollution in the plants. They should not find pollution in a place where people have not been, but they are. How did the pollution get there? It blew in on air currents.

Scientists have even found radioactive pollution in lichens growing in Alaska and Canada. The pollution came from an accident that happened in Russia. How will this pollution affect wildlife? Scientists are not sure, but they are watching the caribou closely.

Old growth forests are important for teaching us how the actions of people affect nature.

Giving Caribou a Helping Hand

Idaho's woodland caribou were listed as an endangered species in 1983. At that time, there were only about 20 caribou in the herd.

Scientists thought the herd needed an immediate boost. They thought a transplant was a good idea. Caribou were trapped in British Columbia, Canada and brought to Idaho. Sixty caribou were released in the Selkirk Mountains between 1987 and 1990. Washington transplanted 43 caribou.

The caribou were fitted with radio collars. That allowed researchers to track them in the forest. Many caribou died, but some did survive to breed and have young.

By studying caribou, biologists have discovered that mountain lions kill more caribou than any other predator. Researchers also noticed something else. As the white-tailed deer population went up, so did the number of caribou being killed by mountain lions! This may seem strange, but there is a reason why this happens.

Today, there are more white-tailed deer than there was 100 to 200 years ago. Cutting down trees and forest fires has created meadows. This means more food for deer, so deer numbers go up. More deer means more food for mountain lions, so their numbers go up. White-tailed deer are much better at hiding from mountain lions than caribou, and caribou became easy pickings for mountain lions.

Biologists decided to do an experiment. They let hunters take more mountain lions during the hunting season. As mountain lion numbers went down, caribou numbers went up. Removing some mountain lions has helped caribou to survive.

As more is learned about caribou, biologists will discover other ways to give them a helping hand.



Radio-collared caribou eating lichen in North Idaho.



Managed Forests

Managed forests are forests that have been changed by man and are used for a specific purpose. Cutting down trees, planting new trees, building roads and setting or putting out fires all change forests.

Managed forests are used for many different purposes. Managed forests provide recreation like camping, hunting and fishing. They also provide wildlife habitat and the forest products we use everyday.

Wood from forests is used for more things than building homes and making paper. Many products are made from tree-based chemicals. These chemicals are found in products you may think would have nothing to do with trees. Tree products are found in ice cream, camera film, toothpaste, bubble gum, bike helmets and Twinkies!

You may hear someone call a forest a **sustainable** (su-STAA-ne-bel) forest. This means if trees are cut down, people will make sure that other trees grow back in their place. New trees may be planted to replace the trees cut down. Older trees may also be left behind to drop seeds. These trees are called seed trees. Their seeds will spread and grow and become the next generation in the forest.

Sustainable, managed forests are very important. Without trees and the products that come from trees, our lives would be very different.

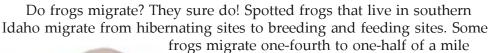
Wildlife on the Move

During the fall and spring, we often see animals on the move. They are migrating from one habitat to another. An animal may migrate thousands of miles or ten feet. The distance an animal moves is not important. What is important is that the animal moved between habitats during the year to survive.

Animals migrate for many reasons. During the fall, days become shorter; nights become longer. The amount of sunlight reaching us is less, and temperatures are cooler. Shorter days means animals have less time to look for food. Food that was easy to find in summer is now much harder to find, especially if it is buried under snow. Many animals migrate because they cannot find enough food to eat.

Barren-ground caribou are known for their long-distance migrations. Some barren-ground caribou migrate thousands of miles between their summer and winter habitats. Woodland caribou also migrate, but

not as far. They may stay on the same mountain all year and move up and down the mountainside with the seasons.



between habitats. That's amazing for a frog!

Migration is a wonderful thing. It is one

tool animals use to solve the problem of disappearing food. Mammals, birds, bats, frogs and fish migrate. Can you think of an animal that migrates?



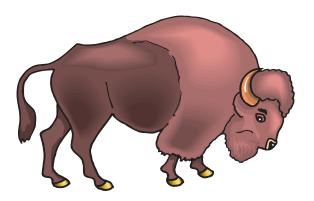
Going...



Endangered



Going,



Extirpated

Have you ever heard someone say that an animal is threatened or endangered? How about **extirpated** (EK-stir-paated) or extinct? What do all these terms mean?

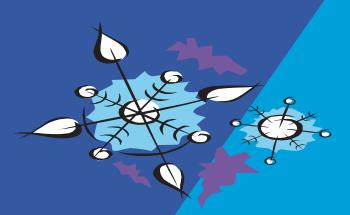
Scientists use these terms to describe how a wildlife species may be doing. A species that is threatened is usually becoming harder to find. The number of individuals is declining. The animal may be listed as endangered if not helped.

If someone says a species is endangered, that means the species is in danger of becoming extinct. These animals are really in trouble. The species will probably not survive unless people help it. Caribou are endangered in Idaho. Scientists are studying caribou to see what can be done to help them.

Animals that are extirpated are missing from an area where they used to be found, but they are still found living in other areas. Caribou are extirpated from Britain. At one time, caribou lived on the British Islands, but they were hunted and lost their habitat to humans. Does that mean they are extinct? No, because caribou are still found living in other parts of the world.

Extinct animals are animals that no longer exist. They cannot be found anywhere on the planet. Passenger pigeons, heath hens and dinosaurs are examples of extinct animals.

Now you know what it means if someone says an animal is threatened, endangered or extirpated.



Brrr, It's Cold Outside

When temperatures drop, I find myself reaching for coats and gloves. A fire sure feels good on a cold snowy night. We have clothing, fireplaces and heaters to keep us warm on cold winter days. How do animals survive in the snow and cold?

One way to avoid the cold is to leave. Many animals migrate to warmer areas for the winter. Bats, butterflies and birds are just some of the animals that fly to warmer climates. They don't migrate because it is too cold, they leave because they can't find anything to eat.

Other animals sleep the winter away. Hibernation is a great way to avoid the harsh weather and lack of food. Marmots, some squirrels and many bats hibernate. When animals are hibernating, they don't eat and drink, so hibernating animals need a nice layer of fat to stay alive. The fat becomes food for their bodies to keep their hearts beating and lungs breathing.

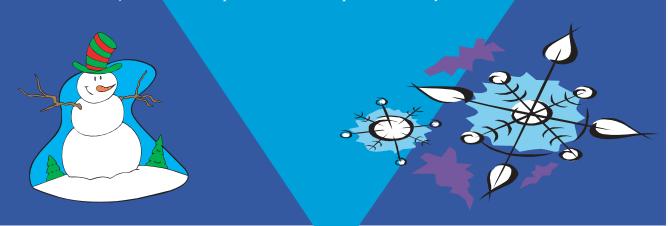
For animals that can't leave and don't hibernate, they need to find other ways to survive the winter. Wild animals have summer coats and winter coats, just like you. In the fall, wild animals start to grow a thick layer of fur or hair. Many animals, like caribou, can trap air in their coats. The air is insulation against the cold.

Have you ever taken a big breath of cold air? Did you start to cough when the cold air hit your lungs? Did you see your breath when breathing out?

Animals would cough, too. They also would lose precious heat and moisture breathing in and out in cold weather. Caribou have a way to deal with this.

Caribou have short, thick muzzles. The muzzle is the part of the head that includes the nose and mouth. The muzzle warms the air as caribou breathe in and cools the air as they breathe out. This helps the caribou hold onto heat and moisture with every breath they take.

These are just a few examples of winter adaptations. Can you think of others?



Caribou Scramble

Unscramble the words to complete the sentences.

- 1. Caribou love to eat (nlceih) ______.
- 2. Caribou young are called (velcas) ______.
- 3. Caribou are (mbrmese) _____ of the deer family.
- 4. Mountain lions are (rpdtaorse) _____ of caribou.
- 5. Caribou have feet like (wsenohsos) ______
- 6. Both bull and cow caribou grow (salrnet)
- 7. _____ (rerenide) are domesticated caribou.
- 8. Caribou (eivl) _____ in Idaho's Selkirk Mountains.

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WE WOULD LIKE TO HEAR FROM YOU!

If you have a letter, poem or question for Wildlife Express, it may be included in a future issue! Send it to the address printed above!

Home On The Range

Each month we will show you the geographical range or distribution of our featured animal in both Idaho and the United States.





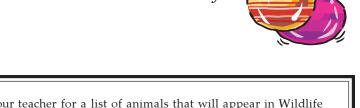
Mountain caribou in the forest high.

Walk on the snowand reach toward the sky.

Lichen is there. The food you love.

Your mountain lifestyle fits you like a glove.

Cari Boo, Woodland Elementary



Ask your teacher for a list of animals that will appear in Wildlife Express this year and send us a poem about your favorite. We'll put one in each issue with your name and school. Send them to our address listed above.