

Wildlife Express!

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Porcupines

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PORCUPINES



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Let's Talk About ... Porcupines



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When you think of porcupines, what jumps into your mind? Most likely it is “OUCH, don’t touch!” Touching a porcupine is a dare you do not want to take. Porcupines are covered in sharp, poky quills.

Quills are thick, stiff hairs that cover most of a porcupine’s body. Porcupines have about 30,000 quills. The only place a porcupine doesn’t have quills is on its nose and belly. Porcupines cannot shoot quills from their bodies. A quill is just a hair. We can’t shoot the hairs out of our heads, and neither can a porcupine. To get stuck by quills, you must touch the porcupine or it must touch you. Porcupines can make it easier for an animal to get stuck by a quill. When a porcupine feels threatened, it constricts muscles to make the quills stick up, tucks in its head and rolls up its back. Then a porcupine will walk backwards and swipe its tail at the threat. The tip of a

quill is barbed with tiny hooks, so it will stick easily. The barbs expand with moisture and help the quill work deeper into the body. It can be difficult and painful to remove porcupine quills. Quills do not contain poison, but they are covered with germs. The germs may cause an infection. If the quills go deep enough into the body, they may also puncture the lungs, heart, or other organs.

Porcupines are excellent tree climbers. They love forest habitats. Trees give porcupines food and a safe place to rest. A favorite food is the inner bark of trees. Porcupines may also eat leaves, roots, berries, fruits or seeds. They also love salt. Porcupines sometimes chew the handles of shovels and other tools to get the salt left from people’s hands.

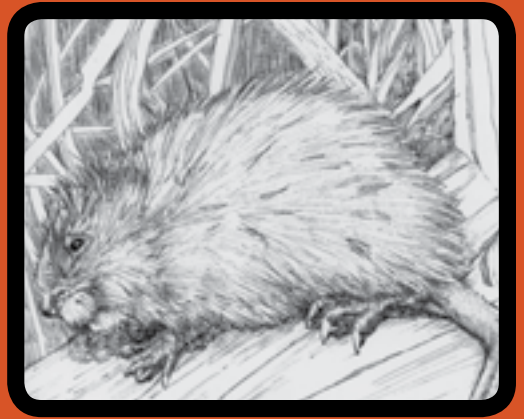
Porcupines have a great way to protect themselves, but they still have enemies. Their main predator

is the fisher. Fishers are fast predators that can quickly attack the face of a porcupine and flip it on its back. Once a porcupine is on its back, it is fairly defenseless. Mountain lions, wolverines or wolves may also eat a porcupine.

Porcupines are animals that usually like to be alone. During the winter, porcupines may gather together in dens when the weather is bad. Rocky outcrops, hollow trees or even buildings are good places for porcupines to wait out bad weather. When you do see a group of porcupines together, it is called a prickle. That makes sense!

During the summer if you see two porcupines together, you are probably seeing a mother with her baby. Porcupines have only one baby a year. A baby porcupine is called a pup or porcupette. A porcupine weighs about one pound when it is born. Porcupettes are born with a full set of teeth, with their eyes open, and with all of their quills. The quills are soft when a porcupine is born and harden about one hour after birth. Porcupettes are able to eat plants within a week after being born, but they drink their mother’s milk until they are four months old. They are living on their own when they are about five months old. If a porcupine can avoid predators and accidents, it may live to be ten to fifteen years old in the wild.

The RODENT FAMILY



Porcupines are rodents. So are mice, beavers and squirrels. There are more rodents in the world than any other type of mammal. Idaho has 45 different kinds of rodents.

Idaho's largest rodent is the beaver. It may reach 50 pounds. Porcupines are Idaho's second largest rodent. They average about 30 pounds in Idaho. The largest rodent in the world is the capybara (kap-ee-BAR-ah). They grow to be as big as pigs. Capybara can weigh more than 125 pounds, and they can be four feet long! They live near ponds and rivers in South America. One of the smallest rodents is the pygmy mouse found in Africa. It weighs about as much as an unsharpened pencil and is only two inches long.

The front teeth of a rodent never stop growing, so rodents need to chew on things. This keeps their teeth from growing too long. If they didn't chew on things to keep their teeth short, their teeth may actually circle around and grow into their skulls!

Do you have a pet rodent like a mouse, hamster or guinea pig? You may have noticed that your pet's front teeth are a yellow-orange color. Believe it or not, these teeth are supposed to be orange! The teeth are only orange on the outside. The other sides of the teeth are white. The orange color is special enamel. It helps to

make the teeth strong and hard. Imagine chewing down trees like beavers. Wouldn't you want strong teeth? The orange enamel also helps to keep their teeth sharp. The hard, orange enamel on the outside of the teeth wears down more slowly than the white enamel on the inside of the teeth. Every time a rodent takes a bite it sharpens its teeth. This keeps the teeth chisel-sharp.

Rodents are an important part of the ecosystem. They are links in food chains. Many rodents are food for other animals. Even people eat rodents. In Venezuela, people eat capybara. Venezuelans eat capybara during a traditional holiday, just like we eat turkey for Thanksgiving.



WHAT'S THAT?

You're walking along a trail. All of the sudden, you see something grayish-white peeking out of the tall grass. Leaning forward you realize what it is – a skull. Now the mystery really begins. What animal did that skull belong to, and how did this animal live its life?



This may be a hard question to answer, but the skull will give you some clues. One of the best clues you have are the teeth. Teeth tell you what an animal eats. Animals that eat meat need teeth that will help them cut and tear. Meat eaters, called carnivores, have meat cutting teeth along their cheeks. These teeth are sharp and pointed. When the top teeth and the bottom teeth come together, the teeth pass each other like scissors. A carnivore, like a mountain lion, has no problem slicing through an animal with its teeth!

Sharp pointed teeth may work well for meat eaters, but they sure wouldn't help plant eaters. Plant eaters are called herbivores. Plants take a lot of chewing to break down. Just think how long you need to chew celery! Herbivores have tall teeth in the back of their mouths

with flat tops. Flat teeth let the animals slide their top and bottom teeth against each other to grind plants. Porcupines need strong grinding teeth to eat bark.

We have teeth in the back of our mouths with low bumpy crowns. Bears have these teeth, too. Teeth with this shape belong to omnivores. Omnivores eat both meat and plants, so they need teeth that help cut and grind.

Even the joint of the skull and the jaw may help you tell if the animal ate meat or plants. Animals that grind their food need to make circles with their jaws. The joint of plant eaters tend to be like the joint of your hip or shoulder. The joint is like a ball and circle that fit together. The joint of carnivores and omnivores look more like a straight line.

The location of the eye sockets on the skull can also tell you a lot. Predators, animals that eat other animals, need to be able to tell distances. This comes in handy when reaching out to grab a mouse. Predators have eyes that face forward. Prey animals, animals that are eaten by other animals, have their eyes located more to the sides of their heads. This lets them look out for danger in almost every direction, without ever moving their heads.

Looking at these clues may not tell you what animal the skull came from, but it is a start. It may give you an idea of what the animal eats, and whether it is a predator or prey.

What **BIG** Feet You Have

Have you ever looked closely at a picture of an animal's foot? With all the wrinkles, bumps and shapes, animals' feet can be pretty interesting.

A close-up picture of an animal's foot can tell you a lot about the animal and where it spends its time. Snowshoe hares have a large amount of fur between their toes and on the bottoms of their feet. The fur not only keeps the snowshoe hare's feet warm, it also helps the hare walk on top of the snow. This is how the snowshoe hare got its name. Its large, furry feet really do act like snowshoes, so the hare stays on top of the snow when traveling.

Mountain goats have large squishy pads on the bottoms of their feet. The pads help mountain goats grip onto rocks as they climb on the sides of mountains.

The bottoms of porcupine feet are covered by small bumps. The bumps make their feet look like they are covered in sandpaper. Their rough feet help porcupines climb trees. The bumps help them grab onto the tree bark as they climb.

Think of a beaver's foot. They have webs between the toes on their back feet. The webs are built-in swim paddles. Many animals that spend a lot of time in the water have webs. Have you ever seen the front feet on a beaver? The front feet do not have webs. The front feet have long toes and claws on them. The front feet are helpful for grabbing onto logs and branches.

Next time you see a picture of an animal's foot, look closely. You may be able to figure out the animal's habitat just by looking at its feet.

Clever Defenses

Can you think of an animal that has a clever way of protecting itself? Porcupines have a great way to defend themselves from danger – quills! Quills sure do offer protection, but they are not the only way animals defend themselves. Animals may use color, armor, or even poison to protect themselves.

Snowshoe hares use camouflage and speed. The color of their fur helps them to disappear in their

habitat. If a predator does see them, hares quickly run and dart about to get away from danger.

Turtles use armor. Turtle shells are made of bone, and the outside is covered with scales called scutes. Scutes are made of the same thing as your fingernails -something called keratin. Keratin is hard and tough and helps to protect the shell from weather. The patterns and colors on the scutes also help camouflage the turtle. If

camouflage doesn't protect the turtle, it can seek protection inside its shell.

Some lizards also have armor. Horned lizards come to mind. They are covered by sharp, pointy scales. Horned lizards have another way to protect themselves. They can squirt blood out of the corner of their eyes! The blood may go as far as three feet. This definitely will startle a predator!

Poison is a good defense, too. Sometimes an animal might not look dangerous. Many frogs, toads and salamanders have glands on them that make poison. If they aren't poisonous, they may taste awful. Poisonous animals are sometimes bright and colorful. Their bright colors are a warning to stay away.

Think of a skunk. The stripes on a skunk are a warning to stay away, and boy, do they smell bad! Once an animal has had a run-in with a skunk, it most likely won't get too close to a skunk again. Can you think of other clever ways animals protect themselves? There are just about as many clever defenses as there are animals.



TRACKS!

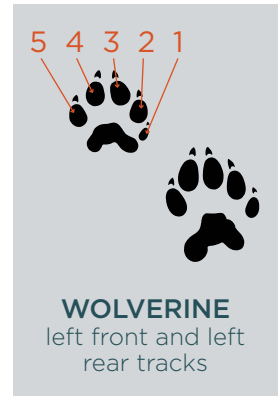
Winter is a great time to look for animal tracks. Tracking can be a lot of fun. It's a bit like playing detective. You observe, gather clues and do your best to put the clues together to solve a mystery. It also can be difficult at times. Here are some tips to consider when figuring out what animal left a track.

Look at the track from all directions. Are there other clues nearby? You may need more than a footprint to guess the animal correctly. Look for clues like chew marks, bones or scat. Scat is animal poop, and it is often one of the best clues you may find to solve your animal mystery.

Notice the size of the track and its shape. Mammal tracks are usually made up of marks left by the claws, toes, palms, heels and the space in between the toes and pads. Not every track will show all of these things, of course. It all depends upon the animal, and what the animal was doing at the time the track was left. This is what a spotted skunk track might look like:



How many toe marks show in the track? Weasels have five toes on both the front and back feet, but sometimes only four toes leave marks. Hares have four toes only on their back feet; the front feet have five toes. In tracking guides, toes are numbered one to five beginning with the inside toe and moving outward. The smallest toe (#1) is usually found on the inside of most mammals' feet. This can help you tell if a track is from the left or right foot of an animal.


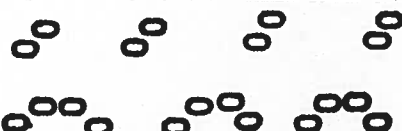








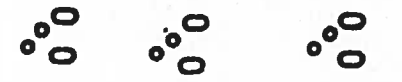

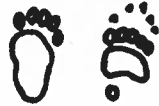

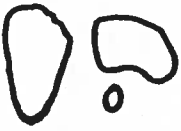

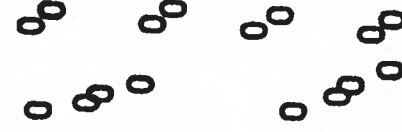












The front legs of dogs actually have five toes! The first toe is found high up on the leg, so you don't usually see it in a track. Coyote tracks usually have four clear marks left by the toes, and the front foot tracks are always larger than the rear foot tracks.



These are just some of the things to consider when looking at tracks. The mammal track comparison chart on the next page will help you tell some tracks apart. At least you may be able to tell if the animal is from a certain group. Good Luck!

Mammal Family Track Key

Toes	Claws	General Shape & Outline	Common Gaits	Shape of Pads	Family
4	Yes				Dog
4	No				Cat
4 or 5	Rare				Rabbit
4 or 5	Varies				Rodent
5 th toe may not show	Sometimes				Bear
5 th toe may not show	Sometimes				Weasel
5	Sometimes				Raccoon
5 (are tiny)	No				Shrew
2	Dew Claws				Deer



BE OUTSIDE in Winter!



BE OUTSIDE
IDAHO CHILDREN IN NATURE

Winter is a wonderful time to explore the outdoors! A blanket of new snow makes familiar places look quite different. Noisy streams become silent under ice and snow. Animals that you rarely see can now be “seen” when you find their tracks in the snow. Cold nips your cheeks and makes you look forward to a cup of hot chocolate after being outside.

Winter activities are many. Skiing and skating are great ways to enjoy winter. So are sledding and snowshoeing. Even if you do not have any equipment, you can still enjoy winter by just taking a walk in the snow. Build a snow fort with your friends or decorate your yard with snowmen. If it is snowing, catch some snowflakes on your mittens and use a magnifying glass to look at the beautiful crystals. Take a walk in new snow to see what animal tracks you can find. Look for bird nests in the trees. If you live near a river or lake, do some winter bird watching to look for bald eagles and ducks. Don't forget to check out the winter night sky. Cold, clear nights can give you some great opportunities to see the stars.

No matter what kind of winter activity you enjoy, dressing properly is very important. Wear layers that you can take off when you warm up and put back on if you feel cold. Snow pants can help you stay warm and dry. Warm boots are very important for winter fun and don't forget a hat and mittens. Wearing a hat is one of the best ways to stay warm, no matter what you are doing. So, get into your winter clothes and head outside for some winter fun. After all, winter is a big part of every year in Idaho!

Porcupine Puzzle

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

BARBS

HERBIVORE

PRICKLE

BARK

LONER

QUILLS

CHEW

MAMMAL

RODENT

CLIMB

NOCTURNAL

TREES

DENS

PORCUPETTE

FISHER

PORCUPINE

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