Wildlife Express!

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Wolverines

Photo courtesy Ken Curtis

Let's Look at.....

Photo courtesy Boyd Norton

Wolverines

Wolverines are one of the rarest mammals in North America. They live in remote, high-elevation forests and tundra far away from humans. Wolverines need snowy areas where the temperatures are cool. Their long, thick coat of fur makes it easy for them to get too hot. If a wolverine wants to get from one mountain to another, it will usually walk the tops or ridges of the mountains instead of going down into the warmer valleys.

Snow is important to wolverines for another reason. Female wolverines dig dens in the snow to give birth to their young. They will dig tunnels that may be up to 10 feet long! The babies, called kits, are born in late winter and early spring. Usually two to three kits are born. Newborn kits weigh almost three ounces (about as much as 15 unsharpened pencils) and are between four to five inches long. Kits are born with their eyes closed and with white fur. They drink mother's milk until they are nine to 10 weeks old. By late May, they begin to travel with their mother as she looks for food.

Wolverine fathers may play a role in raising the kits. One study in Idaho found that young wolverines stayed with the mother until they were about eight months old. From eight months to about 14 months of age, wolverines were found living closely to the male in the area.

The shape of the wolverine's body and its smell has earned the wolverine a nickname – skunk bear. They look a bit like a bear cub and smell a bit like a skunk! Wolverines are not huge animals. Their bodies are 26 to 34 inches long with a tail that is seven to 10 inches long. They weigh anywhere from 18 to 60 pounds, but a 60 pound wolverine would be huge! Most are around 20 to 40 pounds with the males much larger than the females. They have long brown fur and light buff or yellow stripes that run from the wolverine's nose down its sides to the tail.

A wolverine's diet is made up mostly of meat, but they also eat roots and berries. They may kill large animals like deer, but usually only if the deer is sick or stuck in deep snow. Wolverines are primarily scavengers; they eat animals that are already dead. Dead animals are called carrion. Wolverines may travel as much as 15 miles in a day looking for food. To help them find carrion, wolverines have a wonderful sense of smell. They can smell a dead deer that is buried six feet under the snow! Wow! They have large feet that help them walk on the snow and dig to get their supper. Can you eat a frozen steak? A wolverine could! They have very powerful jaw muscles that allow them to eat frozen meat and break bones.

Wolverines don't have too many predators. They are extremely strong for their size. They also make deep growls and rumbles that sound ferocious. The sounds help to scare away large predators, but wolverines are sometimes killed by wolves, bears or mountain lions. Wolverines are protected in Idaho, but they can be trapped in Alaska and Montana.

Wolverines are fascinating creatures! We are lucky to have them in Idaho.

Brrr!

It's Cold Outside

When temperatures drop, people often find themselves 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 enough 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.

Animals that can't leave and don't hibernate, 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 wolverines, can trap air in their coats. Wolverines have long hairs on the outsides of their bodies called guard hairs. Their guard hairs can be as long as four inches! These hairs trap air close to the wolverine's body that acts like insulation against the cold. The hairs also help keep snow and rain off of the wolverine's body.

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 might 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

The Weasel Family

Photo courtesy IDFG

Weasel

Members of the weasel family are called mustelids (mus-TELL-ids). In Latin, "mustela" means weasel. This group of animals includes wolverine, badger, fisher, weasels, pine marten, mink, and otters. In Idaho, we have eight species of mustelids.

Mustelids are found on every continent except Antarctica and Australia. They range in size from the sea otter that can weigh as much as a third grader to the least weasel which weighs about as much as two pink erasers. Wolverines are the largest mustelid in Idaho. Short-tailed weasels are the smallest. They are eight to 14 inches long and weigh two to seven ounces.

Most mustelids have long, slender bodies and short legs. They can fit easily into tight spaces or move through the water. Even the bulky-looking badger and wolverine are amazingly flexible and quick. Several species, including the pine marten and fisher, are excellent climbers. The otters and mink are wonderful swimmers and spend a lot of time in the water.

The shape of the mustelids' bodies makes it difficult for them to stay warm and store fat, so they eat a lot. As a family, mustelids are mainly carnivores. They eat other animals, but they may also eat fruits, berries or plants. When they can, mustelids kill more than they can eat at one sitting. The leftovers are hidden in a place called a "cache" (cash). When the animal is hungry, it will return to the cache and finish eating its meal.

Photo courtesy IDFG

Pine Marten

All members of the weasel family have something in common. They stink! Mustelids have glands located at the base of the tail that make musk. Musk is a strongly scented liquid. Musk may be used to attract a mate. It is also used to mark their homes or territories. The smell tells other members of the same species to stay out! Some mustelids mark their caches with musk. By doing this, they are warning others to stay away from their food as well as helping themselves find the cache later.

Keep an eye out for mustelids while enjoying time in Idaho's wild lands. These active, curious and strong creatures can be very entertaining to watch!

Home Sweet Home

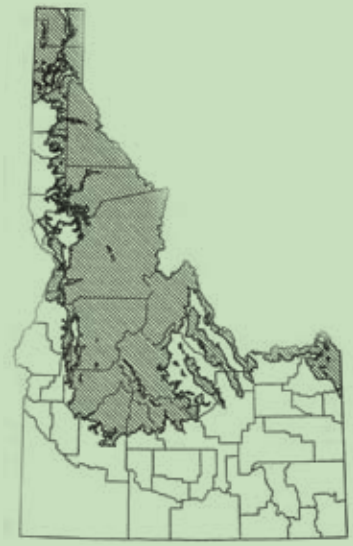
An animal's home is called its habitat. A habitat contains four things: food, water, shelter and space. If one part is missing, an animal will have a difficult time surviving.

It is easy to see how important food, water and shelter are to an animal. You must eat. A big glass of ice water sure hits the spot on a hot summer day. You wouldn't want to stand outside during a thunderstorm, but the space part of habitat is just as important as food, water or shelter.

Animals need enough space to find the things they need without having to fight for them. When animals have to fight over food, they use important energy. Animals gathered together in small spaces can also make each other sick. Think of a student that has a cough. In the small space of a classroom, that student's germs quickly spread to other students who also get sick.

Next time you see an animal, think about its habitat. What is around that the animal might eat? Is there water nearby? Is there a bush, hole or cave for shelter? Does it seem like many other animals are around? Answering these questions will tell you a lot about the life and habitat of the animal you saw.

What's That Map Mean?



Open up a field guide or book about an animal and you may see a map. Most field guides have maps in them. The maps are there to show you where an animal lives, but there could be more to that map than meets the eye.

Most of the maps in field guides are called distribution or range maps. The map shows where the animal may be found in an area. To the right is the distribution map for the wolverine in the *Atlas of Idaho's Wildlife.*

The map shows wolverines may be found over most of central and northern Idaho. Does this mean that wolverines will be found in all of the shaded areas? No, not necessarily. This type of distribution map is made by looking at the types of habitats where wolverines have been seen or are likely to be seen. These spots are connected and the areas between the dots are shaded. Not all the shaded areas would be good wolverine habitat. This map shows areas shaded where valleys are found. Wolverines might wander into a valley, but it is not their preferred habitat. The map is colored in to show where wolverines *may* be found. It does not mean that they *will* be found there all of the time.

Range maps may change over time. How do scientists map where an animal might have lived over 100 years ago? Scientists look for stuffed specimens in museums, photographs, trapping records, and written accounts from early pioneers that had seen or captured wolverines. It takes sleuthing and research.

After searching through 114 museums and tons of records, a group of scientists found 729 records of wolverines in the lower 48 states from 1829 to 2005. The records were divided into three time periods: historical, recent and present. Below are the maps. The dots show where wolverines were seen or captured.

Wolverine distribution maps courtesy Keith B. Aubry, US Forest Service

Historical 1827-1960

Recent 1961-1994

Present 1994-2005

These maps are more accurate than the Idaho map. What changes do you notice to the wolverine's distribution? Has it increased or decreased? Can you think of some reasons for the change? What part do you believe people played in the decrease of the wolverine's distribution? Looking at a range map can teach you a lot about an animal.

Photo courtesy Diane Evans Mack

Studying Wolverines

Wolverines live in areas where there are few or no roads. How do scientists study and learn about an animal like a wolverine? At times it may be tricky to find where wolverines are living, but there are some tricks that researchers use.

Winter is one of the best times to look for wolverines, because you can see their tracks. Researchers fly over an area in a helicopter or airplane. They take photographs of the wolverine tracks that they see. The tracks let the researchers know that wolverines are in the area, but it doesn't tell them how many wolverines live there. Wolverines wander quite a bit, so it is difficult to know if the tracks were made by more than one wolverine.

If researchers have seen wolverine tracks, they can land the helicopter and follow the tracks back to a den site. If the den is occupied, they can tranquilize the wolverines and fit them with radio transmitters. You may have seen wildlife wearing collars. These collars often have a radio transmitter on them, but collars don't work well for wolverines. Wolverines have small heads and thick necks. They can pull off collars easily, so researchers put radio transmitters inside the wolverine's body. The transmitters send out signals that the researchers can pick up with an antenna. Some transmitters are special. They send a signal to a satellite that sends a signal directly to the researcher's computer. The researcher can track almost every step the wolverine takes without leaving his or her office.

Researchers can also use the wolverine's great sense of smell to their advantage. They hang road-killed deer from a tree. On another tree, they set up a motion activated camera. Every time an animal goes to check out the deer, the camera takes its picture. Researchers can also set up hair snares. Special brushes or barbed wire are set around the dead deer. Wolverines walk up to the deer and snag their hair on the brushes and wire. From this hair, scientists can get information about the wolverines.

There are even dogs being trained to sniff out wolverine poop! Dogs have sensitive noses. They can tell the difference between different animal's droppings. Dogs can lead researchers to wolverine droppings that a person might overlook. Wolverines may be elusive, but researchers have some interesting ways to learn about them!

What's Your Niche?

Photo courtesy IDFG

Tiger Beetle

Think of the town where you live. People in your community have jobs that make it a nice place to live. There are doctors that keep you healthy, teachers that help you learn, and people that make food for you to eat.

Animals, plants and other organisms also have jobs and roles to play where they live. This role is called a niche (NICH). An animal's niche includes such things as where and how the animal gathers food and its link in a food chain.

Within ecosystems, every living thing has important jobs and roles. If one of these organisms is missing, the ecosystem will be unhealthy. At times, it may be hard to see an animal's niche. What about skunks? They just seem like stinky animals that may cause farmers problems. Even the smelly skunk has a role in nature. Skunks eat more insects than anything else. They really love to eat grasshoppers, beetles and moth larvae. Many of the insects skunks eat like to munch on farmer's crops. Skunks help farmers by eating crop pests. The small bit of grass or soil they dig up looking for food is a small price to pay for all the insects they eat.

What's your niche? Do you have an important job or role to play in your family or school?

Truth or Fiction?

What comes to your mind when you hear wolverine? Do you think of a vicious, dangerous animal? Have you heard that a wolverine could kill a pack of wolves, destroy a cabin looking for food or kill a person? Do you think these things are true? Many of these beliefs were started long ago before people really understood wolverines.

The wolverine's keen sense of smell has gotten it into trouble. In the 1800s, pioneers and trappers moved into areas where wolverines lived. Wolverines would sometimes take the bait off of a fur trap or eat the animal caught in the trap. Wolverines could also smell food stored in cabins – even the food in tin cans! A tin can is no match for the strong jaws of the wolverine. Wolverines would eat the food then spray urine and musk all over the cabin. Pioneers would return to find their food gone and their home a stinky mess. This would make just about anyone angry, but it is important to remember that wolverines are scavengers. They are made to sniff out food. If a wolverine finds more than it can eat, it will save the rest and eat it later. Spraying the cabin with urine was just the wolverine's way of telling other animals to stay away.

The scientific name for the wolverine is Gulo gulo. This means "gluttonous glutton." A glutton is someone that eats large amounts of food. Does the wolverine stuff itself with food? Not really. They eat what they can at one sitting.

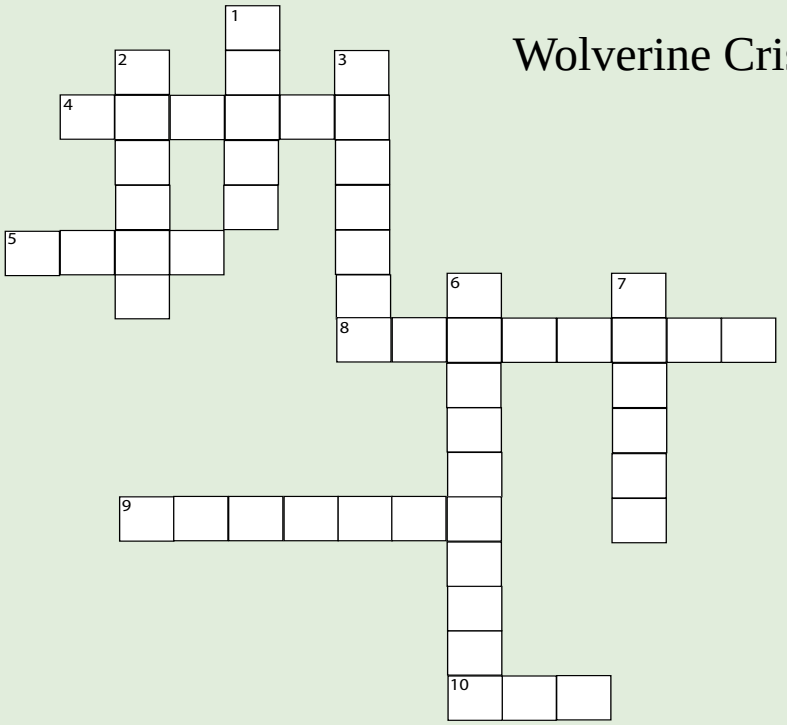
Could a wolverine kill a pack of wolves or a human? Remember wolverines are powerful, but they are not large. Wolverines might try to scare wolves away from their meal by growling and snarling, but the wolverine is probably more likely to be injured or killed. Wolverines also have more to fear from humans than humans have to fear from wolverines.

Many of the conflicts and misunderstandings between humans and wolverines lead to their decline in numbers. They were trapped, hunted and poisoned. By the early 1900s, wolverines were eliminated from many locations.

Next time you hear something about an animal and wonder if it is true, read about the animal in a scientific book. This may help you figure out if the information is true, fiction or just an exaggerated story.

Wolverine Tracks in the snow
Photo courtesy IDFG

Wolverine Criss Cross



Words

Carrion
Glutton
Kits
Musky
Nickame
Rarest
Remote
Scavengers
Six
Weasel

Across

4. Wolverines are the largest member of the _____family.
5. Baby wolverines are called _____.
8. Skunk-bear is a _____for the wolverine.
9. A wolverine's diet is mostly _____.
10. A wolverine can smell a dead deer that is _____feet under the snow.

Down

1. Male wolverines mark their territories with a _____odor.
2. In Idaho, wolverines live in _____, high elevation mountain forests.
3. The wolverine's scientific name means gluttonous _____.
6. Wolverines are primarily _____.
7. Wolverines are one of the _____and least-known mammals in North America.

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